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Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles, and Practices

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Citation

Stahn, C., Iverson, J. M., & Easterday, J. S. (2017). *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles, and Practices*. Oxford: Oxford University Press.
doi:10.1093/oso/9780198784630.001.0001

Version: Publisher's Version

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Downloaded from: <https://hdl.handle.net/1887/59605>

Note: To cite this publication please use the final published version (if applicable).

OXFORD

ENVIRONMENTAL PROTECTION AND TRANSITIONS FROM CONFLICT TO PEACE



Edited by Carsten Stahn,
Jens Iverson, and Jennifer S. Easterday



ENVIRONMENTAL PROTECTION AND TRANSITIONS
FROM CONFLICT TO PEACE

Environmental Protection and Transitions from Conflict to Peace

Edited by
CARSTEN STAHN
JENS IVERSON
and
JENNIFER S. EASTERDAY

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP,
United Kingdom

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide. Oxford is a registered trade mark of
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First Edition published in 2017

Impression: 1

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Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data
Data available

Library of Congress Control Number: 2017947324

ISBN 978-0-19-878463-0

Printed and bound by
CPI Group (UK) Ltd, Croydon, CR0 4YY

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For my parents and my family
C.S.

For Kate, Freya, and Ada
J.I.

For my family
J.E.

Preface

For many years, the *Jus Post Bellum Project* has updated and further enlightened practitioners and researchers on the theoretical framework and practical consequences of *jus post bellum* and its link to sustainable peace. Within the context of this discourse, the environment and the exploitation of natural resources have not been the centre of attention.

In this volume, Carsten Stahn, Jens Iverson and Jennifer S. Easterday have chosen to focus on environmental protection as a more visible part of *jus post bellum*. This is an important and welcome choice. Not only is *post bellum* environmental protection *a conditio sine qua non* for the rebuilding of a war-torn society, it is still an overlooked matter, only occasionally dealt with by the international community on a case-by-case basis. UN Environment (formerly UNEP) is doing crucial work through its Disasters and Conflicts programme, but as a UN program, it needs a mandate from States when choosing which steps to take — and those steps need to be financed. That said, we see a light on the horizon. In the recently proposed *Global Pact for the Environment*, the proposed Article 19 provides that “States shall take pursuant to their obligations under international law all feasible measures to protect the environment in relation to armed conflicts.”¹

In an attempt to corroborate that post-war environmental protection is not solely a policy matter but also a legal matter, a seminar was arranged by the *Jus Post Bellum Project* in the Hague in 2014. I was privileged to attend that seminar and listen to the interesting and pioneering research presented. This volume is in part a further elaboration of some of the research presented there. But it also contains more recent research that assists us to deepen our understanding of this complex issue.

The result is a comprehensive and impressive volume that presents up-to-date research and comments on environmental protection of *jus post bellum*. It is fair to say that this volume is the first of its kind. It is needed and welcome.

Following an excellent and helpful introduction, the volume is divided into four parts: Foundations, Legal Norms and Frameworks, Tension and Dilemmas and Remedying and Preventive Damage and Harm. It contains valuable tables of legal cases, treaties and other documents as well as a list of abbreviations. It is a proper piece of academic work. But it is more than that. It fills a gap.

When the United Nations International Law Commission (ILC) decided to place the topic *Protection of the Environment in Relation to Armed Conflicts* on its agenda, it did so as a result of a growing environmental apprehension among States, international organizations, such as the ICRC and civil society, the latter represented for example by the Environmental Law Institute. It was out of concern “that the environment

¹ Presented by Laurent Fabius, President of the *Conseil constitutionnel*, Former President of the COP21, and President of the Pact Experts Group, to President Macron in Paris 24 June 2017. Available at <http://pactenvironment.org>, last accessed 31 July 2017.

continues to be the silent victim of modern warfare” that UNEP and the Environmental Law Institute “undertook a joint assessment of the state of the existing legal framework protecting natural resources and the environment during armed conflict” in 2009. The result was the UNEP’s report, *Protecting the Environment During Armed Conflict – An Inventory and Analysis of International Law* (2009). The report suggested that the ILC “examine the existing international law for protecting the environment during armed conflict and recommend how it can be clarified, codified and expanded”.²

Although the title of the UNEP Report indicates that the focus of the report is environmental protection “during” armed conflict, the innovative approach of the report was to look at other areas than international humanitarian law, namely environmental law, human rights and international criminal law. While the report does not refer to *jus post bellum*, the references to the post-war consequences for the environment and natural resources were plentiful. The *jus post bellum* was ever-present.

When the ILC takes up a new topic, it does so on the basis of its mandate. The focus must be on progressive development of international law or its codification. At the same time the Commission should not restrict itself to traditional topics, but should also consider those that reflect new developments in international law and pressing concerns of the international community as a whole. It was on this basis the Commission took up the topic of *Protection of the environment in relation to armed conflict*.

When I was appointed Special Rapporteur for the topic I suggested that the work should focus on three temporal phases: before, during and after armed conflict. It seemed to be the only practical way to move the topic forward. At the same time it was evident that the temporal phases could not be entirely separated from each other. The pre-conflict phase and the post-conflict phase had much in common if viewed through a legal lens. The “during armed conflict phase” was already regulated through the law of armed conflict. Even if the existing environmental protection was not strong enough, there was little prospect of modifying that particular body of law.

Concurrently the Commission had recognised that [t]he existence of an armed conflict does not *ipso facto* terminate or suspend the operation of treaties as between States parties to the conflict or as between a State party to the conflict and a State that is not.³ The Commission had presented an indicative list of treaties that involves an implication that they continue in operation, in whole or in part, during armed conflict.⁴ This list included treaties for the international protection of human rights, international protection of the environment, international watercourses and related installations and facilities, and treaties relating to aquifers and related installations and facilities among others. It was clear that the law applicable during armed conflict was wider than merely the *lex specialis* on the law of armed conflict. Legal principles and rules are often interlinked throughout all phases of a conflict.

² UNEP, *Protecting the Environment During Armed Conflict – An Inventory and Analysis of International Law* (2009), Recommendation 3, p. 53.

³ ILC, Draft articles on the effect of armed conflict on treaties, Article 3. Available at http://legal.un.org/docs/?path=../ilc/texts/instruments/english/draft_articles/1_10_2011.pdf&lang=EF, last accessed 31 July 2017.

⁴ Article 7 (Continued operation of treaties resulting from their subject-matter).

From a more practical perspective every topic the ILC places on its agenda needs to be confined. It cannot cover all angles or all aspects. The ILC decided not to address root causes of armed conflict, natural resources, protection of cultural property *per se*, or peacebuilding, to give but a few examples. Many of these issues are dealt with by other UN bodies, such as the Security Council and the Peacebuilding Commission. It is still an open question whether the Commission will proceed to define “environment” or to address in more detail issues of liability and responsibility.

In addressing environmental protection in relation to armed conflicts, the pre- and post-armed conflict phases are of crucial importance. A post-war situation is legally complex: matters such as establishing the critical time and dates of conduct, clarifying applicable legal subjects, liability, responsibility, compensation, remediation, statutes of limitation — these are but a few matters that need to be addressed. At the same time it is obvious that the environment will not be repaired through a lengthy court procedure — as important as that may be. Innovative *jus post bellum* is required.

Sustainable peace cannot be achieved if environmental consequences are disregarded. In this context, women play a crucial role and need to be actively involved. This is a matter of law and justice. This comprehensive volume will add to the debate, and provide a space for further discussions on approaches in transitions from conflict to peace. The contributions show that *jus post bellum* clearly links into the pre-conflict and during armed conflict phases. I envy those who have not yet read the book, but will shortly be enlightened by it.

Ambassador Marie G. Jacobsson
Former Member of the United Nations International Law Commission
and Special Rapporteur for the topic: *Protection of the environment in
relation to armed conflicts 2013–2016*

July 2017

Acknowledgements

This volume is the continuation of a collaborative research effort led by the editors, known as the *Jus Post Bellum* Project. This project investigates whether and how a contemporary *jus post bellum* may facilitate greater fairness and sustainability in conflict termination and peacemaking.

Many of the contributions grew out of expert seminars on *jus post bellum* and the environment organized by the Project at the Peace Palace in June 2014. The conference and the project were made possible by the kind support of the Netherlands Organization for Scientific Research (NWO) who provided the funding for this research through a Vidi grant for the *Jus Post Bellum* Project. The research is part of the broader research programme of the Leiden Law School on 'Exploring the Frontiers of International Law'.

We would like to thank all contributors to this volume for their care, dedication, and efforts to provide fresh thinking on the theme of *jus post bellum*, and their openness to editorial suggestions. We would also like to express our gratitude to other individuals who contributed to the creation of this volume, particularly Marie Jacobsson. This work would not be possible without the support of the Grotius Centre for International Legal Studies at Leiden University, which hosts the Project. In particular we would like to thank Jordan Hawthorne for her invaluable assistance.

At Oxford University Press we would like to thank Emma Endean-Mills and Merel Alstein for supporting this project and ensuring publication of this volume. We hope that this work will contribute to broader discourse and concrete improvements in environmental protection and transitions to peace.

Carsten Stahn, Jens Iverson, Jennifer S. Easterday, March 2017

Contents

<i>Preface</i>	vii
<i>Marie G. Jacobsson</i>	
<i>Table of Cases</i>	xix
<i>Table of Legislation</i>	xxv
<i>Abbreviations</i>	xxxvii
<i>List of Contributors</i>	xli
Introduction: Protection of the Environment and <i>Jus Post Bellum</i>: Some Preliminary Reflections	1
<i>Carsten Stahn, Jens Iverson, and Jennifer S. Easterday</i>	
I.1 State-of-the-Art	1
I.2 <i>Jus Post Bellum</i> and Environmental Protection	5
I.3 The ILC Draft Principles on the Protection of the Environment in Relation to Armed Conflicts	11
I.4 Content of the Book	15
I.5 Not a Conclusion	24
I. FOUNDATIONS	
1. Considerations in Framing the Environmental Dimensions of <i>Jus Post Bellum</i>	29
<i>Carl Bruch</i>	
1.1 Introduction	29
1.2 <i>Jus Post Bellum</i> and Environmental Peacebuilding	30
1.3 Challenges Ahead	38
2. Defining the Environment: Environmental Integrity	40
<i>Cymie R. Payne</i>	
2.1 Introduction	40
2.2 The Classic Approach in International Law	44
2.3 Environmental Integrity	62
2.4 Lessons for <i>Jus Post Bellum</i>	68
II. LEGAL NORMS AND FRAMEWORKS	
3. The Ability of Environmental Treaties to Address Environmental Problems in Post-Conflict	73
<i>Britta Sjöstedt</i>	
3.1 Introduction	73
3.2 Problems in Environmental Protection Work Related to Armed Conflicts	74
3.3 Environmental Treaties' Alternative Approach	77
3.4 Conclusions	90

4. The Environment and Armed Conflict: Employing General Principles to Protect the Environment	93
<i>Kirsten Stefanik</i>	
4.1 Introduction	93
4.2 The Power of Principles: General Principles of International Law	95
4.3 The Role of General Principles in International Law	98
4.4 International Environmental Law	102
4.5 The Precautionary Principle	106
4.6 Precaution and Proportion: The Precautionary Principle Versus International Humanitarian Law	113
4.7 Principles of IEL in <i>Jus Post Bellum</i>	115
4.8 Conclusion	117
5. Using a Framework of Human Rights and Transitional Justice for Post-Conflict Environmental Protection and Remediation	119
<i>Karen Hulme</i>	
5.1 Introduction	119
5.2 Post-Conflict Legal Frameworks	120
5.3 Environmental Damage as a Human Rights Issue	123
5.4 Environmental Damage as a Post-Conflict Human Rights Issue	126
5.5 Conclusions	141
6. The Law of Pillage, Conflict Resources, and <i>Jus Post Bellum</i>	143
<i>Olivia Radics and Carl Bruch</i>	
6.1 Introduction	143
6.2 Background	146
6.3 The Law of Pillage and <i>Jus Post Bellum</i>	151
6.4 Conclusion: Alternative Avenues for Accountability and Prevention	167
7. Standard-setting Practices for the Management of Natural Resources in Conflict-Torn States: Constitutive Elements of <i>Jus Post Bellum</i>	169
<i>Daniëlla Dam-de Jong</i>	
7.1 Introduction	169
7.2 The Role of Natural Resources in Fuelling Armed Conflict in West Africa and the DRC	170
7.3 Standards Developed in UN Security Council Resolutions	175
7.4 Implementation of Standards in the Mandates of Peacekeeping Operations	185
7.5 Implementation of Standards in Management Reform Programmes	188
7.6 Lessons for <i>Jus Post Bellum</i>	190
8. Environmental Implications of Disarmament: The CWC Case	192
<i>Ayşe-Martina Böhringer and Thilo Marauhn</i>	
8.1 The CWC Obligation to Disarm	192
8.2 Environmental Implications of Chemical Disarmament	194
8.3 From Fragmentation to Integration	195
8.4 The Syrian Case	199
8.5 Lessons Learned	201

9. Legal Protection of the Environment: The Double Challenge of Non-International Armed Conflict and Post-Conflict Peacebuilding	203
<i>Dieter Fleck</i>	
9.1 Introduction	203
9.2 Environmental Obligations in Non-International Armed Conflict	205
9.3 Environmental Obligations Post-Conflict	215
9.4 Conclusions	218
10. Eco-Struggles: Using International Criminal Law to Protect the Environment During and After Non-International Armed Conflict	220
<i>Matthew Gillett</i>	
10.1 Introduction	220
10.2 Environmental Harm During and After Armed Conflicts	222
10.3 The Application of International Criminal Law to Environmental Harm During Non-International Armed Conflicts	224
10.4 Extending Environmental Protections to Non-International Armed Conflicts	234
10.5 Accountability for Environmental Harm as a Facet of <i>Jus Post Bellum</i>	248
10.6 Conclusion	252
III. TENSIONS AND DILEMMAS	
11. Reparation for Environmental Damage in <i>Jus Post Bellum</i>: The Problem of Shared Responsibility	257
<i>Ilias Plakokefalos</i>	
11.1 Introduction	257
11.2 The Bundle of Primary Obligations and their Relevance to Shared Responsibility and Reparation	259
11.3 Shared Responsibility and Reparation	265
11.4 Concluding Remarks	272
12. Conflict, Cash, and Controversy: Protecting Environmental Rights in Post-Conflict Settings	274
<i>Jennifer S. Easterday and Hana Ivanhoe</i>	
12.1 Introduction: Sustainable Development, Environmental Protection, and <i>Jus Post Bellum</i>	274
12.2 Corporate Social Responsibility and Environmental Degradation	277
12.3 Ensuring Corporate Social Responsibility and Respect for Human and Environmental Rights in Post-Conflict Countries	279
12.4 UN and International Financial Organizations	290
12.5 Challenges and Gaps in Existing Frameworks Addressing Environmental Degradation Resulting from External Involvement in Post-Conflict Settings	293
12.6 Conclusions	297

13. Private Security Companies and Other Private Security Service Providers (PSCs) and Environmental Protection in <i>Jus Post Bellum</i>: Policy and Regulatory Challenges	299
<i>Onita Das and Aneaka Kellay</i>	
13.1 Introduction	299
13.2 PSCs and Environmental Issues: An Overview	300
13.3 PSCs: Law and Policy and its Relevance to Environmental Protection—an Overview	305
13.4 Law and Policy in Practice: Attaching Liability for PSC Wrongdoing	315
13.5 Conclusion	323

IV. REMEDYING AND PREVENTING DAMAGE AND HARM

14. Developments in the Law of Environmental Reparations: A Case Study of the UN Compensation Commission	329
<i>Cymie R. Payne</i>	
14.1 Introduction	329
14.2 Constitution of the UNCC and Choice of Civil or Criminal Law	333
14.3 Structure, Procedures, and Substantive Law	337
14.4 UNCC Environmental Reparations and <i>Jus Post Bellum</i>	360
14.5 What <i>Jus Post Bellum</i> Adds to Environmental Integrity	364
14.6 Conclusion	365
15. Victims of Environmental Harm During Conflict: The Potential for ‘Justice’	367
<i>Merryl Lawry-White</i>	
15.1 Introduction	367
15.2 The Environmental Imperative	369
15.3 The Patchwork of Relevant Protections	371
15.4 The Parameters of Reparation	379
15.5 Implementation: Institutions, Considerations, and Precedents	387
15.6 Conclusions	394
16. Post-Conflict Mine Action: Environment and Law	396
<i>Ursign Hofmann and Pascal Rapillard</i>	
16.1 Introduction: Nexus Between Peacebuilding, Mine Action, and the Environment	396
16.2 Normative Framework	398
16.3 Environmental Impact of Remnants of Conflict on Land	404
16.4 Environmental Impact of Mine Clearance on Land	406
16.5 Measures to Ensure Mine Clearance on Land Does No Harm to the Environment	408
16.6 Challenges and Ways to Address Liability for Environmental Degradation and Damage to Individuals from Remnants of Conflict and their Removal	409
16.7 Conclusion	418

17. ‘After the War is Before the War’: The Environment, Preventive Measures Under International Humanitarian Law, and their Post-Conflict Impact	420
<i>Anne Dienelt</i>	
17.1 Introduction	420
17.2 Preventive Measures Under IHL	422
17.3 Preventive Measures Under IHL and their Post-Conflict Impact	431
17.4 Conclusion	436
18. Reframing the Remnants of War: The Role of the International Law Commission, Governments, and Civil Society	438
<i>Doug Weir</i>	
18.1 Introduction	438
18.2 Context	439
18.3 The Historic Decoupling of the Environment from Mine Action	440
18.4 The Emergence of the Toxic Remnants of War Framing	442
18.5 The ILC’s Draft Principle on the Toxic and Hazardous Remnants of War	444
18.6 The ILC’s Other Post-Conflict Draft Principles that Intersect with Toxic Remnants of War	450
18.7 Conclusion	453
<i>Index</i>	457

Table of Cases

n denotes a footnote reference

PERMANENT INTERNATIONAL COURTS

International Court Of Justice (ICJ)

- Ahmadou Sadio Diallo (Republic of Guinea v Democratic Republic of the Congo), 19 June 2012, ICJ Reports 639 128*n*64
- Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v Serbia and Montenegro), Judgment, 26 February 2007, ICJ Reports 43. 242*n*123, 270
- Armed Activities on the Territory of the Congo (DRC v Uganda), Judgment, 19 December 2005, ICJ Reports 168 123*n*29, 145, 147, 158–9, 173–4, 173*n*21, 231–2, 237, 373, 376, 382
- Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v Slovakia), Judgment, 25 September 1997, ICJ Reports 7 197, 354, 369, 379*n*69
- Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v Nicaragua), Judgment, 16 December 2015, ICJ Reports 358 197, 387
- Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica), Judgment, 16 December 2015, ICJ Reports 358 197, 387
- Corfu Channel (United Kingdom of Great Britain and Northern Ireland v Albania) Merits [1949] ICJ Rep 4 266, 415–16
- Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276 (1970), Advisory Opinion, 21 June 1971, ICJ 16 158
- Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, 9 July 2004, ICJ Reports 136. 123*n*29, 361*n*209, 376*n*43
- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 8 July 1996, ICJ Reports 1996 2*n*12, 9, 9*n*55, 16, 40–1, 46, 68, 93–4, 105, 123*n*29, 197, 229*n*53, 259–60, 377, 378, 426
- Military and Paramilitary Activities in and against Nicaragua (Nicaragua v USA) (Merits), Judgment of 27 June 1986, ICJ Reports 147 415–16
- North Sea Continental Shelf Cases (Federal Republic of Germany v Denmark; Federal Republic of Germany v Netherlands) Judgment, 20 February 1969, ICJ Reports 3. . . . 96, 96*n*20, 238*n*102
- Nuclear Tests Case Order (New Zealand v France), Order, 22 September 1995 [1995] ICJ Rep 288. 106, 112
- Pulp Mills on the River Uruguay (Argentina v Uruguay), Judgment, 20 April 2010, ICJ Reports 113. 70, 112–13, 197, 260*n*28, 379*n*69
- Right of Passage Over Indian Territory (Portugal v India), Judgment, 12 April 1960, ICJ Reports 6. 100, 100*n*59
- South-West Africa Cases (Ethiopia v South Africa; Liberia v South Africa), Judgment, 18 July 1966 (Second Phase) ICJ Reports 6. 96

International Criminal Court (ICC)

- Decision on the Prosecution's Application for a Warrant of Arrest against Omar Hassan Ahmad Al Bashir, ICC-02/05–01/09, 4 March 2009 126*n*56
- Prosecutor v Bemba Gombo, ICC-01/05-01/08-803, 21 March 2016 1 49*n*52

Prosecutor v Katanga, Judgment Pursuant to Article 74 of the Statute, Trial Chamber II, ICC-01/04-01/07, 7 March 2014	165, 237
Prosecutor v Lubanga Dyilo, Judgment Pursuant to Article 74 of the Statute, Trial Chamber I, ICC-01/04-01/06-2842, 14 March 2012	223, 224
Prosecutor v Lubanga Dyilo, Judgment, Appeals Chamber, ICC-01/04-01/06-3129, 3 March 2015.	384, 385–386
Prosecutor v Mbarushimana, Decision on the Confirmation of Charges, (ICC-01/04-01/10-465-Red, Pre-T.Ch. I, 16 December 2011) 2.	36n92
Prosecutor v Ntaganda, Public redacted version of Prosecutor's Pre-Trial Brief, Trial Chamber VI, ICC-01/04-02/06-503-Conf-AnxA, 9 March 2015	223
Situation in Darfur, The Sudan, ICC-02/05-152, Summary of Prosecution's Application under Article 58, 14 July 2008	225, 225n31, 226

International Tribunal of the Law of the Sea (ITLOS)

Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, ITLOS Reports, 1 February 2011	70
--	----

Permanent Court of Arbitration (PCA)

Iron Rhine Railway (Belgium v Netherlands) (2005) 27 RIAA 35	113
--	-----

Permanent Court of International Justice (PCIJ)

Case Concerning the Factory at Chorzow, PCIJ Series A No. 9, 26 July 1927.	8–9n49, 42, 265, 265n56, 352, 354, 380, 382
Diversion of Water from Meuse (Netherlands v Belgium), PCIJ Series A/B No. 70, 28 June 1937 ...	97

World Trade Organization (WTO)

EC - Measures Concerning Meat and Meat Products (Hormones) (Canada and United States v European Community), 16 January 1998, AB-1997-4, WTO Doc WT/DS26/AB/R and WT/DS48/AB/R	108n123
---	---------

AD HOC INTERNATIONAL TRIBUNALS

International Tribunal for the Former Yugoslavia (ICTY)

Prosecutor v Bošković, Case No. IT-04-82-T, Judgment, Trial Chamber, 10 July 2008	224
Prosecutor v Delalić et al, Case No. IT-96-21-T, Trial Judgment, 16 November 1998	147n32
Prosecutor v Furundžija, Case No. IT-95-17/1-T, Judgment, 10 December 1998	101, 102
Prosecutor v Karadžić, Case No. IT-95-5/18, Judgment, 24 March 2016.	226n32
Prosecutor v Kunarać and Others, Case No. IT- 96-23-A, Appeals Chamber, 12 June 2002	153
Prosecutor v Kupreškić, Case No. IT-95-16-T, Judgment, 14 January 2000	95
Prosecutor v Kupreškić, Case No. IT-95-16-T, Judgment, 14 January 2000	24n137, 97
Prosecutor v Naletelić and Martinović, IT-98-34-A, Judgment, Appeals Chamber, 3 May 2006.	226n33
Prosecutor v Popović et al, Case No. ICTY-05-88, Trial Judgment, 10 June 2010	226n32
Prosecutor v Simić, Case No. IT-95-9-T, Judgment, 17 Oct 2003	147n27
Prosecutor v Tadić, Case No. IT-94-I-AR72, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, Appeals Chamber, 2 October 1995	2n4, 13, 220nn1–2, 228n42, 235n87, 243
Prosecutor v Tolimir, Case No. IT-05-88/2, Trial Judgment, 12 December 2012	226n32

Eritrea–Ethiopia Claims Commission

Damages Claim, Final Award: Ethiopia's Claims, UNRIAA XXVI 2009, 631	263, 265, 270
Decision 7, 27 July 2007	347

Partial Award: Western Front, Aerial Bombardment and Related Claims—Eritrea's Claims, 19 December 2005, RIAA XXVI, 291.....	373, 382–3
International Tribunal for Rwanda (ICTR)	
Prosecutor v Barayagwiza et al, ICTR-99-52-T, Judgment and Sentence, Trial Chamber I, 3 December 2003.....	160
Prosecutor v Musema, ICTR-96-13-A, Judgment and Sentence, Trial Chamber I, 16 November 2001.....	160, 161
Prosecutor v Nahimana, ICTR-99-52-T, Judgment, Trial Chamber I, 3 December 2003.....	160
Special Tribunal for Lebanon (STL)	
Case Against New TV S.A.L. Karma Mohamed Tahsin Al Khayat, STL-14-05/PT/AP/ARI26.1, Decision On Interlocutory Appeal Concerning Personal Jurisdiction In Contempt Proceedings, 2 October 2014.....	224n25
Special Court for Sierra Leone (SCSL)	
Prosecutor v Alex Tamba Brima, Brima Bazzy Kamara and Santigie Borbor Kanu (the AFRC Accused), Judgment (SCSL-04-16-T, 20 June 2007).....	151
Prosecutor v Charles Ghankay Taylor, Judgment Summary, SCSL-03-1-T, 26 April 2012.....	161
International Military Tribunal, Nuremberg (and subsequent tribunals)	
Hostages case (US v List et al), US Military Tribunal V, 19 February 1948.....	154n94
IG Farben case (US v Krauch et al), US Military Tribunal VI, 29 July 1948.....	147n29, 150, 150nn61–2, 159, 160, 318–19
In re Krupp and Others, US Military Tribunal, Judgment of 30 June 1948, 15 AD 620, Case No. 214.....	155, 159, 160
Major War Criminals Trial, International Military Tribunal, 1 October 1946, 6 Fed. Rules Dec. (1947) 69.....	157
Trial of Alois and Anna Bommer and their Daughters, Permanent Military Tribunal, Metz, 19 February 1947, 9 Law Report of Trials of War Criminals 64.....	160, 160n145
Trial of Erich Heyer and Six Others (Essen Lynching case), British Military Court for the Trial of War Criminals, Essen, 22 December 1945, 1 Law Reports of Trials of War Criminals 88–92.....	160n145
US v Flick et al, US Military Tribunal IV, 22 December 1947.....	157, 159, 160
Zyklon B case (Trial of Bruno Tesch and Two Others), British Military Court, Hamburg, 8 March 1946, Law Report of Trials of War Criminals 93.....	161
Other Ad Hoc Tribunals	
Lac Lanoux Arbitration (France v Spain), Arbitral Tribunal (1957) 12 RIAA 281, 24 ILR 101.....	61n114
Trail Smelter case (United States v Canada), Arbitral Tribunal, Montreal (1941) 3 RIAA 1907.....	18n114, 61n114, 196, 357, 379

REGIONAL COURTS

European Court of Human Rights

Akdivar et al v Turkey, Judgment, App no. 99/1995/605/693, ECtHR, 1 April 1998.....	388n127
Al-Skeini and Others v the United Kingdom, App no. 55721/07, ECtHR, 7 July 2011.....	123n29
Guerra and Others v Italy, App no. 116/1996/735/932, ECtHR, 19 February 1998.....	125, 136
Hassan v United Kingdom, App no. 29750/09, ECtHR, 16 September 2014.....	123n29, 128, 377
Kyrtatos v Greece, App no. 41666/98, ECtHR, 22 May 2003.....	377
López Ostra v Spain, App no. 16798/90, ECtHR, 9 December 1994.....	136

Oneriyildiz v Turkey, App no. 48939/99, ECtHR, 30 November 2004	124
Taşkin and Others v Turkey, App no. 46117/99, ECtHR, 10 November 2004	136, 376

African Commission on Human Rights

COHRE (Sudan Human Rights Organisation & Centre on Housing Rights and Evictions) v Sudan, AHRLR 153, 27 March 2009	124, 135, 141
Egyptian Initiative for Personal Rights and Interights v Egypt, AHRLR 90, 1 March 2011	135
SERAC (Social and Economic Rights Action Centre) and Another v Nigeria, Communication no. 155/96 (Ogoni case), AHRLR 60, 27 October 2001	124, 125, 135, 136, 309–10, 377, 385

Inter-American Court of Human Rights

Case of the Plan de Sanchez Massacre v Guatemala, Judgment (Series C no. 105), IACHR, 29 April 2004	376–7
Case of the Saramaka People v Suriname (Series C no. 185), IACHR, 28 November 2007	136, 377, 393
Case of Velasquez-Rodriguez v Honduras (Series C no. 4), IACHR, 29 July 1988	381
Case of the Yakye Axa Indigenous Community v Paraguay (Series C no. 125), IACHR, 17 June 2005	124
Mayagna (Sumo) Awas Tingni Community v Nicaragua, Judgment (Series C no. 79), IACHR, 31 August 2001	376–377
Rio Negro Massacres v Guatemala, Judgment (Series C no. 250), IACHR, 4 September 2012	384–385

NATIONAL COURTS

Netherlands

Prosecutor v Kouwenhoven, Netherlands, LJN: AY5160, Rechtbank's-Gravenhage, 09/750001-05 (28 July 2006)	160
Prosecutor v Van Anraat, Netherlands, LJN: BA6734, Gerechtshof's-Gravenhage, 2200050906-2 (9 May 2007)	160

Pakistan

Shehla Zia v WAPDA, PLD, 1994 Supreme Court 693	111 <i>n</i> 157
---	------------------

Singapore

NV de Bataafsche Petroleum Maatschaap v The War Damage Commission, 23 ILR 810 (Court of Appeal, Singapore 1956)	155, 155 <i>n</i> 101, 157
---	----------------------------

South Africa

Mazibuko and Other v City of Johannesburg and Others (06/13865) 30 April 2008, ZAGPHC 491	132
---	-----

United Kingdom

Rustomjee v The Queen (1876) II QB 74	48 <i>n</i> 44, 359 <i>n</i> 192
---------------------------------------	----------------------------------

United States

Doe v Unocal Corporation, US Federal District Court, 110 F. Supp. 2d. 1294 (C.D. Cal. 2000), Judgment of 31 August 2000	319
Fantham v RONCO (2011) 1:2011cv00762 (DC District Court, April 20 2011)	418
Jobs v KBR, US District Court for the District of Maryland (5 April 2010) 7	303, 317–18
Re KBR Inc Burn Pit Litigation, US District Court for the District of Maryland, no. 8:09-md-02083-RWT, 8 September 2010	317

Re KBR Inc Burn Pit Litigation, US Court of Appeals for the Fourth Circuit, no. 13-143,
Judgment of 7 March 2014. 317-18

Presbyterian Church of Sudan v Talisman Energy, US District Court for the Southern
District of New York, 224 F.Supp.2d289, 19 March 2003. 319

Presbyterian Church of Sudan v Talisman Energy, US Court of Appeals for the Second
Circuit, 582 F.3d 244, 2 October 2009 319

Vietnam Association for Victims of Agent Orange/Dioxin et al v Dow Chemical Co. et al, 517
F.3d 76 (2d Circuit, 2008)..... 53-4n70

Table of Legislation

n denotes a footnote reference

INTERNATIONAL LEGISLATION	(2)..... 2, 51
	Art 56 47, 47 <i>nn</i> 37–8, 239–40 <i>n</i> 108, 422 <i>n</i> 12
INTERNATIONAL TREATIES AND CONVENTIONS	(1)..... 239–40 <i>n</i> 108
Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters	(2)..... 239–40 <i>n</i> 108
1998 136, 344	Art 57 421
Art 9(4) 345	Art 58 422 <i>n</i> 12
Additional Protocol I to the Geneva Conventions 1977..... 29, 46, 50–2, 57, 63, 160 <i>n</i> 145, 219, 228, 239–40, 261–2, 422	Art 59 23 <i>n</i> 132, 428–9, 430
Art 1 152–3 <i>n</i> 83	(2)..... 428
(2) 213, 224 <i>n</i> 24	Art 60 23 <i>n</i> 132, 428, 429–30, 431, 432–3, 5437
Art 4(2)(g) 148	Art 66 422 <i>n</i> 12
Art 6 422 <i>n</i> 12, 423 <i>n</i> 19	Art 74 420 <i>n</i> 3, 432 <i>n</i> 74
Art 15 239–40 <i>n</i> 108	Art 78 420 <i>n</i> 3, 432 <i>n</i> 74
Art 18 422 <i>n</i> 12	Art 79 422 <i>n</i> 12
Art 33 420 <i>n</i> 3, 432 <i>n</i> 74	Art 80 422 <i>n</i> 12
Art 34 420 <i>n</i> 3, 432 <i>n</i> 74	Art 81 422 <i>n</i> 12
Art 35 3–4, 4 <i>n</i> 22, 50–1, 50–1 <i>n</i> 56, 311, 404, 441–2	Art 82 422 <i>n</i> 12, 423 <i>n</i> 19
(3) .. 2, 16, 45, 52, 57–8, 203, 206, 218, 229, 239–40, 239 <i>n</i> 107, 243, 245, 247, 261, 307, 372, 399, 410, 424, 424 <i>n</i> 26, 425–6, 425 <i>nn</i> 29–30, 427, 435–6, 437	Art 83 420 <i>n</i> 2, 422 <i>n</i> 12, 423 <i>n</i> 19
Art 36 420 <i>n</i> 2, 421–2, 422 <i>n</i> 12, 430–1, 431 <i>n</i> 71, 433–6, 437	Art 84 422 <i>n</i> 12, 423 <i>n</i> 19
(1) 23	Art 85 239–40 <i>n</i> 108, 420 <i>n</i> 3, 432 <i>n</i> 74
Art 43 422 <i>n</i> 12	Art 86 420 <i>n</i> 3, 432 <i>n</i> 74
Art 51 404	Art 87 420 <i>n</i> 3, 432 <i>n</i> 74
(1) 431 <i>n</i> 71	(2)..... 423 <i>n</i> 19
Art 52(2)..... 427	Art 88 420 <i>n</i> 3, 432 <i>n</i> 74
Art 53 307–8	Art 89 420 <i>n</i> 3, 432 <i>n</i> 74
Art 54 2, 232 <i>n</i> 72, 373, 382	Art 90 420 <i>n</i> 3, 432 <i>n</i> 74
Art 55 3–4, 4 <i>n</i> 22, 13, 16, 45, 50–1 <i>n</i> 56, 51–3, 55, 58–9, 239 <i>n</i> 107, 243, 247, 307, 336–7, 399, 424 <i>n</i> 26, 441–2	Art 91 251, 382, 420 <i>n</i> 3, 432 <i>n</i> 74
(1)..... 51, 203, 206, 218, 229, 261, 372, 410, 423 <i>n</i> 16, 424, 425–6, 427, 437	Annex I 422 <i>n</i> 12
	Annex II 422 <i>n</i> 12
	Additional Protocol II to the Geneva Conventions 1977..... 240, 373, 422
	Preamble, para 4 213
	Art 1(1)..... 207 <i>n</i> 14
	Art 4(2)(g) 207, 214
	Art 14 207, 232–3, 232 <i>n</i> 72
	Antarctic Treaty 1959 238 <i>n</i> 101
	Anti-Personnel Mine Convention 1997 2–3 <i>n</i> 12, 11, 23, 137, 212, 401, 401 <i>n</i> 28, 410–11, 417, 445
	Art 5 138, 410
	Art 6 410–11
	Art 7(1)(f) 401
	Art 8 410
	Cartagena Plan of Action for 2010–14. . . 401

Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa 1991	197–8	Art 3(2)	401
Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution 1976	200	Art 4	410
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1989	197–8	(1)	11
Protocol on Liability and Compensation 1999	198, 265–6n59	(2)	138
Biodiversity Convention 1992	103n80, 275	(4)	11, 138
Art 3	196n21	Art 5	410–11
Charter of the International Military Tribunal (Nuremberg) 1945		Art 6	410–11
Art 6(b)	148	Art 7(1)(f)	401
Charter of the United Nations		Art 8	410
1945	29, 175–6	Convention Concerning the Protection of the World Cultural and Natural Heritage <i>see</i> World Heritage Convention 1972	
Art 24	175n27, 199	Convention on Long-range Transboundary Air Pollution 1979	198
Art 41	176	Art 2	378n59
Art 103	199	Art 7	378n59
Chemical Weapons Convention		Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons 1980 (CCW)	62n116, 240–1, 262, 374, 401, 442, 445
1993	2–3n12, 18–19, 192–202, 262, 374	Preamble	240n113
Art I	193–4	Art 1	241
Art II	193–4	Protocol II on the Use of Mines, Booby-Traps and Other Devices (Amended 1996)	374
(5)	193n9	Art 10	2–3n12, 138
Art IV	193–4	Protocol III on the Use of Incendiary Weapons	62n116
(6)	194	Art 2(4)	240n113
(10)	195	Protocol V on Explosive Remnants of War 2003	401–2, 447, 448, 449, 453
(11)	194–5	Convention on Supplementary Compensation for Nuclear Damage 1997	
(12)	194	Annex, Art 3(5)	214–15
(16)	194	Convention on the Law of the Non-Navigational Uses of International Watercourses 1997	379
Art V	193–4	Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques <i>see</i> ENMOD Convention	
(11)	195	Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction <i>see</i> Chemical Weapons Convention	
Art VII	193–4	Convention on the Prohibition on the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction <i>see</i> Anti-Personnel Mine Convention	
(3)	195		
Annex on Implementation and Verification	193–4		
Pt IV(A)	193–4		
para c.13	196		
CITES (Convention of International Trade in Endangered Species) 1973	105		
Art 2(1)	74–5n8		
App 1	74–5n8		
Cluster Munitions Convention			
2010	23, 137–8, 401, 401n28, 410–11, 445		
Art 2(2)	138n143		

Convention on Third Party Liability in the Field of Nuclear Energy 2004 Amending Protocol, Art 9	214–15	Art 22	47n37
Convention relative aux transports internationaux ferroviaires 1980	198	Hague Convention IX concerning Bombardment by Naval Forces in Time of War 1907	148
ENMOD Convention 1977	2, 16, 29, 45, 46, 47n37, 50, 57, 59–60, 105, 206, 218, 219, 228, 244–5, 262, 373–4, 424, 425–6, 442	Hague Convention X for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention 1907	148
Art 1	2n6, 53, 229, 245, 425–6 (1)	Art 21	148n40
Art 2	53, 245n133	Hague Declaration (IV, 3) concerning Expanding Bullets 1899	212
European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways 2000	198–9	Hague Regulations 1907, Annex to Hague Convention IV	46, 154–8, 373
European Agreement Concerning the International Carriage of Dangerous Goods by Road 1957	198–9	Art 22	47n37, 49n50
Framework Convention on Climate Change	275	Art 23	47n37, 49n50 (g)
Art 5	41	Art 25	49
Art 91	41	Art 28	49, 148
Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field	422	Art 46	154n95, 155, 155n98
Art 47	420n2, 423n19	Art 47	148, 154n95, 231n70, 319
Geneva Convention II for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea	422	Art 52	154n95
Art 48	420n2, 423n19	Art 53	154n95, 156 (1)
Geneva Convention III relative to the Treatment of Prisoners of War	422	Art 55	49, 49n51, 155–7, 308n64
Art 127	420n2, 423n19	Art 56	49
Geneva Convention IV relative to the Protection of Civilian Persons in Time of War 1949	46, 373, 422	International Convention on Civil Liability for Oil Pollution Damage 1969	379
Art 15	23n132	Art 1(6)	265–6n59
Art 33	23n132, 148, 231n70	International Covenant on Civil and Political Rights 1966 (ICCPR)	122n21, 128
Art 53	23n132	Art 1(2)	236–7
Art 144	420n2, 423n19	Art 4	376
Art 147	154n95, 307, 336, 375	Art 6	124, 309
Geneva Conventions I-IV (Common Articles)	160n145, 307	Art 17	311
Art 2	152–3n83, 422	Optional Protocol I	412
Art 3	61–2, 152–3n83, 207n14, 413 (3)	International Covenant on Economic, Social and Cultural Rights 1966 (ICESCR)	120, 128, 141
<i>see also</i> Additional Protocol I; Additional Protocol II		Art 1(2)	236–7
Hague Convention IV respecting the Laws and Customs of War on Land 1907		Art 2(1)	130
Art 3	214, 251, 382	Art 11	130, 132n93 (1)
		(2)	123–4
		Art 12	123
		(2)(b)	124, 310
		Optional Protocol	124, 133–4
		Art 8(4)	128
		International Whaling Convention 1946	130
		Iraqi Special Tribunal Statute 2003 Art 2(b)(17)	105
		Ottawa Convention 1997 <i>see</i> Anti- Personnel Mine Convention 1997	149

Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare 1925	230n60	Art 28	251n167
Ramsar Convention on Wetlands of International Importance 1971	68, 79, 89–90, 378–9	(a)	160–1
Art 3	83	(b)	160–1
Art 4(1)	83n52	Art 38	45
Rio Declaration on Environment and Development 1992	103nn81–2, 275, 378n58	(1)	95
Principle 3	260n28	(a)	95
Principle 10	136, 344, 394	(b)	95
Principle 15	107, 108	(c)	95, 96–7
Principle 17	136	(d)	95
Principle 18	356n173	Statute of the International Court of Justice	
Principle 24	2, 222	Art 38(1)	242
Rome Statute of the International Criminal Court	46, 57, 239n104, 252	(d)	242n123
Preamble	234n79	Statute of the International Criminal Tribunal for Rwanda 1994	
Art 6	225	Art 3	375
(c)	225	(1)	226
Art 7	226	Art 4(f)	149
(1)(k)	226	Art	6
Art 8(2)	213–14, 220n2	(1)	251n167
(a)(iv)	149	(3)	251n167
(b)(iv)	16, 19–20, 45, 52–3, 52–3n66, 58–9, 145–6, 221, 228–30, 234, 237–8, 237n97, 239–40, 244, 245, 246–7, 248, 253, 335n39, 375	Statute of the International Criminal Tribunal for Yugoslavia 1993	
(b)(xiii)	149, 230n55, 232, 233	Art 2(d)	375
(b)(xvi)	149, 149n52, 151, 230n57, 231	Art 3	375
(b)(xvii)	230n58	(e)	149
(b)(xviii)	230n59	Art 5(i)	226
(b)(xxv)	232	Art 7	
(e)	234	(1)	251n167
(e)(v)	149–50, 149n52, 230, 231	(3)	251n167
(e)(xii)	149, 230	Statute of the Special Court for Sierra Leone 2002	
(e)(xiii)	230, 238n98	Art 3(f)	149
(e)(xiv)	230, 238n98	Stockholm Declaration on the Human Environment 1972	
(e)(xv)	238n98	para 1	124
(f)	224n24	Principle 1	124, 376
Art 8 bis	227–8	Principle 21	18–19n114, 196
(2)(a)	227	Principle 26	50
Art 9(1)	149n56	Tlatelolco Treaty for the Prohibition of Nuclear weapons in Latin America 1967	238n101
Art 10	239	Treaty Banning Nuclear Weapon Tests in the Atmosphere 1963	238n101
Art 12	224n24	Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof 1971	238n101
Art 13	224n24	UN Convention on the Law of the Sea 1982 (UNCLOS)	200, 208–9
Art 25	251n167	Art 32	379n67
(1)	159	Art 56(2)	209
(3)	161		

Art 60(3).....	209	Resolution 660 (1990) on the Iraq-Kuwait situation.....	330, 333n29
Art 194.....	356n173	Resolution 661 (1990) on the Iraq-Kuwait situation.....	330, 333n29
(2).....	208	Resolution 674 (1990) on the Iraq-Kuwait situation.....	330, 333n29
(3).....	208	Resolution 678 (1990) on the Iraq-Kuwait situation.....	333n29
(4).....	196n21	Resolution 686 (1991) on the Iraq-Kuwait situation.....	330, 333n29
Art 234.....	209	Resolution 687 (1991) on the Iraq-Kuwait situation.....	2, 2n8, 60-1, 222, 262-3, 270, 330, 333-4, 337, 339, 340, 345, 347, 355-6, 391-2, 414-15
Art 236.....	208, 259n16	para 16.....	354
Universal Declaration of Human Rights		para 18.....	334n32
1948.....	412	para 19.....	340-1
Art 3.....	309	Resolution 692 (1991) on the Iraq-Kuwait situation.....	333
Vienna Convention for the Protection of the Ozone Layer 1985.....	107	para 3.....	334n32, 337
Vienna Convention on Civil Liability for Nuclear Damage 1963.....	379n66	Resolution 705 (1991) on Iraq.....	353-4n157
Amending Protocol, Art IV(3).....	214-15	Resolution 788 (1992) on an arms embargo to Liberia.....	177
Art IV(3).....	214-15	Resolution 1173 (1998) concerning an import ban on diamonds.....	176n30
Vienna Convention on the Law of Treaties 1969		Resolution 1279 (1999) concerning the DRC 185	
Art 12(2).....	248n151	Resolution 1306 (2000) concerning an import ban on diamonds from Sierra Leone.....	176n30, 177n35, 178n37
Art 13(b).....	248n151	Resolution 1343 (2001) concerning Liberia.....	171n9, 177-8, 179
Art 31(3).....	101	para 2(c).....	178
Art 34.....	248n151	para 15.....	178
Waigani Convention to Ban the importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement of Hazardous wastes within the South Pacific Region.....	198n34	para 19.....	178
World Heritage Convention 1972.....	4, 17, 57, 64n129, 74, 74n6, 77-92, 378-9	Resolution 1395 (2002) concerning Liberia.....	172n12, 178
Art 2.....	50, 78	Resolution 1408 (2002) concerning Liberia.....	178-9
Art 4.....	78, 81	Resolution 1458 (2003) concerning Liberia.....	172n13
Art 5.....	81, 82	Resolution 1478 (2003) concerning Liberia.....	179
Art 6(3).....	50, 78	Resolution 1483 (2003) on the situation between Iraq and Kuwait.....	353-4n157
Art 11		Resolution 1493 (2003) concerning an arms embargo on the DRC.....	87n79, 181-2
(2).....	78	Resolution 1509 (2003) concerning Liberia.....	184-5
(4).....	78-9, 79n30	Resolution 1521 (2003) concerning an import ban on diamonds from Liberia.....	172n14, 176n30, 177
Art 13		Preamble.....	177n34, 180
(1).....	84n57		
(7).....	87		
Art 15.....	84		
Art 22.....	84		
Operational Guidelines.....	80n34		
UNITED NATIONS INSTRUMENTS			
Security Council Resolutions			
Resolution 232 (1966) concerning an import ban on certain natural resources.....	176n29		
Resolution 253 (1968) concerning an import ban on all commodities and products.....	176n29		

Resolution 1533 (2004) concerning the DRC	182n68	General Assembly Resolutions	
Resolution 1569 (2005) concerning the DRC	182n67	Resolution 1803 (XVII), Declaration on Permanent Sovereignty over Natural Resources, 14 December 1962	236–7
Resolution 1579 (2004) concerning Liberia	180–1	Resolution 2675 (XXV), Basic Principles for the Protection of Civilian Populations in Armed Conflict, 9 December 1970	123n29
para 3	180	Resolution 2997 (XXVII) following the 1972 Rio Conference on the Human Environment, 12 December 1972	434–5
Resolution 1607 (2005) concerning Liberia	180–1, 185	Resolution 3435 (XXX) establishing the UNEP	441
Resolution 1647 (2005) concerning Liberia	172n16, 180–1, 185, 189n113	Resolution 31/72 (1976) on the ENMOPD Convention	105
Resolution 1689 (2006) concerning Liberia	181	Resolution 41/128, Declaration on the Right to Development, 4 December 1986	123
Resolution 1698 (2006) concerning the DRC	182	Resolution 45/94, ‘Need to Ensure a Healthy Environment for the Well-being of Individuals,’ 14 December 1990	119
Resolution 1753 (2007) concerning DRC ...	181	Resolution 46/216, 20 December 1991	356n173
Resolution 1756 (2007) concerning the DRC	184	Resolution 47/37, Protection of the Environment in Times of Armed Conflict, 25 November 1992	244, 434n87
para 2	186–7	Resolution 47/151, International cooperation to mitigate the environmental consequences resulting from the situation between Iraq and Kuwait, 18 December 1992	356n173
Resolution 1856 (2008) concerning the DRC	187, 223	Resolution 49/50 (1994) on the UN Decade of International Law	2
para 4	187	Resolution S-19/2, Programme for the Further Implementation of Agenda 21, 19 September 1997	108
Resolution 1857 (2008) concerning the DRC	182	Resolution 56/4 (2001) on the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict	219
Resolution 1896 (2009) concerning the DRC	182–3	Resolution 60/147, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, 16 December 2005	383–4, 385
para 6	183n77	Art 11	383
para 16	183n75	Art 12	252, 252n169
Resolution 1906 (2009) concerning the DRC	187	Annex	383
Resolution 1925 (2010) concerning the DRC	402		
Resolution 1952 (2010) concerning the DRC	183, 187		
para 7	183n79		
para 16	187		
Resolution 1961 (2010) concerning Liberia	185		
Resolution 1991 (2011) concerning the DRC para 17	184n83, 187		
Resolution 1996 (2011), Reports of the Secretary-General on the Sudan	403		
Resolution 2021 (2011) concerning the DRC	175n25		
Resolution 2053 (2012) concerning the DRC	184		
Resolution 2078 (2012) concerning the DRC Preamble	184n83		
Resolution 2098 (2013) on the DRC	188		
para 14	188n107		
Resolution 2118 (2013) on Syrian chemical weapons	199–201		
Resolution 2136 (2014) concerning the DRC	175n26, 188		
Resolution 2147 (2014) concerning the DRC para 5	188n107		

Resolution ES-10/17 (2007), Establishment of the United Nations Register of Damage	68 <i>n</i> 150	Decision 226, S/AC.26/2004/124	344
Resolution 64/292, The Human Right to Water and Sanitation, 3 August 2010 . . .	132	Decision 258, S/AC.26/Dec.258, 8 December 2005	360
Resolution 69/212, Oil slick on Lebanese shores, 29 December 2014	222	Decision 269, S/AC.26/Dec.269, 7 April 2011	360
World Heritage Committee Decisions		Decision 272, S/AC.26/Dec.272 (2014)	353–4
Decision 27 COM 7A.2, Doc. WHC-03/27.COM/24	87 <i>n</i> 80	Decision 273, S/AC.26/Dec.273 (2015)	353–4
Decision 28 COM 15A.3, Doc. WHC-04/28/COM/26	82, 87	Intra-National Peace Accords	
Decision 30 COM 7A.4, Doc. WHC-06/30.COM/19	82	Abuja Peace Agreement 1995	171
Decision 30 COM 7A.7, UN Doc. WHC-06/30.COM/1	87 <i>n</i> 80	Chapultepec Agreement between the Government of El Salvador and the Frente Farabundo Martí para la Liberación Nacional, 16 January 1992, A/46/864 116	
Decision 34 COM 7A.4, Doc. WHC-10/34.COM/20	82–3	Art 13	250 <i>n</i> 160
Compensation Committee Decisions		Art 17(12)	250 <i>n</i> 160
Decision 1, S/AC.26/1991/1 337, 338 <i>n</i> 60		Colombian Peace Agreement, 2016	122 <i>n</i> 23
Decision 3, S/AC.26/1991/3, 23 October 1991	361 <i>n</i> 210	Guatemalan Peace Agreements 1996	129
Decision 7, S/AC.26/1991/7	337–8, 347, 349, 353	Lomé Accord (Peace Agreement between the Government of Sierra Leone and the Revolutionary United Front of Sierra Leone), S/1999/777	116
para 34	339	Northern Ireland Peace Agreement (Good Friday Agreement), Belfast, 10 April 1998	116
(b)	349	Sun City Agreement (Final Act of the Inter-Congolese Political Negotiations), 2 April 2003	116
para 35	355–6	Rules/Guidelines/Other Miscellaneous Instruments	
(d)	355	Basic Principles <i>see</i> General Assembly Resolution 60/147	
para 37	345	Environment Assembly Resolution on the Protection of the Environment in Areas Affected by Armed Conflict, UN Doc. UNEP/EA.2/Res.15	450
Decision 10, S/AC.26/1991/10 (Procedural Rules)	338 <i>n</i> 60, 340	Food and Agriculture Organization, Technical Guidelines for Responsible Fisheries	111 <i>n</i> 157
Art 6	337	Food and Agriculture Organization, Voluntary Guidelines on the Responsible Governance of Tenure	282–3
Art 16	341	Human Rights Council, Draft of a Possible Convention on Private Military and Security Companies	311–12, 323
Arts 18–27	341	Art 3	
Art 28	341	(1)	322
Art 30	344	(3)	312
Art 35(1)	345		
Art 41	342		
Decision 13, S/AC.26/1991/13	337		
Decision 19, S/AC.26/1991/19	338, 338 <i>n</i> 58, 356–7		
Decision 46, S/AC.26/1997/46	345–6		
Decision 73, S/AC.26/1999/73, 25 June 1999	353 <i>n</i> 156		
Decision 100, S/AC.26/2000/100, 19 June 2000	353 <i>n</i> 156		
Decision 114, S/AC.26/Dec.114, 7 December 2000	343		
Decision 124, S/AC.26/2001/124	343–4		
Decision 132, S/AC.26/Dec.132, 21 June 2001	359		

International Law Commission

Draft Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA)	263–4, 265–6 <i>n</i> 59, 266–7, 271, 322, 332 <i>n</i> 24, 380–2, 410
Art 1	334
Art 2	334
Art 4	320
(2)	321
Art 5	320
Art 8	320
Art 16	242 <i>n</i> 123, 264
Art 21	260
Art 25	260
Art 30	352
Art 31	258, 265, 265 <i>n</i> 56, 266, 334, 352, 380, 380 <i>n</i> 72
Art 33	381
Art 34	214, 352
Art 35	352
Art 36	352, 354
Art 37	352
Draft Articles on the Effects of Armed Conflict on Treaties 2011	259–60
Arts 3-5	378
Art 7	259, 430–1
Annex	378
Draft Articles on the Prevention of Transboundary Harm Arising out of Hazardous Activities	209–10, 217
Draft Code of Crimes against the Peace and Security of Mankind 1996	242
Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities	54, 217, 386
Principle 2(b)	16, 16 <i>n</i> 105
Principle 4	214, 386
Principle 6	214
Draft Principles on the Protection of the Environment in Relation to Armed Conflicts 2016	11–15, 46 <i>n</i> 32, 204, 275, 405, 405 <i>n</i> 41, 439–54
Principle 3	433, 445
Principle 4	12 <i>n</i> 76, 450
Principle 5	13, 428
Principle 7	12, 12 <i>n</i> 75, 451
Principle 8	12, 12 <i>n</i> 77
Principle 9	13, 427 <i>n</i> 44
Principle 10	13
Principle 12	13 <i>n</i> 81
Principle 13	13, 428

Principle 14	13–14, 451–2
Principle 15	14, 14 <i>n</i> 96, 452
Principle 16 (on Toxic and Hazardous Remnants of War)	14, 23, 402, 402 <i>n</i> 32, 438, 440, 445–50, 453
Principle 17	452
Principle 18	452–3

International Maritime Organization

International Maritime Dangerous Goods Code	199
--	-----

**International Union for Conservation
of Nature**

Guidelines for Applying Protected Area Management Categories 2008	54
--	----

**OECD (Organisation for Economic
Cooperation and Development)**

Guidelines for Multinational Enterprises	284–5
---	-------

**Organisation for the Prohibition
of Chemical Weapons**

Decision: Destruction of Syrian Chemical Weapons, EC-M-33/DEC.1, 27 September 2013	199–200
Decision, OPCW-United Nations Joint Investigative Mechanism Reports on Chemical Weapons Use in the Syrian Arab Republic, EC-83/DEC.5, 11 November 2016	200–1
para 2	201 <i>n</i> 62
para 7	201 <i>n</i> 62

**Harvard University, Program
on Humanitarian Policy and Conflict
Research**

Harvard Manual on International Law Applicable to Air and Missile Warfare 2003	
r 88	424
r 89	209, 424

**Industrial/Financial Collaborative
Initiatives**

Equator Principles	288, 288 <i>n</i> 72
International Code of Conduct for Private Security Service Providers	308–9, 314–15, 323–4
Preamble	
Art 3	308
Art 4	308

Criminal Code, RSC 1985, C-46 s 6.	111n148		
Law of Armed Conflict Manual 1999	245n138		
Cape Verde			
Criminal Code 2003 Art 273	246n142		
Chad			
Instructor's Manual 2006	245-6		
Colombia			
Penal Code 2000 Art 164	246n142		
Comoros			
Decret n° 12-022/PR du 04 12 2011 portant promulgation de la loi n° 11-020/AU du 13/12/2011 portant mise en oeuvre du Statut de Rome Art. 20(2) (iv).	247n146		
Congo, Democratic Republic of the			
Genocide, War Crimes and Crimes against Humanity Act, Law No. 8-98, 31 October 1998 Art 4(b).	247n145		
Croatia			
Criminal Code 1997 Art 158(2).	246n142		
Denmark			
Military Criminal Code 1973, amended 1978 § 25(1).	247n145		
Military Criminal Code 2005 § 36(2).	247n145		
Estonia			
Penal Code 2001 Art 104	246n142		
Ethiopia			
Criminal Code 2004 Art 270	246n142		
Georgia			
Criminal Code 1999 Art. 413(d)	247n145		
Germany			
Law Introducing the International Crimes Code 2002 Art 1, § 12(3).	247n146		
Greece			
Law No. 3948/2011 on the adaptation of internal law to the provisions of the ICC Statute adopted by Law 3003/ 2002 (A'75), April 2011 Art 12(1)(c)	246n144		
Ireland			
Geneva Conventions Act, 1962, amended 1998 s 4 (1). (4).	247n145 247n145		
Kazakhstan			
Penal Code 1997 Art 161	246n141		
Kyrgyzstan			
Criminal Code 1997 Art 374	246n141		
Mali			
Penal Code 2001 Art 31(4).	246n142		
Moldova, Republic of			
Penal Code 2002 Art 136	246n141		
Mongolia			
Criminal Code 2002 Art 304	246n141		
Montenegro, Republic of			
Criminal Code 2004 Art 428(2).	246n142		
Netherlands			
International Crimes Act 2003 Art. 5(5)(b).	247n146		
New Zealand			
International Crimes and ICC Act 2000 s 11(2).	247n145		
Norway			
Military Penal Code 1902, amended 1981 § 108(b)	247n145		
Panama			
Criminal Code, Law No. 14 of 18 May 2007 Art 436	246n144		

Peru	Art 264
Code of Military and Police Justice 2006	(b) 246n144
Art 101 246n144	(g)(a) 246n144
Military and Police Criminal Code 2010	
Art 97 246n144	
Philippines	Tajikistan
Act on Crimes against International	Criminal Code 1998
Humanitarian Law, Genocide, and	Art 400 246n141
other Crimes Against Humanity 2009	
Art 4(c)(5) 246n142	Ukraine
	Criminal Code 2001
	Art 441 246n141
Portugal	United Kingdom
Adaptation of Criminal Legislation to ICC	ICC Act 2001
Statute, Law 31/2004, 22 July 2004	s 50(1) 247n145
Art 11(i) 246n144	s 51(1) 247n145
	s 58(1) 247n145
Russian Federation	United States
Criminal Code 1996	Alien Tort Claims Act 1789, US Code
Art 358 246n141	Title 28 322
	CERCLA (Comprehensive Environmental
	Response, Compensation, and
	Liability Act) 1980, US Code Title 42 ... 56
	Department of Defense Law of War
	Manual 2015 247–8
	Federal Tort Claims Act 1946, US Code
	Title 28 317, 317n130
	Lieber Code 1863 (Instructions for the
	Government of Armies of the United
	States in the Field) 212
	Art 44 148
	Migratory Bird Treaty Act 1918, US Code
	Title 16 389
	Oil Pollution Act 1990, US Code
	Title 33 56, 352n150
	s 2701 (20) 56
	Refuse Act 1899, US Code Title 33 389–90
	Uniform Code for Military Justice 147
	Uruguay
	Law on Cooperation with the ICC 2006
	Art 26(3)12 246n142
	Vietnam
	Penal Code 1999
	Art 342 246n141

Abbreviations

AComHPR	African Commission on Human and Peoples Rights
ADS	Animal Detection Systems
AEACT	Articles on the Effects of Armed Conflicts on Treaties
AFDL	Alliance des Forces Démocratiques pour la Liberation du Congo-Zaire
AP	Additional Protocols
APMBC	Anti-Personnel Mine Ban Convention
ARSIWA	ILC Articles on the Responsibility of States for International Wrongful Acts
ATCA	The United States Alien Tort Acts
CAR	Central African Republic
CCM	Convention on Cluster Munitions
CCW	Convention on Certain Conventional Weapons
CENTOM	The United States Central Command
CERCLA	US Hazardous Waste Cleanup Law
CESCR	Committee on Economic, Social and Cultural Rights
CICIG	The International Commission Against Impunity
COP	Conference of the Parties
CRC	Committee on the Rights of the Child
CSR	Corporate Social Responsibility
CW	Chemical Weapons
CWC	Chemical Weapons Convention
DDR	disarmament, demobilization, and reintegration
DFS	United Nations Department of Field Support
DPK	United Nations Department of Peacekeeping Operations
DPKO	Department of Peacekeeping Operations
DRC	Democratic Republic of Congo
EMEP	Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
ENMOD	Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques
ERW	Explosive remnants of war
ESC	Economic, Social and Cultural Rights
ESIA	Environmental and Social Impact Assessment
FAO	Food and Agriculture Organizations of the United Nations
FDI	Foreign Direct Investment
FTCA	Federal Tort Claims Act
GC	Geneva Convention
GDP	Gross Domestic Product
GEMAP	Governmental and Economic Management Assistance Programme
GEMP	Economic Management Assistance Program
GICHD	Geneva International Centre for Humanitarian Demining
HEA	Habit Equivalency Analysis
HRC	Human Rights Human Rights Committee/Council

IAC	International Armed Conflict
IAM	International Accountability Mechanism
IATG	International Ammunition Technical Guidelines
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICGLR	International Conference on the Great Lakes Region
ICJ	International Court of Justice
ICL	International Criminal Law
ICoC	International Code of Conduct for Private Security Providers
ICRC	International Committee of the Red Cross
ICTR	International Criminal Tribunal for Rwanda
ICTY	International Criminal Tribunal for the Former Yugoslavia
IDPs	Internally Displaced Persons
IEL	International Environmental Law
IFC-PS	International Finance Corporation Social and Environmental Performance Standards/International Finance Corporation's Standards on Social and Environmental Sustainability
IFOs	international financial organizations
IHL	International Humanitarian Law
ILC	International Law Commission
IMAS	International Mine Action Standards
INPFL	Independent National Patriotic Front of Liberia
IO	international organization
ISAF	International Security Assistance Force
ISIS	Islamic State of Iraq and Syria
ISO	International Organization for Standardization
KBR	Kellogg Brown and Root
LFI	Liberian Forest Initiative
LOAC	Law of Armed Conflict
LOGCAP	Logistics Civilian Augmentation Program
LURD	Liberians United for Reconciliation and Democracy
MAR	Maximum Available Resources
MEAs	Multilateral Environmental Agreements
MNCs	Multinational Corporations
MODEL	Movement for the Democracy of Liberia
MONUA	United Nations Observer Mission in Angola
MONUC/MONUSCO	United Nations (Stabilization) Mission in the Democratic Republic of Congo
MSIs	Multi-Stakeholder initiatives
NATO	North Atlantic Treaty Organization
NCPs	National Contact Points
NGOs	non-governmental organizations
NIAC	Non-International Armed Conflict
NMAA	National Mine Action Authority
NPFL	National Patriotic Front of Liberia
NSP	National Park Service
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development

OPCW	Organisation for the Prohibition of Chemical Weapons
PCIJ	Permanent Court of International Justice
PERAC	Protection of the Environment in Relation to Armed Conflicts (ILC)
PSCs	Private Security Companies and Security Service Providers
PSGs	Peacebuilding and State building Goals
REGAG	Regional Environmental Rehabilitation Advisory Group
RUF	Revolutionary United Front
SCSL	Special Court for Sierra Leone
SOFA	Status of Forces Agreement
SRSg	Special Representative of the Secretary General
TRC	Truth and Reconciliation Commissions
TRW	Toxic Remnants of War
UN	United Nations
UNAMSIL	United Nations Assistance Mission in Sierra Leone
UNCC	United Nations Compensation Commission
UNCCC	United Nations Framework Convention on Climate Change
UNCHR	United Nations High Commissioner for Refugees
UNCITRAL	United Nations Commission on International Trade Law
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNMIL	United Nations Mission in Liberia
UNMISS	United Nations Mission in South Sudan
UNOC	United Nations Operations in Côte d'Ivoire
UNTAC	United Nations Transitional Authority in Cambodia
UNRoD	United Nations Register of Damage
US	United States
UXO	Unexploded Ordnance
VLCT	Vienna Convention on the Law of Treaties (1969)
WCED	World Commission on Environment and Development
WHO	World Health Organization

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Introduction

Protection of the Environment and *Jus Post Bellum*: Some Preliminary Reflections

Carsten Stahn*, Jens Iverson**, and Jennifer S. Easterday***

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.¹

I.1 State-of-the-Art

Protection of the environment and natural resources is a key element in the transition from armed conflict to peace. Most academic studies have focused on classical peacetime or conflict situations.² The United Nations Environmental Programme ('UNEP') qualified the environment as a 'silent casualty' of armed conflict.³

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¹ Aldo Leopold, 'The Land Ethic' in *A Sand County Almanac* (New York: Oxford University Press, 1949), 262.

² See, for example, Karen Hulme, *War-Torn Environment: Interpreting the Legal Threshold* (Leiden: Brill, 2004); Carl Bruch and Jay Austin, *The Environmental Consequences of War: Legal, Scientific and Economic Perspectives* (Cambridge: Cambridge University Press, 2000); Rosemary Rayfuse (ed.), *War and the Environment – New Approaches to Protecting the Environment in Relation to Armed Conflict* (Leiden: Brill, 2014); Michael Bothe, Carl Bruch, Jordan Diamond, and David Jensen, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92 *International Review of the Red Cross* 576; Cordula Droegel and Marie-Louise Togas, 'The Protection of the Natural Environment in Armed Conflict: Existing Rules and the Need for Further Legal Protection' (2013) 82 *Nordic Journal of International Law* 21; Erik Koppe, 'The Principle of Ambiguity and the Prohibition Against Excessive Collateral Damage to the Environment During Armed Conflict' (2013) 82 *Nordic Journal of International Law* 53–82; Daniella Dam, 'From Engines for Conflict into Engines for Sustainable Development: The Potential of International Law to Address Predatory Exploitation of Natural Resources in Situations of Internal Armed Conflict' (2013) 82 *Nordic Journal of International Law* 155.

³ UNEP, Press Release, 'Environment is the "silent casualty" of armed conflict', 6 November 2016, at <http://reliefweb.int/sites/reliefweb.int/files/resources/Environment%20is%20the%20%27silent%20casualty%27of%20armed%20conflict_EN.pdf> accessed 15 August 2017.

Exploring the protection of the environment in the aftermath of armed conflict⁴ and its relationship to sustainable peace is a relatively novel perspective.⁵

The environmental devastation caused by armed conflict has prompted an expansion in the international legal framework governing environmental protection. For instance, the damage caused by the Vietnam War encouraged the adoption of the Environmental Modification Convention ('ENMOD') and Additional Protocol I to the Geneva Conventions which strengthened the protection of the environment from widespread destruction during conflict.⁶ ENMOD restricted the modification of nature as a weapon of war.⁷ Additional Protocol I protected the environment itself (Art. 35(3)), as well as the human population (Art. 54), and banned attacks against the natural environment by way of reprisals (Art. 55(2)). The 1991 Iraq War led to unprecedented oil spills in the Persian Gulf. It prompted the adoption of Security Council Resolution 687 (1991),⁸ as well as the establishment of the United Nations Compensation Commission which dealt *inter alia* with environmental damage. Since the 1990s, the UNEP, other UN agencies, and numerous NGOs have taken a control role in assessing and documenting environmental damage caused by conflict.⁹ The International Committee of the Red Cross ('ICRC') has developed guidelines for the protection of the environment during armed conflict¹⁰ which were endorsed by the General Assembly.¹¹ Principle 24 of the Rio Declaration on Environment and Development specifies expressly that states shall provide 'protection for the environment in armed conflict' since '[w]arfare is inherently destructive of sustainable development'.¹² Several disarmament instruments contain duties to remove remnants of war or to destroy weapons after conflict in conditions that do not result in significant damage to the environment.¹³ Efforts have

⁴ In *Tadić*, the ICTY defined armed conflict as 'a situation in which there is resort to armed force between States or protracted resort to armed force between governmental authorities and organized armed groups'. ICTY, *Prosecutor v. Tadić*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, No. IT-94-I-AR72, 2 October 1995, para 70.

⁵ See Toxic Remnants of War Project, *Environmental Mechanics: Re-Imaging Post-Conflict Environmental Assistance* (Toxic Remnants of War Project, 2015), at <http://www.toxicremnantsofwar.info/wp-content/uploads/2015/11/TRWP_Environmental_Mechanics.pdf> accessed 15 August 2017.

⁶ Under Art. 1 of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Technique ('ENMOD'), parties undertake 'not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as a means of destruction, damage or injury to any other State party'. See Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 18 May 1977, 16 I.L.M. 90. On its limited scope of application, see Michael Schmitt, 'Humanitarian Law and the Environment' (2000) 28 *Denver Journal of International Law and Policy* 265.

⁷ See also Rule 45 of the ICRC Customary Law Study.

⁸ Resolution 687 specified that Iraq is 'liable under international law for any direct loss, damage, including environmental damage ... as a result of Iraq's unlawful invasion and occupation of Kuwait'.

⁹ UNEP has traced the effects of conflicts on the environment in more than twenty reports. See UNEP, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (2009), at <http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf> accessed 15 August 2017.

¹⁰ ICRC, Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict, at <<https://www.icrc.org/eng/resources/documents/article/other/57jn38.htm>> accessed 15 August 2017.

¹¹ See UN GA Res. 49/50 (1994).

¹² See also the reference by the ICJ in the Advisory Opinion, *Legality of the Threat or Use of Nuclear Weapons*, 8 July 1996, ICJ Reports 1996, para 30.

¹³ According to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, states parties hold responsibility for chemical weapons that they abandon on the territory of another state party. The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction does not contain

been made to inventory existing protections of the environment during armed conflict.¹⁴ But overall, responses remain fragmented and partial.

In humanitarian responses, protection of the natural environment is often at the periphery. Responsive action is at the core of humanitarian response—immediate action that aims to stop, prevent, or alleviate the worst and effects of abuse.¹⁵ Remedial action is less immediate, and is aimed at helping people recover and live with subsequent effects.¹⁶ Finally, environment-building action focuses on long-term efforts to rebuild societal structures and norms in order to prevent or limit current and future violations and abuses.¹⁷ Humanitarian action is predominantly focused on thematic issues, such as protection of civilians, sexual and gender-based violence, protection of children or cultural property. Environmental protection is generally not part of the immediate response (i.e. action to stop or alleviate violations), but at best part of long-term efforts to rebuild structures or prevent or limit future damage.

The role of non-state armed groups remains a bone of contention in legal discussions on conflict and environment.¹⁸ Incidents, such as the burning of oil wells by ISIS in Libya, Iraq, or Syria, highlight the risks that non-state actors may pose to the environment and health of civilians. But international law still lacks effective mechanisms and structures to deal with such types of destruction, due to ambiguity of environmental rules relating to non-international armed conflicts and lack of compliance systems.¹⁹ In addition, major powers have remained reluctant to accept environmental obligations or duties to prevent or remedy conflict-related harm.²⁰

Existing legal frameworks differ in their approach towards environmental challenges. International humanitarian law is often the starting point. The existing regime has been criticized for its high threshold for environmental damage under Articles 35 and 55 of Additional Protocol I, (i.e. the requirement of ‘widespread, long-term and severe damage’ to the environment under Additional Protocol I). As Karen Hulme has pointed out, these notions are considerably vague, and open to conflicting understandings by

an express environmental impact assessment, but requires states parties to clear all mines in areas under their jurisdiction or control. Article 10 of the 1996 Amended Protocol II on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or Have Indiscriminate Effects) obliges states to clear, remove, or destroy minefields under their control. The Protocol on Explosive Remnants of War obliges a party to a conflict to assume responsibility for remnants of war in territory under their control and to provide assistance in relation to clearance, removal, or destruction, even in the absence of control.

¹⁴ Elizabeth Mrema, Carl E. Bruch, and Jordan Diamond, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP/Earthprint, 2009).

¹⁵ Hugo Slim and Andrew Bonwick, *Protection: An ALNAP Guide for Humanitarian Agencies* (London: Overseas Development Institute, 2005), 42.

¹⁶ *ibid.* ¹⁷ *ibid.*

¹⁸ See generally Claudia Hofmann and Ulrich Schneekener, ‘Engaging Non-state Armed Actors in State and Peace-Building: Options and Strategies’ (2011) 93 *International Review of the Red Cross* 603.

¹⁹ Only a limited number of non-state armed groups have agreed to specific environmental protections in their doctrines. See Jonathan Somer, ‘Environmental Protection and Non-State Armed Groups: Setting a Place at the Table for the Elephant in the Room’, at <<http://www.toxicremnantsofwar.info/environmental-protection-and-non-state-armed-groups-setting-a-place-at-the-table-for-the-elephant-in-the-room/>> accessed 15 August 2017.

²⁰ For instance, the US has called into question the customary nature of Rule 45 of the ICRC Customary Law Study which prohibits causing ‘serious damage to the natural environment’. See John B. Bellinger and

interpreters. Taken to its extreme, the term ‘widespread’ might be read to cover only damage that stretches over thousands of kilometres. The notion of ‘long term’ could imply a period of several decades, rather than months or years. The requirement of severity might require significant impact on human life.²¹

Protection of the environment *per se* remains an exception. While certain multilateral environment agreements (e.g. the Convention Concerning the Protection of the World Cultural and Natural Heritage) protect the environment *per se* (e.g. biodiversity), international humanitarian law and international criminal law continue to treat environmental protection largely from an anthropocentric perspective. They address environmental protection mostly through the lens of property protection (e.g. ownership of natural resources), and precautions in attack or pursuit of military objectives (principles of necessity and proportionality). Different approaches to the environment can be found within the same document. Article 35 of the 1977 Additional Protocol I²² is more ecocentric, while Article 55 is more anthropocentric—valuing the natural environment not necessarily for its own sake but because damage to the natural environment may ‘prejudice the health or survival of the population.’ This anthropocentric framework is the norm in the law of armed conflict. Like Aldo Leopold, contributors to this volume emphasize environmental integrity and stability as fundamental criteria to evaluate the effectiveness of efforts to preserve the environment and stabilize the peace.

The acceptance of specific ecological obligations and procedures in post-conflict environments continues to encounter resistance. It is only gradually recognized that a comprehensive understanding of the nexus between environment and conflict requires not only efforts to protect the environment as such, but a deeper engagement with the origins of conflicts and a better connection with peacebuilding strategies.²³

Traditional approaches face particular challenges in transitions. There is a high degree of norm diffusion. Protection of the environment and natural resources needs to be

William J. Haynes, ‘A US Government Response to the International Committee of the Red Cross Study Customary International Humanitarian Law’ (2007) 89 *International Review of the Red Cross* 443, 455–60.

²¹ See Hulme (n 2) 92–6.

²² Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977. The relevant articles are:

Article 35. BASIC RULES.

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.
3. It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

Article 55. PROTECTION OF THE NATURAL ENVIRONMENT.

1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.
2. Attacks against the natural environment by way of reprisals are prohibited.

²³ See David Jensen and Stephen Lonergan (eds.), *Assessing and Restoring Natural Resources In Post-Conflict Peacebuilding* (New York: Routledge, 2012); Carl Bruch, Carroll Muffett, and Sandra Nichols, *Governance, Natural Resources and Post-Conflict Peacebuilding* (New York: Routledge, 2015).

considered in tandem with a broad range of simultaneously applicable frameworks, such as (i) human rights, (ii) transitional justice,²⁴ (iii) arms control/disarmament, (iv) UN law and practice (sanctions, protection of natural resources, law of peace operations), (v) development, and (vi) domestic law. These bodies provide different perspectives on environmental protection. Environmental concerns may be protected through different lenses: property protection, health, and environmental norms and principles.²⁵ These frameworks complement each other and require coordination.²⁶ The weight given to these rationales may shift according to the nature and intensity of the conflict and the progression towards the consolidation of peace, that is moves from the absence of violence to thicker versions of societal peace.²⁷

Existing frameworks contain gaps and ambiguities in key areas, such as non-international armed conflict, the allocation of responsibility (e.g. ‘shared responsibility’,²⁸ or the responsibility of non-state actors such as private military contractors), and enforcement. Many human rights instruments contain environmental protections.²⁹ But there are often conflicting priorities in post-conflict settings that may require deviation from classical peacetime standards. A balance needs to be struck between strict liability approaches, supportive compliance mechanisms, and punitive approaches. Addressing immediate and long-term consequences of environmental damage in and after conflict raises novel questions about reparations.

I.2 *Jus Post Bellum* and Environmental Protection

The role of *jus post bellum* in relation to environmental protection has thus far gained limited attention in scholarship.³⁰ The concept of *jus post bellum* has roots in just war

²⁴ Transitional justice is a contested term, but can be thought of as a ‘conception of justice associated with periods of political change, characterized by legal responses to confront the wrongdoings of repressive predecessor regimes’. See Ruti G. Teitel, ‘Transitional Justice Genealogy’ (2006) 16 *Harvard Human Rights Journal* 69, 69.

²⁵ See Karen Hulme, ‘The ILC’s Work Stream on Protection of the Environment in Relation to Armed Conflict’ (2016) 34 *Questions in International Law* 27, 33.

²⁶ Each of them offers prospects to strengthen specific aspects of environmental protection (e.g. a ‘rights’-based approach to protection, standard-setting, environmental clean-up, remedies, and reparations), but also contains its inherent limitations.

²⁷ On *jus post bellum* and peace, see Cécile Fabre, *Cosmopolitan Peace* (Oxford: Oxford University Press, 2016); Mark Evans, ‘Just Peace: An Elusive Ideal’ in Eric Patterson (ed.), *Ethics Beyond War’s End* (Washington, DC: Georgetown University Press, 2012), 197.

²⁸ On ‘shared responsibility’, see Andre Nollkaemper and Dov Jacobs, ‘Shared Responsibility in International Law: A Conceptual Framework’ (2013) 34 *Michigan Journal of International Law* 359.

²⁹ For instance, Art. 24 of the African Charter of Human and Peoples’ Rights states that ‘[a]ll peoples shall have the right to a general satisfactory environment favorable to their development’. See African Charter of Human and Peoples’ Rights, (1982) 21 I.L.M. 58. The 1988 Additional Protocol to the American Convention on Human Rights reaffirms the ‘right to live in a healthy environment and to have access to basic public services’. Organization of American States, Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, OASTS No. 69, 28 I.L.M. 161.

³⁰ For an exception, see Douglas Lackey, ‘Postwar Environmental Damage: A Study in *Jus Post Bellum*’ in Larry May and Zachary Hoskins (eds.), *International Criminal Law and Philosophy* (Cambridge: Cambridge University Press, 2010), 141. In her Third Report, ILC Special Rapporteur Marie Jacobsson ‘has decided not to address the ongoing academic discussions on the concept of *jus post bellum*’ since the ‘legal-political discussion on this concept is wider than positive law and has a clear connection to just war theories’. See Marie

theory.³¹ It was traditionally linked to the assessment of the morality of war and intervention in international society.³² But it is gaining increasing importance as a legal concept through practice and law-making in different areas, such as peace treaties, peace operations, (post-)occupation law, international criminal justice, or statebuilding practice.³³ *Jus post bellum* differs from *jus contra bellum* and the *jus in bello*.³⁴ It is not only restrictive, but also permissive in nature, that is geared at facilitating and guiding 'choices' in transitions. Like other fields, it has been primarily concerned with atrocity violence and human harm.³⁵ It has traditionally neglected the environment or treated it as a low priority. This limited focus is open to critical scrutiny.

Environmental exploitation and harm is often not just a result of armed conflict, but one of its major causes. Studies about the interactions of human and natural systems show that environmental impact can have serious consequences for peacebuilding.³⁶ For instance, environmental damage caused by weapons, oil spills and destroyed landscapes, or killing of wildlife may impede health, return of internally displaced persons, sustainable development, or social peace among societies affected conflict. Cymie Payne has thus convincingly argued in our first *jus post bellum* volume that environmental integrity is an essential part of breaking cycles of conflict, restoring societies, and re-establishing the rule of law.³⁷

G. Jacobsson, Special Rapporteur, Third Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A/CN.4/700, 3 June 2016, para 10.

³¹ See, for example, Michael Walzer, *Arguing About War* (New Haven, CT: Yale University Press, 2004); Brian Orend, *War and International Justice: A Kantian Perspective* (Waterloo, ON: Wilfrid Laurier Press, 2000), 57; Brian Orend, *The Morality of War* (Buffalo, New York: Broadview Press, 2006), 160–90; Alex Bellamy, 'The Responsibilities of Victory: *Jus Post Bellum* and the Just War' (2008) 34 *Review of International Studies* 601; Mark Allman and Tobias Winright, *After the Smoke Clears: The Just War Tradition and Post War Justice* (Maryknoll: Orbis Books, 2010); Michael Walzer, 'The Aftermath of War. Reflections on *Jus Post Bellum*' in Eric Patterson (ed.), *Ethics Beyond War's End* (Washington, DC: Georgetown University Press, 2012), 35.

³² On *jus post bellum* and judgment, see Jeremy Waldron, 'Post Bellum Aspects of the Laws of Armed Conflict' (2009) 31 *Loyola of Los Angeles International and Comparative Law Review* 31, 45–55.

³³ See Inger Österdahl and Esther van Zadel, 'What Will *Jus Post Bellum* Mean: Of New Wine and Old Bottles' (2009) 14 *Journal of Conflict and Security Law* 175; Adam Roberts, 'Transformative Military Occupation: Applying the Laws of War and Human Rights' (2006) 100 *American Journal of International Law* 580; Kristen Boon, 'Obligations of the New Occupier: The Contours of *Jus Post Bellum*' (2009) 31 *Loyola of Los Angeles International and Comparative Law Review* 57; Christine Bell, 'Post-conflict Accountability and the Reshaping of Human Rights and Humanitarian Law' in Orna Ben-Naftali (ed.), *International Humanitarian Law and International Human Rights* (Oxford: Oxford University Press 2011), 328, 369. See also the contributions in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson, *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014).

³⁴ On critiques of *jus post bellum*, see Hilary Charlesworth, 'Law After War' (2007) 8 *Melbourne Journal of International Law* 233; Eric De Brabandere, 'The Responsibility for Post-Conflict Reforms: A Critical Assessment of *Jus Post Bellum* as a Legal Concept' (2010) 43 *Vanderbilt Journal of Transnational Law* 119; Ruti Teitel, 'Rethinking *Jus Post Bellum* in an Age of Global Transitional Justice' (2013) 24 *European Journal of International Law* 335.

³⁵ For a critique of the crisis narrative of international law, see Hilary Charlesworth, 'International Law: A Discipline of Crisis' (2002) 65 *Modern Law Review* 377.

³⁶ UNEP, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (United Nations Environment Programme, 2009), at <http://postconflict.unep.ch/publications/pcdmb_policy_01.pdf> accessed 15 August 2017.

³⁷ See Cymie Payne, 'The Norm of Environmental Integrity in Post-Conflict-Legal Regimes' in Stahn, Easterday, and Iverson (n 33) 502.

I.2.1 Notions of *jus post bellum*

This volume seeks to make the case that *jus post bellum* can have a useful role in relation to environmental protection. A fundamental premise is that environmental damage needs to be considered independently from respect of *jus ad bellum* and *jus in bello*.³⁸ As we have set out in our previous research, the concept is inherently linked to the idea of sustainable peace.³⁹ Some view it in a narrow sense, namely as a concept relating to the transition phase out of armed conflict, that is a phase that is separate from a complete end to hostilities.⁴⁰ We have understood it in a wider sense, namely not only as exit from conflict, but as a concept inherently connected to the establishment of peace. It pursues different macro purposes:

- (i) it may have a certain preventive function, by requiring actors to look into the consequences of action before, rather than ‘in’ and ‘after’ armed conflict;
- (ii) it may serve as a constraint on violence in armed conflict; and
- (iii) it may facilitate a succession to peace, rather than ‘exit’ from conflict.

In legal terms, the concept may be understood in at least three different ways. *Jus post bellum* may be said to form a system of norms and principles applicable to transitions from conflict to peace.⁴¹ This view is the most ambitious conception. Many *jus post bellum* norms are adaptations from existing bodies of law, or are derived from them. Process-related norms, flexible principles, and ‘soft law’ have particular importance, in light of the particular tensions raised in post-conflict settings.

A second and more ‘modest’ understanding of *jus post bellum* is its qualification as a ‘framework’.⁴² This conception emphasizes the functionality of *jus post bellum*. *Jus post bellum* might be understood as an ‘ordering framework’, namely as an instrument to identify what rules and principles apply in post-conflict situations, to coordinate the application of laws, or to solve conflicts of norms or balance conflicting interests.

Thirdly, *jus post bellum* may constitute an interpretative device.⁴³ The concept might inform a context-specific interpretation of certain normative concepts, such as ‘military necessity’ or the principle of proportionality. For instance, the nexus between

³⁸ See also chapter 16 in this volume. On the independence of *jus post bellum* from *jus ad bellum* and *jus in bello*, see Carsten Stahn, ‘Jus ad bellum’, ‘jus in bello’ ... ‘jus post bellum?’ – Rethinking the Conception of the Law of Armed Force’ (2007) 17 *European Journal of International Law* 921, 936; Carsten Stahn, ‘Das Ringen um den Frieden: Jus Ad Bellum, Jus Contra Bellum, Jus Post Bellum?’ in Andreas von Arnould (ed.), *Völkerrechtsgeschichte(n): Historische Narrative und Konzepte im Wandel* (Berlin: Duncker & Humblot, 2017), 147, 156–7.

³⁹ Jennifer S. Easterday, Jens Iverson, and Carsten Stahn, ‘Exploring the Normative Foundations of *Jus Post Bellum*: An Introduction’ in Stahn, Easterday, and Iverson (n 33) 1, 11.

⁴⁰ On *jus ex bello*, see Darrel Mollendorf, ‘Jus ex Bello’ (2008) 16 *Political Philosophy* 123; Darrel Mollendorf, ‘Two Doctrines of Jus ex Bello’ (2015) 125 *Ethics* 653; David Rodin, ‘Two Emerging Issues of Jus Post Bellum: War Termination and the Liability of Soldiers for Crimes of Aggression’ in Carsten Stahn and Jann Kleffner (eds.), *Jus Post Bellum: Towards a Law of Transition from Conflict to Peace* (The Hague: TMC Asser Press, 2008), 53.

⁴¹ On this understanding see Carsten Stahn, ‘The Future of Jus Post Bellum’ in Stahn and Kleffner (n 40), 231, 236–7.

⁴² See Easterday, Iverson, and Stahn (n 39) 1, 2–4.

⁴³ See James Gallen, ‘Jus Post Bellum: An Interpretive Framework’ in Stahn, Easterday, and Iverson (n 33) 58.

environmental protection and peace might support a ‘green’ interpretation of concepts, such as proportionality, necessity, or distinction.

I.2.2 Implications in relation to environmental protection

As Larry May and others have shown, *jus post bellum* demands moderation, which derives from the need to end conflict in a sustainable way.⁴⁴ This may require concessions, compromises, and a certain degree of renouncement, that is an openness by parties to conflict to accept not only what is ‘owed’, but what can be reasonably demanded. This conception has a certain grounding in the principle of equity,⁴⁵ which plays a prominent role in general international law and international environmental law.

These tensions, and in particular the need for moderation, communitarian approaches, and balancing of conflicting interests, are evident in the field of environmental protection. The ‘optimal goal’ is, as the International Law Commission (‘ILC’) put it, to leave ‘no environmental footprints at all.’⁴⁶ While optimal, this goal is normally not only impossible—even assessment of the extent of environmental harm can be difficult. During and after armed conflict, it is often hard to obtain reliable information on the condition of the environment. Assessment of environmental harm is mostly only one among competing priorities. Contributions to the harm are often shared or clouded by scientific uncertainty. Certain forms of damage may unfold in slow motion and materialize only long after cessation of hostilities. Other forms of damage may be irreversible. It will often be impossible to restore the *status quo ante*.

The only remedy may be forward-looking, that is to strengthen system resilience.⁴⁷ Repair of harm may require a broader distribution of burden-sharing. For instance, environmental harm is often caused by cumulative effects. The principle ‘if you break it, you own it’⁴⁸ is not necessarily most conducive to effective environmental protection. International environmental law is governed by the ‘polluter pays’ principle.⁴⁹ This approach causes particular difficulty in civil wars or fragile states. Countries affected by armed violence or parties involved in non-international armed conflict may lack

⁴⁴ See Larry May, ‘Jus Post Bellum, Grotius and Meionexia’ in Stahn, Easterday, and Iverson (n 33), 15, 21–2. Steven J. Barela and Alexis Keller, ‘Justice, Peace and Jus Post Bellum’ (2015) 7 *Amsterdam Law Forum* 98, 107, arguing that peacemaking requires recognition and certain degree of concession and compromise from parties involved (principle of renouncement).

⁴⁵ On equity in international environmental law, see Dinah Shelton, ‘Equity’ in Daniel Bodansky, Jutta Brunnée, and Ellen Hey (eds.), *The Oxford Handbook of International Environmental Law* 639; Philippe Cullet, ‘Common but Differentiated Responsibilities’ in Malgosia Fitzmaurice, David. M. Ong, and Panos Merkouris (eds.), *Research Handbook on International Environmental Law* (Cheltenham: Elgar, 2010), 161. On equity and *jus post bellum* in international investment law, see Jure Zrilič, ‘International Investment Law in the Context of Jus Post Bellum: Are Investment Treaties Likely to Facilitate or Hinder the Transition to Peace?’ (2015) 16 *Journal of World Investment & Trade* 604.

⁴⁶ Jacobsson, Third Report (n 30) para 170.

⁴⁷ See Payne, chapter 2 in this volume.

⁴⁸ See Dinah Shelton, ‘If You Break It, Do You Own It? Legal Consequences of Environmental Harm from Military Activities’ (2015) 6 *Journal of International Humanitarian Legal Studies* 201; George Clifford, ‘Jus Post Bellum: Foundational Principles and a Proposed Model’ (2012) 11 *Journal of Military Ethics* 42, 44; James Pattison, ‘Jus Post Bellum and the Responsibility to Rebuild’ (2015) 45 *British Journal of Political Science* 635, 638–41.

⁴⁹ The ‘polluter pays’ principle may be traced back to the jurisprudence of the Permanent Court of International Justice. See PCIJ, *Case Concerning the Factory at Chorzow*, PCIJ Series A, No. 9, 26 July

capacity to remedy harm caused, even if they are formally responsible for its causation. There is a risk that no one is effectively held liable for cumulative action.

Jus post bellum provides a potential framework to accommodate these tensions. It is in many ways an instrument to understand the functioning of norms, principles, and policies in a new way. It has essentially four different functions.

It offers, first of all, a lens to view environmental protection as continuum throughout cycles of conflict or conflict transformations. Environmental concerns are relevant through all phases of conflict, ranging from pre-conflict stages to different phases of armed conflict, post-conflict transitions, and their aftermath. The perspective through which they are approached in these periods differ, depending on the underlying bodies of law. *Jus post bellum* provides a means to understand better how principles operate in these distinct phases. It allows a better distinction between different categories of principles, and their interplay, such as (i) environment-related principles (e.g. sustainable development,⁵⁰ intergenerational equity⁵¹), (ii) conflict or transition-related practices, (iii) organizing principles (e.g. rules of conflict, prioritization), and (iv) process-related principles (e.g. cooperation, sequencing).

Second, *jus post bellum* provides a fresh look at the operation of the principles of prevention⁵² and precaution.⁵³ In traditional discourse, prevention and precaution are mostly related to classical peacetime or armed conflict. These two scenarios are often seen in isolation of each other. *Jus post bellum* provides an incentive to regard prevention and precaution in more holistic way, namely as a prerogative in pre-conflict planning, ongoing conflict, periods of transition, and peacetime. These different phases are inherently connected. *Jus post bellum* strengthens, in particular, the argument that concerns of environmental protection are not set aside by armed conflict⁵⁴ but relevant throughout conflict and its aftermath—a finding supported by the jurisprudence of the International Court of Justice (‘ICJ’) in the *Nuclear Weapons* Opinion⁵⁵ and the practice of the ILC.⁵⁶

Third, *jus post bellum* strengthens the case for due diligence of actors beyond armed conflict. Due diligence duties are inherent in international environmental law and

1927. See generally Priscilla Schwartz, ‘The Polluter-Pays Principle’ in Fitzmaurice, Ong, and Merkouris (n 44) 243.

⁵⁰ See Duncan French, ‘Sustainable Development’, in Fitzmaurice, Ong, and Merkouris (n 45) 51.

⁵¹ See Edith Brown Weiss, ‘Implementing intergenerational equity’, in Fitzmaurice, Ong, and Merkouris (n 45) 100.

⁵² The principle of prevention is related to the avoidance of harm that is known or foreseeable. See Arie Trouwurst, *Evolution and Status of the Precautionary Principle in International Law* (The Hague: Kluwer Law International, 2002), 36–7.

⁵³ The precautionary principle includes risks arising from scientific uncertainty. *ibid.*

⁵⁴ On the relationship between *jus post bellum* and *jus in bello*, see Inger Österdahl, ‘The Gentle Modernizer of Armed Conflict?’ in Stahn, Easterday, and Iverson (n 33) 207.

⁵⁵ ICJ, *Legality of the Threat or Use of Nuclear Weapons* (n 12) para 33 (‘The Court thus finds that while the existing international law relating to the protection and safeguarding of the environment does not specifically prohibit the use of nuclear weapons, it indicates important environmental factors that are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict’).

⁵⁶ See ILC, Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A.CN.4/674, 30 May 2014, para 2 (‘This work takes, at its starting point, the presumption that the existence of an armed conflict does not ipso facto terminate or suspend the operation of treaties’).

international humanitarian law. *Jus post bellum* broadens the spectrum. It might involve a mandate to minimize harm that makes a peaceful post-conflict settlement impossible. Scholars have derived this imperative from the need to facilitate peace between warring factions.⁵⁷ This argument applies with equal force to environmental considerations, which constitute an impediment to sustainable peace. The mandate to protect the environment during and after conflict is inherently linked to the needs of future generations ('intergenerational approach'). Legally, this due diligence under *jus post bellum* is best understood as an 'obligation of conduct', that is a duty to take reasonable steps towards this outcome, rather than an obligation of result.

Fourth, *jus post bellum* allows a differentiated look at the treatment of harm and remedies. In existing discourse on the morality of war, *jus post bellum* has been associated with a principle of rebuilding.⁵⁸ The imperative to rebuild after conflict is mostly understood as a moral principle.⁵⁹ It is clear that environmental damage must 'be assessed against whomever caused it, regardless of who won or lost'.⁶⁰ But the legal regime governing post-conflict liability and responsibility is more complex. States may bear responsibility for lawful and unlawful acts. Non-state actors may be held accountable under customary international law or domestic laws. Several conventions limit damage caused by armed conflict.⁶¹ It remains contested to what extent violations trigger strict liability.⁶² Contributions to the harm may originate from a wide of actors. One of the most difficult questions is to provide effective remedies. Parties to a conflict, including non-state actors, may lack the means and know-how to restore environmental damage. Remedial action may have to be spread more widely than parties to a conflict. It relies on collective action, solidarity, and cooperation, involving affected states, international organizations, NGOs, and local actors.⁶³ Reparation or compensation claims for harm may need to be organized through specialized procedures.

This special approach towards responsibility is sometimes referred to as 'remedial responsibility'.⁶⁴ It distinguishes the responsibility of the agent for a specific outcome from the responsibility to remedy harm through remedial action ('remedial

⁵⁷ Larry May relates this to the principle of reconciliation, namely the 'obligation to initiate and conduct war in such a way that one does not unduly antagonize the people with whom one will eventually have to reach a peaceful accord'. See Larry May, *After War Ends* (Cambridge: Cambridge University Press, 2012), 21.

⁵⁸ Alexandra Gheciu and Jennifer Welsh, 'The Imperative to Rebuild: Assessing the Normative Case for Postconflict Reconstruction' (2009) 23 *Ethics & International Affairs* 121; Lonnie Peperkamp, 'On the Duty to Reconstruct After War: Who is Responsible for *Jus Post Bellum*?' (2016) XXIX *Canadian Journal of Law & Jurisprudence* 403.

⁵⁹ See generally Larry May and Andrew Forcehimes (eds.), *Morality, Jus Post Bellum, and International Law* (Cambridge: Cambridge University Press, 2012).

⁶⁰ Lackey (n 30) 141, 148.

⁶¹ See Jacobsson, Third Report (n 30) para 110 *et seq.*

⁶² See Toxic Remnants of War Project (n 5) 41 ('It could be argued that as conflict and military activities are inherently risky for the environment, parties to a conflict should also bear some responsibility for damage, whether intentional or not'). Strict liability approaches have been applied in relation to oil transportation and nuclear industries.

⁶³ See also Peperkamp (n 58) 429 ('The "belligerents rebuilt thesis" must therefore be understood in a more nuanced way than it initially appeared: belligerents are not solely responsible. If they cannot bear the duty to reconstruct themselves, other actors are remedially responsible instead').

⁶⁴ David Miller, *National Responsibility and Global Justice* (Oxford: Oxford University Press, 2007), 15–16; David Miller, 'Distributing Responsibilities' (2001) 9 *Journal of Political Philosophy* 453.

responsibility'). It is reflected in certain recent disarmament instruments. Both, the Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions decouple clearance obligations from user responsibility. For instance, Article 4(4) of the Convention on Cluster Munitions 'strongly encourage[s]' states parties that used weapons to support host states in the destruction and clearance of cluster munitions.⁶⁵ But ultimately, the host state is bound to ensure clearance, irrespective of who used the weapons on its territory.⁶⁶ Responsibility is thus tied to jurisdiction and control. This approach is deemed to strengthen the protection of civilians after the cessation of hostilities.

1.3 The ILC Draft Principles on the Protection of the Environment in Relation to Armed Conflicts

Some fundamental aspects of the regime governing environmental protection in transitions from conflict to peace have been addressed by the ILC in its study on the 'protection of the environment in relation to armed conflicts', guided by Special Rapporteur Marie Jacobsson.⁶⁷

The 2016 ILC draft principles break new ground since they extend the scope of consideration of environmental protection beyond armed conflict. The ILC decided early on to adopt a holistic approach which includes not only protection during peacetime and armed conflict, but also the aftermath of conflict, and certain general principles covering all phases. The third report examines principles applying in the post-conflict phase.⁶⁸ The ILC draft principles thus venture in *post bellum* terrain which differs partly from classical peacetime. This is an achievement in itself, because it signals that environmental damage should not simply be accepted as a 'silent casualty' of conflict in the aftermath of hostilities.⁶⁹

The draft principles suggested by the ILC are in many ways marked by compromise, and in no way complete in coverage. But they reflect important trends and new insights. The ILC takes a dynamic approach towards the understanding of the environment and its ecosystems. It acknowledges that 'environmental considerations cannot remain static over time, they should develop as human understanding of the environment develops'.⁷⁰

The notion of principles as such triggered a rich debate.⁷¹ Some members expressed a preference for draft articles, which would lend themselves to codification. But

⁶⁵ Art. 4(4) of the Convention on Cluster Munitions.

⁶⁶ Art. 4(1) of the Convention on Cluster Munitions.

⁶⁷ See Michael Bothe, 'The ILC's Special Rapporteur's Preliminary Report on the Protection of the Environment in Relation to Armed Conflict: An Important Step in the Right Direction' in Pia Acconci *et al.*, (eds), *International Law and the Protection of Humanity. Essays in Honor of Flavia Latanzi* (Leiden/Boston: Brill, 2017), 213–24.

⁶⁸ Jacobsson, Third Report (n 30) para 17.

⁶⁹ See in this sense, Guilio Bartolini and Marco Pertile, 'The Work of the ILC on the Environment and Armed Conflicts: Enhancing Protection for the "Silent Victims of Warfare"?' (2016) 34 *Question of International Law* 1, 4.

⁷⁰ See Report of the ILC, Sixty-eighth session (2 May–10 June and 4 July–12 August 2016), A/71/10, 336.

⁷¹ See Report of the ILC, Sixty-seventh session (4 May–5 June and 6 July–7 August 2015), A/70/10, 108, para 146.

ultimately, the more flexible concept of principles was retained. The principles are important from a *jus post bellum* perspective in several ways.

A first important contribution is the desire to strengthen environmental protection in the planning and legal framework of military and peace operations. *Jus post bellum* contains a nucleus of norms and principles in UN law and the law of military operations.⁷² Many contemporary operations, such as Iraq, Afghanistan, or Libya have been criticized for a lack of appropriate mandating or planning. *Jus post bellum* scholars have argued that existing frameworks should contain a clearer pre-commitment to assess consequences of the use of force on post-conflict situations.⁷³ Some have called for a *jus ante bellum*.⁷⁴ The 2016 ILC draft principles strengthen prevention in military and peace operations before the operation. For instance, draft principle 7 encourages states and international organizations to include provisions concerning environmental protection, including 'preventive measures, impact assessments, restoration and clean-up measures' in agreements concerning the presence of military forces.⁷⁵ Draft principle 8 mandates ('shall') states and international organizations involved in peace operations to 'consider the impact of such operations on the environment and take appropriate measures to prevent, mitigate and remediate the negative environmental consequences thereof'. These principles are complemented by a general clause which highlights the aim to enhance the protection of the environment not only in pre-conflict phase, but also during armed conflict and after armed conflict.⁷⁶ Although the ILC draft principles are framed in 'soft language' ('should, as appropriate'; 'shall consider'), they serve as an important check for practices.

Second, the ILC draft principles clarify duties in armed conflict. The work of ILC is guided by the objective to strengthen the protection of the environment during armed conflict, rather than merely re-stating existing rules under international humanitarian law. This is reflected in draft principle 2.⁷⁷ One of the most important developments lies in the approach towards the protection of the environment during armed conflict. The draft principles do not expressly differentiate between the legal regime governing

⁷² See Dieter Fleck, 'Jus Post Bellum as a Partly Independent Legal Framework' in Stahn, Easterday, and Iverson (n 33) 43, 48, 50.

⁷³ See Brian Orend, *Michael Walzer on War and Justice* (Cardiff: University of Wales Press, 2000), 137–9, 190; Analisa Koeman, 'A Realistic and Effective Constraint on the Resort to Force? Pre-commitment to *Jus in Bello* and *Jus Post Bellum* as Part of the Criterion of Right Intention' (2007) 6 *Journal of Military Ethics* 198.

⁷⁴ Garrett Wallace Brown and Alexandra Bohm, 'Introducing *Jus ante Bellum* as a Cosmopolitan Approach to Humanitarian Intervention' (2016) 22 *European Journal of International Relations* 897–919.

⁷⁵ It reads: 'States and international organizations should, as appropriate, include provisions on environmental protection in agreements concerning the presence of military forces in relation to armed conflict. Such provisions may include preventive measures, impact assessments, restoration and clean-up measures.'

⁷⁶ Principle 4 (Measures to enhance the protection of the environment) reads: '1. States shall, pursuant to their obligations under international law, take effective legislative, administrative, judicial and other measures to enhance the protection of the environment in relation to armed conflict. 2. In addition, States should take further measures, as appropriate, to enhance the protection of the environment in relation to armed conflict.'

⁷⁷ It reads: 'The present draft principles are aimed at enhancing the protection of the environment in relation to armed conflict, including through preventive measures for minimizing damage to the environment during armed conflict and through remedial measures.'

international and non-international armed conflict.⁷⁸ They follow thus, to some extent, the famous critique of the distinction, formulated in *Tadić*: ‘What is inhumane, and consequently proscribed, in international wars, cannot but be inhumane and inadmissible in civil strife.’⁷⁹ As highlighted in several contributions in this volume, they treat the environment largely as a civilian object on warfare⁸⁰ and expand protection, by categorically excluding reprisals against the natural environment under all circumstances, including non-international armed conflict.⁸¹

As argued by UNEP, distinction, necessity, and proportionality under international humanitarian law ‘may not be sufficient to limit damage to the environment.’⁸² The ILC draft principles reflect this consideration. Draft principle 9 contains a general duty to respect and protect the natural environment in accordance with both, ‘applicable international law’, and ‘in particular the law of armed conflict.’⁸³ Draft principle 10 specifies that the rules and principles governing ‘distinction, proportionality, military necessity and precautions in attack’ shall be ‘applied to the natural environment, *with a view to its protection*.’⁸⁴ The ILC also recognized a general duty of care to ‘protect the natural environment against widespread, long-term and severe damage’⁸⁵ and a duty not to attack any part of it, ‘unless it has become a military objective.’⁸⁶ The duty of care is derived from Article 55 of Additional Protocol I. It clarifies that the environment is protected *per se*, even in the absence of human harm. According to the explanation of the ILC, it involves a ‘duty on the parties to an armed conflict to be vigilant of the potential impact that military activities can have on the natural environment.’⁸⁷ The draft principles also enhance protection, by requiring states to ‘designate, by agreement or otherwise, areas of major environmental and cultural importance as protected zones.’⁸⁸ The term ‘major environmental importance’ was discussed at previous occasions, but it is novel in the context of the law of armed conflict. The wording closes an important gap left in the negotiation of Additional Protocol I to the Geneva Conventions.⁸⁹

Third, the ILC draft principles reinforce post-conflict protection. They acknowledge that post-conflict construction requires a communitarian effort that goes beyond the parties to a conflict. Draft principle 14 goes to the heart of *jus post bellum*.⁹⁰ It states that ‘[p]arties to an armed conflict should, as part of the peace process, including where appropriate in peace agreements, address matters relating to the restoration and protection of the environment damaged by the conflict.’ This principle recognizes the cardinal importance of the link between peacebuilding and environmental protection. It bears some synergies with Immanuel Kant’s famous dictum in *Perpetual Peace* according to which peace agreements should avoid clauses that carry the seeds for the outbreak of further wars.⁹¹

⁷⁸ See also Stavros-Evdokimos Pantazopoulos, ‘Protection of the Environment During Armed Conflicts: An Appraisal of the ILC’s Work’ (2016) 43 *Questions in International Law* 7, 9.

⁷⁹ *Prosecutor v. Tadić* (n 3) para 119. ⁸⁰ See chapters 10 and 17 in this volume.

⁸¹ See ILC draft principle 12. ⁸² See UNEP (n 9) 52. ⁸³ ILC draft principle 9(1).

⁸⁴ Emphasis added. ⁸⁵ ILC draft principle 9(2). ⁸⁶ ILC draft principle 9(3).

⁸⁷ Jacobsson (n 30) 329. ⁸⁸ ILC draft principle 5, as well as draft principle 13.

⁸⁹ Jacobsson (n 30) 324.

⁹⁰ On *jus post bellum* and law of peace, see Christine Bell, ‘Of Jus Post Bellum and Lex Pacificatoria: What’s in a Name?’ in Stahn, Easterday, and Iverson (n 33) 181.

⁹¹ Immanuel Kant, *Traktat zum Ewigen Frieden: Ein philosophischer Entwurf*, 1795, Erster Präliminarartikel.

The principle reflects a trend to address environmental protection in peace agreements. The language encompasses both international armed conflicts and non-international armed conflicts. Moreover, the generic use of the term ‘parties’ suggests that the principle applies not only to states but also to non-state actors.⁹² This formulation marks an important acknowledgment of the obligations of non-state actors under international law. But it triggered considerable debate. Some members felt the scope of the provision should be limited to international armed conflicts, since the recognition the obligations of non-state actors ‘similar to those of States’ might legitimize their status.⁹³ Others stated that such a limitation would be at odds with the realities of armed conflicts which are predominantly non-international in nature.⁹⁴

Draft principle 14 specifies that ‘[r]elevant international organizations should, where appropriate, play a facilitating role in this regard’. Such a role is key in light of the realities of conflict which may impede cooperation between former belligerents. Some scholars have even gone a step further and argued that the ‘collective, international duty to rebuild’ should be assigned primarily according to ‘the agent’s ability to rebuild’, rather than the legal duties of parties involved in conflict.⁹⁵ This vision would require significant investment in institutions and protection mechanisms, in cases where parties are unwilling or unable to take action. Draft principle 15 seeks to strengthen restoration, remediation, and recovery. It encourages international cooperation in order to carry out environmental damage assessments and remedy harm.⁹⁶

Fourth, the ILC principles promote ‘sustainable exit’ from conflict. They contain a range of provisions to deal with the removal of harm. The most prominent one is the treatment of toxic and hazardous remnants of war. Draft principle 16 provides that ‘[a]fter an armed conflict, parties to the conflict shall seek to remove or render harmless toxic and hazardous remnants of war under their jurisdiction or control that are causing or risk causing damage to the environment’. The wording (‘shall seek to’) makes it clear that it is an obligation of conduct. It complements existing ‘obligations under international law to clear, remove, destroy or maintain minefields, mined areas, mines, booby-traps, explosive ordnance and other devices.’⁹⁷ The terms ‘party to a conflict’ includes non-state actors. The draft principle goes thus further than traditional approaches, which would rely primarily on state obligations under human rights or international environmental law.⁹⁸ The Commentary of the ILC suggests that this covers areas within *de jure* and *de facto* control.⁹⁹ This approach was partly criticized as being overambitious in its endeavour to include non-state actors in removal activities.¹⁰⁰ The principle is phrased in a progressive way since it links the obligation expressly to environmental harm as such, rather than harm to humans and property alone.

⁹² See Hulme (n 25) 37–8.

⁹³ Jacobsson (n 30) 313, para 167.

⁹⁴ *ibid.*

⁹⁵ See Pattison (n 48) 635.

⁹⁶ It reads: ‘Cooperation among relevant actors, including international organizations, is encouraged with respect to post-armed conflict environmental assessments and remedial measures’. ON UNEP’s role, see ILC, Third Report (n 30) paras. 174–84.

⁹⁷ See Jacobsson draft principle 16(3).

⁹⁸ Hulme (n 25) 37.

⁹⁹ See Protection of the environment in relation to armed conflicts Statement of the Chairman of the Drafting Committee, Mr. Pavel Šturma, 9 August 2016, 14.

¹⁰⁰ See Jacobsson (n 30) 315, para 171 (‘some members expressed the view that such responsibility should remain with the State having effective jurisdiction and relevant international organizations; it would be

The ILC's notes of cautious optimism are worth reiterating:

[T]here exists a substantive collection of legal rules that enhances environmental protection in relation to armed conflict. However, if taken as a whole, this collection of laws is a blunt tool, since its various parts sometimes seem to work in parallel streams. . . .

[T]he law that is relevant for the protection of the environment in relation to armed conflict has continued to grow and mature through practice, *opinio juris*, case law and treaties. The role of international organizations such as the United Nations, UNEP and UNESCO in this context is considerable. Environmental considerations have become part of the mainstream, and this is particularly notable when one looks at how different the situation was a decade or more ago.¹⁰¹

This cautious optimism regarding the development of the law in this area is well founded. Traditional legal approaches to protection face particular challenges during and after conflict. The overall aim of this volume is to help move environmental considerations from the periphery of to the core of the effort to respond to armed conflict and build a just and sustainable peace.

I.4 Content of the Book

This book is partly more narrow, and partly broader than the ILC study. It investigates how a *jus post bellum* approach to environmental protection can improve peacebuilding practices. It draws on multiple bodies of law to examine environmental protection in transitions from conflict to peace, including UN law, human rights, the law of occupation, and disarmament. It approaches environmental damage through the lens of multiple perspectives: property considerations (e.g. ownership over natural resources), health, and environmental concerns. Each of these lenses raises distinct dilemmas in relation to the sustainability and justice of peace.

I.4.1 Context

The opening chapter by Carl Bruch places developments challenges into context. Bruch shows that existing law is characterized by a patchwork of provisions and mechanisms.¹⁰² He argues that *jus post bellum* can and should put protection of the natural environment at its core in instances where such protection is critical to the creation of a just and sustainable transition to peace. The ILC draft principles largely avoided dealing with the environment as a cause of conflict. Bruch illustrates that natural resources can be critical for positive contributions to the economy and food security, or for financing further conflict. He therefore supports a broader *jus post bellum* approach which includes considerations of the root causes of conflict. Bruch argues that practice is an

unrealistic to expect non-State actors involved in the armed conflict to carry out the measures envisaged in the draft principle').

¹⁰¹ Jacobsson (n 30) paras. 266, 268.

¹⁰² See also generally Carl Bruch, Marion Boulicault, Shuchi Talati, and David Jensen, 'International Law, Natural Resources and Post-conflict Peacebuilding: From Rio to Rio+20 and Beyond' (2012) 21 *Review of European Community and International Environmental Law* 44.

essential touchstone for any analysis of *jus post bellum* and the environment. Ultimately, the law governing the transition to peace may often be more facilitative than restrictive, leaving a space for a politics of environmental peacebuilding.

Cymie Payne addresses the fundamental question of the definition of ‘the environment’. In the *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion, the ICJ stated that ‘the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.’¹⁰³ None of the major *in bello* regulations of the natural environment, such as ENMOD, Protocol I Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (AP I), Articles 35(3), 55, or the Rome Statute of the International Criminal Court (Article 8(2)(b)(iv)) define the environment as such. Provisions in the law of armed conflict are mostly anthropocentric¹⁰⁴ or refer to the ‘natural environment’, in distinction to the ‘human environment’. The ILC offered a broader approach in its principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities. It formulated a ‘working definition’ of the environment which ‘includes natural resources, both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors, and the characteristic of their landscape.’¹⁰⁵ In her contribution, Payne suggests to adopt an ‘integrity’ driven approach, which takes into account the collective interest, the context, the role of change, and interactivity of the environment during and after varied armed conflicts. She claims that *jus post bellum* should be aimed at improving system resilience, biodiversity, and evolutionary potential in situations where historical condition may not be recoverable.

I.4.2 Normative frameworks

The second part of the book analyses the legal and normative frameworks that govern the protection of the environment and natural resources in the transition from armed conflict to peace. They include international environmental law (‘IEL’) and multilateral environmental treaties, specific areas of public international law such as UN law, state responsibility, international humanitarian law and human rights law, as well as domestic law. Contributions discuss not only positive law and *lex lata*, but also policies and practices.

A healthy environment is a pre-condition for sustainable peacebuilding. Chapters 3 and 4 explore how international treaty law and environmental law come into play in situations from conflict to peace. Britta Sjöstedt argues that environmental treaties have the ability to fill an institutional and a normative gap in a post-conflict context, which

¹⁰³ ICJ (n 12) para 29. ¹⁰⁴ See above (n 22).

¹⁰⁵ ILC, Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, with Commentaries, 2006, draft principle 2(b), at <http://legal.un.org/ilc/texts/instruments/english/commentaries/9_10_2006.pdf> accessed 15 August 2017. The ILC notes: ‘Environment could be defined in a restricted way, limiting it exclusively to natural resources, such as air, soil, water, fauna and flora, and their interaction. A broader definition could embrace environmental values also. The Commission has opted to include in the definition the latter encompassing non-service values such as aesthetic aspects of the landscape also. This includes the enjoyment of nature because of its natural beauty and its recreational attributes and opportunities associated with it.’ *ibid.* 133.

is often characterized by institutional collapse and low priority of environmental protection work. Many environmental treaties have treaty bodies that can ensure that the treaties apply to protect the environment. Sjöstedt claims that such bodies fill important functions in post-conflict settings. She illustrates this argument by the application of the World Heritage Convention in relation to the armed conflicts taking place in the Democratic Republic of the Congo ('DRC').¹⁰⁶ She shows that the treaty bodies established under the World Heritage Convention have provided various means to protect the natural World Heritage Sites in the case of the DRC.

Kirsten Stefanik examines the role of general principles in conflict and post-conflict settings, and in particular the function of environmental principles,¹⁰⁷ such as intergenerational equity and the precautionary principle. She argues that principles of international environmental law provide necessary nuance to military decision-makers in the application of existing *jus in bello* protections for civilians and the environment. Stefanik shows that environmental destruction and degradation during conflict can and must be minimized, but that there must be equal recognition of the significant adverse impacts of environmental insecurity and the need for the ongoing application of principles of international environmental law in the transition to peace. She claims that peace arrangements and truth and reconciliation processes can provide a mechanism for continuing attention to environmental remediation and protection.

Chapter 6 addresses the role of human rights and transitional justice in the post-war environmental context.¹⁰⁸ Karen Hulme explores to what extent the human right to a healthy environment and other economic, social, and cultural rights might require the remedying and management of environmental resources, water resources, and agricultural areas. It clearly recognized that human rights law includes obligations relating to the environment.¹⁰⁹ But states often sideline human rights during peacebuilding, emphasizing instead 'rule of law' as a less contentious approach.¹¹⁰ Hulme argues that the potential of human rights mechanisms to improve environmental protections in post-conflict settings remains partly unexplored. She draws upon practice of transitional justice, which has had a mixed history of upholding such survival rights. She claims that a combined human rights and environmental approach to peacebuilding could strengthen obligations to undertake environmental clean-up and restoration, provide mechanisms to review state actions and ensure environmental remediation,

¹⁰⁶ See also Britta Sjöstedt, 'The Role of Multilateral Environmental Agreements in Armed Conflict: "Green-keeping" in Virunga National Park: Applying the UNESCO World Heritage Convention in the Armed Conflict of the Democratic Republic of the Congo' (2013) 82 *Nordic Journal of International Law* 129.

¹⁰⁷ On general principles, see Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge: Cambridge University Press, 3rd edn, 2012).

¹⁰⁸ On the environment and human rights, see Linda Hajjar Leib, *Human Rights and the Environment: Philosophical, Theoretical and Legal Perspectives* (Leiden: Brill/Martinus Nijhoff, 2010).

¹⁰⁹ Human rights law fosters public availability of environmental information, public participation in environmental decision-making, and access to legal remedies. See Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, A/HRC/31/53, 28 December 2015.

¹¹⁰ Balakrishnan Rajagopal, 'Invoking The Rule Of Law In Post-Conflict Rebuilding: A Critical Examination' (2007–2008) 49 *William & Mary Law Review* 1345, 1357.

and highlight broader 'structural violence' issues of environmental justice in the allocation and use of natural resources. She cautions at the same time against some of the tensions inherent in a predominantly human-rights-oriented approach, such as its inevitably anthropocentric nature and its risks of politicizing discourse.

Olivia Radics and Carl Bruch focus on two of the most direct impacts of armed conflict on the environment: pillage and conflict resources.¹¹¹ They argue that 'predatory natural resource exploitation' can destroy the chances for a successful transition to peace, both in conflict and its immediate aftermath, and also make a peace unjust, as unbalanced resource contracts creating 'booty futures' can lead to the continuation of exploitative practices in the post-conflict period. Drawing on international criminal law and occupation law, they show that the law of pillage presents an as-yet underutilized tool for addressing conflict resources. They claim that classical trials need to be combined with alternative avenues for accountability and prevention, including sanctions, in order to enhance just and responsible resource management.

Daniëlla Dam-de Jong builds on Radics' and Bruch's focus on pillage to develop a broader analysis of the standards developed by the United Nations Security Council for the management of natural resources and the application of those standards to the transition to peace.¹¹² She examines whether such standards are mandatory or merely hortatory, drawing out where the standards are voluntary and the particular instances where they are tied to sanctions and are thus mandatory. She also addresses key issues such as the preference for particular systems set up not by states but by third parties such as the Kimberley Process for the Certification of Rough Diamonds. More fundamentally, Dam-de Jong questions whether the United Nations Security Council is the appropriate body to bind states in this area, particularly given the Principle of Permanent Sovereignty over Natural Resources, which provides that states have the right to freely dispose of their natural resources.

Ayşe-Martina Böhringer and Thilo Marauhn investigate the underexplored relationship between arms control law and environmental law in post-conflict environments. They argue that the regime of the Chemical Weapons Convention¹¹³ and bilateral agreements need to be complemented by general principles of international environmental law, in order to deal with the environmental implications of chemical disarmament, such as transport of weapons and war material for the purpose of destruction, elimination, and conversion. One example is the prohibition to cause significant transboundary environmental harm ('no harm' principle).¹¹⁴ It includes

¹¹¹ On pillaging, see also Larissa van den Herik and Daniëlla Dam-de Jong, 'Revitalizing the Antique War Crime of Pillage: The Potential and Pitfalls of Using International Criminal Law to Address Illegal Resource Exploitation During Armed Conflict' (2011) 22 *Criminal Law Forum* 237.

¹¹² See generally Daniëlla Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (Cambridge: Cambridge University Press, 2015).

¹¹³ See generally Thilo Marauhn, 'The Prohibition to Use Chemical Weapons' (2014) 17 *Yearbook of International Humanitarian Law* 25.

¹¹⁴ The principle of 'no harm' goes back to the *Trail Smelter* case and is widely recognized as customary international law. Principle 21 of the Stockholm Declaration states: 'States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities

procedural aspects,¹¹⁵ such as the duty of consultation, exchange of information, early warning, and the assessment of potential transboundary impacts of projects at the domestic level. Drawing on insights from the situation in Syria, the authors claim that environmentally sound destruction of chemical weapons becomes complex in conflict and post-conflict situations, since it is often compromised by ongoing violence or resurgence of civil war.

Dieter Fleck examines the particular challenge of protecting the environment in the aftermath of a non-international armed conflict. He starts with an admission of the limitations in the law to limit environmental damage in relation to armed conflict. In Rule 44 of its Study on Customary International Humanitarian Law, the ICRC stated that '[m]ethods and means of warfare must be employed with due regard to the protection and preservation of the natural environment.'¹¹⁶ The ICRC study found that Rule 44 'arguably' applies also during non-international armed conflicts, 'if there are effects in another State.'¹¹⁷ Fleck argues that this 'due regard' standard should be understood as an obligation of conduct, namely an obligation to show concern for environmental effects of their military operations, and to minimize such effects not only in view of transboundary damage, but also within the territory of operations. This requires responsible planning and precautions in attack, taking in account the technical, economic, and financial capacities available at the time. Fleck also shows that reparation issues deserve more attention. The obligation to repair losses and damage caused by breaches of the *jus in bello* includes damage caused by breaches of environmental obligations. But liability may be limited or excluded during armed conflicts for injurious consequences of acts not prohibited by international law. Measures towards a sustainable recovery of the natural environment may thus depend on approaches under *jus post bellum*, including cooperation and assistance by third parties.

Matthew Gillett examines to what extent norms under international criminal law protect the environment during and after conflict.¹¹⁸ He identifies discrepancies between protections in international armed conflict and non-international armed conflict. For example, the Rome Statute prohibits '[i]ntentionally launching an attack in the knowledge that such attack will cause . . . widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete

within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'

¹¹⁵ See generally Phoebe N. Okowa, 'Procedural Obligations in International Environmental Agreements' (1996) 67 *British Yearbook of International Law* 275.

¹¹⁶ See ICRC, Rule 44, at <https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule44> accessed 15 August 2017.

¹¹⁷ In its explanation, the ICRC notes: 'This argument is based on the recognition by the International Court of Justice that safeguarding a State's ecological balance was an "essential interest" and its finding that States' obligation to ensure that activities within their jurisdiction and control respect the environment of other States or areas beyond national control were part of customary international law.' *ibid*.

¹¹⁸ See generally Frédéric Mégret, 'The Problem of an International Criminal Law of the Environment' (2011) *Columbia Journal of Environmental Law* 195; Mark A. Drumbl, 'Waging War against the World: The Need to Move from War Crimes to Environmental Crimes' in Austin and Bruch (n 2) 620–46; Tara Weinstein, 'Prosecuting Attacks That Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?' (2004–2005) 17 *Georgetown International Environmental Law Review* 697–722. On ecocide, see Lynn Berat, 'Defending the Right to a Healthy Environment: Toward a Crime of Geocide in International Law' (1993) 11 *Boston University International Law Journal* 327.

and direct overall military advantage anticipated'¹¹⁹ during an international armed conflict, but not during a non-international armed conflict.¹²⁰ Gillett argues that this gap calls for redress. He questions whether customary international law already contains a full-fledged criminal prohibition of disproportionate environmental harm in non-international armed conflict. He claims existing norms provide a space to prosecute environmental damage indirectly under anthropocentric provisions. But such convictions may be of limited expressive effect in relation to environmental values. He argues that the adoption of a prohibition against environmental harm in the context of non-international armed conflict would provide a valuable provision of *jus post bellum*.

I.4.3 Particular dilemmas and sites of contestation

The third part of the book addresses specific dilemmas that require further attention. Environmental harm is typically caused by a diversity of different actors, ranging from foreign interveners, to government forces, armed groups, or private actors. This raises complex issues in relation to responsibility and liability. For example, environmental damage in armed conflict poses complex problems in relation to the determination of shared responsibility. Corporate activities are under-regulated and can contribute to severe environmental degradation, even while promoted for the sake of development. Contributions assembled in the third part of the book identify gaps and blind spots in contemporary laws and policies, and potential practices to address them.

As Dieter Fleck has argued earlier, *jus post bellum* requires pragmatic limitation, conciliation, and participation.¹²¹ This poses challenges for reparation of environmental damage. Ilias Plakokefalos discusses legal problems arising in the sharing of responsibility for violations with a nexus to armed conflict.¹²² He identifies numerous limitations in this area connected with the nature of multilateral environmental agreements. Multilateral environmental agreements occasionally explicitly exclude the possibility of being applied in times of armed conflict, although most are silent on the subject. More fundamentally, such agreements do not pose obligations to non-state actors. In the case where environmental damage is caused by multiple states during armed conflict, the basic approach (as observed by the ILC) is independent responsibility for the entire damage when the injury is not causally divisible. Only when an injury caused by multiple states is causally divisible may compensation be proportionally reduced. Given the interconnected nature of environmental damage, complex or long-lasting armed conflict involving multiple states may carry with it broad and weighty claims of reparation. Plakokefalos shows that in its practice, the United Nations Compensation Commission ('UNCC') took a 'middle ground' between the principle of full reparation supported by the ILC and the exception according to which reparation may be adjusted.

¹¹⁹ Article 8(2)(b)(iv) of the Rome Statute.

¹²⁰ See on this also Carl Bruch, 'All's Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict' (2001) 25 Vermont Law Review 695.

¹²¹ Dieter Fleck, '*Jus Post Bellum* as a Partly Independent Legal Framework' in Stahn, Easterday, and Iverson (n 33) 43, 56–7.

¹²² See generally André Nollkaemper and Ilias Plakokefalos (eds.), *The Principles of Shared Responsibility in International Law: An Appraisal of the State of the Art* (Cambridge: Cambridge University Press, 2014).

Jennifer S. Easterday and Hana Ivanhoe focus on the threat environmental degradation poses to a sustainable peace in the aftermath of armed conflict. They argue that environmental safeguards need to be a core part of an economic recovery plan, especially when related to the use of natural resources. They propose an expansion of the Ruggie Framework on Business and Human Rights¹²³ to explicitly refer to peacebuilding environments. Key tenets of corporate social responsibility, as articulated in the Ruggie Framework and elsewhere, such as human rights due diligence and non-judicial grievance mechanisms, are important in reducing the threat environmental degradation poses to a fragile peace. Easterday and Ivanhoe emphasize that peacebuilders need to take the opportunity to work with private corporations to ensure environmental and social safeguards in development projects that could otherwise lead to a resurgence of the conflict. This may be done through domestic government regulation as well as external pathways, such as soft law norms and corporate social responsibility standards in loan and financing agreements.

Private security companies, private military security contractors, and private security service providers ('PSCs')¹²⁴ have played an increasing role in conflict situations, not only during armed conflict, but also in the withdrawal phase of troops and the disposal of military waste and conflict debris. Aneaka Kellay and Onita Das argue that the use of PSCs particularly during the peacebuilding stage poses significant challenges to transparency, oversight, and accountability. They focus on the examples of Iraq (2003–2011) and Afghanistan (2001–2014) to highlight the inadequate regulation of these entities. Of particular note is the issue of toxic pollution, increasingly identified as the toxic remnants of war, sometimes created during operations.¹²⁵ Kellay and Das claim that there is a lack of clear regulations relating to obligations and misconduct of PSCs, including the responsibility of states and other hiring non-state parties. They propose the establishment of a 'PSC compensation fund' that is used for reparation of damage to the environment and compensation for victims harmed by PSC actions.

I.4.4 Remediating and preventing harm

The final part of the book focuses specifically on preventing and remediating environmental damage and harm to victims. It analyses how liability, responsibility, damage, and harm can be measured, allocated, and enforced in specific areas, such as de-mining and removal of toxic and hazardous remnants of war, and how preventive measures can be improved (e.g. in relation to review of new weapons).

¹²³ UN Human Rights Council (HRC), Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development: Protect, Respect and Remedy: A Framework for Business and Human Rights, UN Doc. A/HRC/8/5, 7 April 2008 (prepared by John Ruggie). For more on the Ruggie Framework, see Larissa van den Herik and Jernej Letnar Čerňič, 'Regulating Corporations under International Law From Human Rights to International Criminal Law and Back Again' (2010) 8 *Journal of International Criminal Justice* 725.

¹²⁴ See generally Francesco Francioni and Natalino Ronzitti (eds.), *War by Contract: Human Rights, Humanitarian Law, and Private Contractors* (Oxford: Oxford University Press, 2011).

¹²⁵ See also chapter 18 in this volume.

Cymie Payne examines lessons from the practice of the environmental programme of the UNCC.¹²⁶ The UNCC provided a unique liability regime for compensation of environmental damage. The Government of the Republic of Iraq faced claims regarding the breach of its responsibility to other states. Individuals could make claims for their direct losses, but only through a government or an international organization. Payne claims that the UNCC's reparations programme 'was an example of *jus post bellum* in the most literal sense.' She argues that the UNCC showed moderation in its determination of claims and valuation of remediation techniques. Iraq was, in sum, required to pay less than the total cost of environmental damage that it caused. Environmental integrity was prioritized. The Commission acknowledged the precautionary need to identify potential risks in order to plan future action. Its work triggered a willingness of affected states in the region to cooperate for the improvement of environmental conditions. It might thus have implicitly applied *jus post bellum* principles (moderation, conciliation, participation), without saying so expressly.¹²⁷ Payne goes further to suggest that generally, environmental reparations provide unique opportunities for cooperation at the end of conflict. *Jus post bellum* can bring legal disciplines together under a common rubric, and allows a more constructive approach to their application to preserving environmental integrity in the transition to peace. Ultimately, she asserts that waiting until conflict ends to provide for environmental protection is short-sighted.

Merryl Lawry-White provides a broader perspective on reparative practices, drawing on multiple fields (e.g. environmental law, human rights, humanitarian law, transitional justice). She claims that is unfeasible to establish a 'general model' to deal with environmental harm in post-conflict settings (e.g. civil, administrative, or criminal). Rather, the strategy must be tailored to the context.¹²⁸ Lawry-White shows that there is limited empirical evidence indicating how reparative mechanisms respond to the needs and desires of environmental victims. She argues that reparations should not only serve the retrospective purpose of (to the degree possible) redressing the damage done, but also the prospective goal of reinforcing the rule of law and creating the foundations for a sustainable and just peace.¹²⁹ She cautions that normal judicial mechanisms may be both overwhelmed and poorly constructed for providing reparation for the type of massive, widespread environmental harm that frequently results from armed conflict.

Ursign Hofmann and Pascal Rapillard address a deadly and enduring threat to and within the environment after certain armed conflicts: mines. Mine action, particularly

¹²⁶ See generally Christopher S. Gibson, Trevor M. Rajah, and Timothy J. Feighery (eds.), *War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2015); Cymie Payne and Peter Sand (eds.), *Gulf War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2011).

¹²⁷ On *jus post bellum* considerations in the work of the Eritrea-Ethiopia Claims Commission, see Markus Krajewski, 'Schadensersatz wegen Verletzungen des Gewaltverbots als ius post bellum am Beispiel der Eritrea-Ethiopia Claims Commission' (2012) 72 ZaöRV 147.

¹²⁸ See in this sense Report of the Secretary General, The Rule of Law and Transitional Justice in Conflict and Post-conflict Societies, UN Doc. S/2004/616, 23 August 2004, Summary ('We must learn as well to eschew one-size-fits-all formulas and the importation of foreign models, and, instead, base our support on national assessments, national participation and national needs and aspirations').

¹²⁹ On environmental reparation, see Michael Bowman and Alan Boyle, *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* (Oxford: Oxford University Press, 2002).

clearance, fosters peacebuilding not only through the restoration of a safe environment but through employing former combatants as deminers and allowing the repatriation of refugees and internally displaced persons.¹³⁰ But clearance of remnants of conflict can affect ecosystems and have a negative impact on vegetation or the composition and fertility of soil. The Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions¹³¹ are silent in relation to the environmental impact of contamination and do not expressly regulate liability for such types of damage. Hoffmann and Rapillard argue that mine action organizations, like all humanitarian actors, need to consider the possible negative impacts of their operations to ensure they ‘do no harm’ and do not lead to further degradation of the environment, longer-term vulnerability, and threats to livelihoods. They discuss ways to address liability for environmental degradation from remnants of conflict and in particular for their removal. They provide particular attention to the responsibility of armed non-state actors. They argue that obligations of such non-state actors should be approached through the lens of duties of care.

Anne Dienelt focuses on preventative measures under international humanitarian law and their role in protecting the natural environment. Procedures, such as the marking of protected sites and zones¹³² as well as the duty to review new weapons, means, or method of warfare under Article 36(1) of Additional Protocol I¹³³ can contribute to protect the environment in relation to armed conflict. Dienelt shows that review procedures under Article 36 were mainly meant to guide peacetime conduct, rather than post-conflict peacebuilding. But she argues that post-conflict assessments are useful and states are required to learn lessons from past conflicts when it comes to environmental protection, since ‘after the war’ is often ‘before the war’.

The last contribution by Doug Weir deals with the removal of toxic and hazardous remnants of war.¹³⁴ Weir traces major steps taken over past decades to address remnants of war. He shows that treatment of conflict pollution involves environmental and humanitarian considerations. Weir discusses in particular, the new draft principles of the ILC regarding remnants of war, which relate clearance duties specifically to environmental damage. He criticizes that draft principle 16 merely obliges states to ‘seek to remove’ remnants.¹³⁵ But he concludes that the principles seem to be moving in a positive direction.

¹³⁰ Kristian Berg Harpviken and Rebecca Roberts, ‘Conclusions’ in Kristian Berg Harpviken, and Rebecca Roberts (eds.), *Preparing the Ground for Peace. Mine Action in Support of Peacebuilding* (Oslo: PRIO, 2004), 55.

¹³¹ See generally Karen Hulme, ‘The 2008 Cluster Munitions Convention: Stepping Outside the CCW Framework (Again)’ (2009) 58 *International and Comparative Law Quarterly* 23.

¹³² See Arts. 59 and 60 of Additional Protocol I, and Art. 15 of the Fourth Geneva Convention.

¹³³ See Justin McClelland, ‘The Review of Weapons in Accordance with Article 36 of Additional Protocol I’ (2003) 85 *International Review of the Red Cross* 397.

¹³⁴ On the Toxic Remnants of War Project, see <<http://www.toxicremnantsofwar.info/>> accessed 15 August 2015.

¹³⁵ See also Hulme (n 25) 38.

I.5 Not a Conclusion

The chapters in the book clearly indicate the path towards greater protection of the environment before, during, and after conflict is still at its beginning. It remains a challenge to align protection with the political interest of states, and the increasing involvement of non-state actors in armed conflict.

There is growing consensus that it is prohibited to use the environment as a weapon in warfare. This is reflected in international humanitarian law, and to some extent international criminal law. Works such as the ILC principles make it clear that the environment is not only protected indirectly, namely as civilian object or resource, but directly as a system. It is increasingly recognized that environmental protection must be analysed through the interplay of different law or legal regimes, such as human rights law, humanitarian law, environmental law, or disarmament. Institutions such as UNEP, the ICRC, or the ILC, and NGOs have a pioneering role in this regard. The Office of the Prosecutor of the International Criminal Court has encouraged the prosecution of ‘crimes that are committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land’.¹³⁶ This has a strong expressive and signalling effect as to the gravity of environmental crimes.

The realities of contemporary warfare show that pre-conflict, conflict, post-conflict, and peacetime cannot be neatly separated, or put into clearly defined ‘boxes’. They must rather be seen as a continuum. Duties of prevention, precaution, due diligence, or repair of harm run through all of these phases, although they might differ in scope and content. Concepts, such as the progressive realization of rights, play a useful role in steering transitions as a process.

Specific rules and principles governing transitions from conflict to peace are still in development. These are often more fluid than conventional ‘hard law’, derived from other bodies of law, or framed as principles, guidelines, or practices. Some of them, such as the principle of moderation, have been applied implicitly by post-war institutions. Others become clear or explicit through general practice, such as peace treaties, UN resolutions, manuals, or the work of expert bodies, such as the ILC. In light of the specificities of post-conflict environments, *opinio juris* might have greater value in the formation of customary rules or principles than state practice.¹³⁷

The volume indicates that there are strong links between the peace-orientation of *jus post bellum* and environmental principles, such as intergenerational equity and precaution. Many of the draft principles of the ILC may not be formally labelled as *post bellum* principles, but reflect arguments that have been made in *jus post bellum* scholarship. *Jus*

¹³⁶ ICC, OTP Policy Paper on Case Selection and Prioritisation, 15 September 2016, para 42, at <https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf> accessed 15 August 2017.

¹³⁷ In relation to international humanitarian law, see the famous statement by the ICTY, *Prosecutor v. Kupreškić*, 14 January 2000, IT-95-16-T, para 527 (‘This is however an area where *opinio iuris sive necessitatis* may play a much greater role than *usus*, as a result of the aforementioned Martens Clause’).

post bellum scholars have argued that responsible planning, pragmatic limitation, conciliation, and burden-sharing are fundamental elements of post-conflict peacebuilding. These elements are reflected in the ILC draft principles. There is emerging agreement that prevention and precaution, due diligence, and a collective approach to remediation of harm are building blocks of a post-conflict law that takes into account environmental protection.

Moreover, from a macro perspective, there might be a shifting of the lens regarding the treatment of responsibility. Traditional legal theories are agent-based. They look at individual contribution of actors to the harm, and their responsibility. In the field of environmental harm, this perspective is unsatisfactory. From a perspective of protection, the focus should not be exclusively on the wrongdoing of the agent, but mostly on the environment as object of care.¹³⁸ It is thus feasible to apply a care-driven approach towards responsibility, which is grounded in cooperation, solidarity, and capacity to remedy harm (remedial responsibility). Suggestions to improve the *status quo* include better monitoring of environmental harm, enhancing assistance models in environmental and disarmament agreements, closing gaps in relation to non-international armed conflict and non-state actors, strengthening of trust funds, and preventive mechanisms.

Of course, many challenges remain. The list is long. But the volume marks a starting point for states, international organizations, and civil society to discuss, debate, and engage on conflict and the environment. Such dialogue is urgently needed. It will need to be continued in future decades.

¹³⁸ For an assessment of duties of care under international humanitarian law, see Karen Hulme, 'Taking Care to Protect the Environment: A Meaningless Obligation?' (2010) 92 *International Review of the Red Cross* 675. On *jus post bellum*, see Sigal Ben-Porath, 'Care Ethics and Dependence—Rethinking *Jus Post Bellum*' (2008) 23 *Hypatia* 61; Carsten Stahn, 'Jus Post Bellum and the Ethics of Care', at <<http://opiniojuris.org/2014/05/09/jus-post-bellum-symposium-jus-post-bellum-ethics-care/>> accessed 15 August 2017.

PART I
FOUNDATIONS

Considerations in Framing the Environmental Dimensions of *Jus Post Bellum*

Carl Bruch*

1.1 Introduction

International law governing protection of the environment in relation to armed conflict has evolved substantially since the late 1960s. In response to the widespread use of herbicides and reported efforts to seed clouds during the Vietnam War, the international community adopted environmental provisions in Additional Protocol I to the Geneva Conventions and the Environmental Modification Convention.¹ The wanton environmental devastation of the 1990–1 Gulf War—including setting fire to more than 600 oil wells and the deliberate release of millions of barrels of oil into the Persian Gulf—shocked the international community into establishing the United Nations Compensation Commission to adjudicate environmental and other claims against Iraq, with Iraq’s liability arising from illegally engaging in aggressive warfare in contravention of the UN Charter.² In the 1990s, there was also growing awareness of the role that competition over scarce natural resources and over valuable natural resources can play in the onset of conflict (termed ‘environmental security’).³

With the end of the Cold War, the 1990s also saw the growth of international efforts to support post-conflict peacebuilding. In 1992, the UN Secretary-General announced the *Agenda for Peace*, which provided a conceptual and policy framework for post-conflict peacebuilding that went far beyond the UN’s peacekeeping efforts.⁴ In 2005, the UN Security Council established the Peacebuilding Commission, the Peacebuilding

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¹ Michael Bothe, Carl Bruch, Jordan Diamond, and David Jensen, ‘International Law Protecting the Environment during Armed Conflict: Gaps and Opportunities’ (2010) 92 *International Review of the Red Cross* 569.

² See Peter H. Sand and Cymie Payne (eds.), *Gulf War Reparations and the UN Compensation Commission: Environmental Liability* (New York: Oxford University Press, 2011); Cymie R. Payne, ‘Legal Liability for Environmental Damage: The United Nations Compensation Commission and the 1990–1991 Gulf War’ in Carl Bruch, Carroll Muffett, and Sandra S. Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (Abingdon, Oxon: Routledge, 2016).

³ See Thomas F. Homer-Dixon, ‘Environmental Scarcities and Violent Conflict: Evidence from Cases’ (1994) 19(1) *International Security* 5; Nils Petter Gleditsch, ‘Armed Conflict and the Environment: A Critique of the Literature’ (1998) 35(3) *Journal of Peace Research* 381; Rita Floyd and Richard Matthew, *Environmental Security: Approaches and Issues* (Abingdon, Oxon: Routledge, 2013).

⁴ UN Security Council, *An Agenda for Peace: Preventative Diplomacy, Peacemaking and Peacekeeping—Report of the Secretary-General*, A/47/277-S/24111, 17 June 1992.

Fund, and the Peacebuilding Support Office to assist countries making the transition from armed conflict to an enduring peace.⁵ In dozens of countries affected by armed conflict, it quickly became apparent that natural resource governance was essential to the wide range of post-conflict peacebuilding priorities, including demobilization, disarmament, and reintegration of ex-combatants, return of refugees and displaced persons, economic growth, livelihoods and food security, cooperation and reconciliation, and improving inclusive governance.⁶

Recognizing the value in thinking about the role of environment across the conflict lifecycle—from the causes of conflict, to actions during conflict, to post-conflict recovery—researchers have started to weave together diverse threads of intellectual inquiry into a new field of environmental peacebuilding. *Environmental peacebuilding* is ‘the process of governing and managing natural resources and the environment to support durable peace.’⁷ Environmental peacebuilding comprises a broad array of efforts across the conflict lifecycle that seek to prevent, mitigate, resolve, and recover from violent conflict. It draws upon renewable natural resources, non-renewable natural resources, and ecosystems and their services.⁸ While environmental peacebuilding focuses on governance and management, it extends beyond international law to include national law, institutional arrangements, private sector policies, and a wide range of practices.

At the same time, the international legal community has started to consolidate the emerging body of international law governing actions in the wake of armed conflict—*jus post bellum*.⁹ This includes international law governing natural resources and the environment—the focus of this book—as well as other dimensions touching on human rights, sovereignty, peace and security, and humanitarian efforts, among others.

1.2 *Jus Post Bellum* and Environmental Peacebuilding

This chapter seeks to place the environmental provisions of *jus post bellum* in the broader context of environmental peacebuilding. In considering the efforts to articulate a new body of *jus post bellum*, particularly as it relates to natural resources and the environment, it presents three key observations. In the process, I pose two questions that may inform the further development of *jus post bellum*.

The first observation is that there is a large and diverse body of experience related to environmental peacebuilding that can inform the development and framing of *jus*

⁵ See Matti Lehtonen, ‘Peacebuilding through Natural Resource Management: The UN Peacebuilding Commission’s First Five Years’ in Bruch, Muffett, and Nichols (n 2).

⁶ Carl Bruch, Carroll Muffett, and Sandra S. Nichols, ‘Natural Resources and Post-Conflict Governance: Building a Sustainable Peace’ in Bruch, Muffett, and Nichols (n 2).

⁷ *ibid.*

⁸ These include, for example, efforts to share benefits from natural resources in a transparent and equitable manner, bringing people together to address shared environmental threats, and developing natural resources in a conflict-sensitive manner. See, for example, Carl Bruch, David Jensen, and Amanda Kron, ‘Environmental Peacebuilding’ in *Understand to Prevent: Guidance on the Military Contribution to the Prevention of Violent Conflict* (Multinational Capability Development Campaign) (2016).

⁹ See, for example, Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014).

post bellum, including through state practice and customary international law. Natural resources underpin or affect practically every peacebuilding activity.¹⁰ Most post-conflict economies depend on natural resources to rebuild and to provide government revenues. For example, in Sierra Leone, 72 per cent of the growth in the country's gross domestic product ('GDP') came from two new (post-war) iron ore mines.¹¹ Typically 50–80 per cent of a post-conflict country's exports come from natural resources,¹² and oil revenues represent 98 per cent of South Sudan's government budget.¹³ The magnitude of oil revenues in particular can overwhelm other sources of revenue. For example, in 2010, Nigerian oil revenue was US\$ 59 billion;¹⁴ that same year bilateral official development assistance ('ODA') to Africa was US\$ 29 billion.¹⁵ In other words, Nigerian oil revenues were more than twice all bilateral ODA to Africa. Capturing natural resource revenues is both critically important to long-term development and stability, and it is a challenge. The Africa Progress Panel estimates that the Democratic Republic of the Congo ('DRC') lost US\$ 1.355 billion in five major cut-rate mining concessions since 2010.¹⁶

Disarmament, demobilization, and reintegration ('DDR') of former combatants is one of the most important factors influencing whether a conflict will recur.¹⁷ In most post-conflict countries, though, 60–80 per cent of livelihoods are agrarian.¹⁸ In these situations, typically 50–80 per cent of ex-combatants elect to return to agriculture-based livelihoods, but often there is insufficient arable land available; and in arid and semi-arid countries, land may be available, but not the water rights to successfully farm the land.¹⁹ Other resource-dependent activities include addressing return of internally displaced persons ('IDPs') and refugees, providing basic services, restoring local livelihoods, and addressing corruption.²⁰ This leads to my first key question: what is the appropriate scope of environmental issues that should be considered when discussing *jus post bellum*?

There is the classic issue of remediating and seeking penalties for widespread and severe environmental damage resulting from deliberate targeting of the environment. However, this is relatively rare: for example, in the Vietnam War and the 1990–1

¹⁰ Carl Bruch, David Jensen, Mikiyasu Nakayama, and Jon Unruh, *Post-Conflict Peacebuilding and Natural Resources: The Promise and the Peril* (Washington, DC: ELI Press, forthcoming 2018).

¹¹ Umaru Fofana, 'Mining Spurs Sierra Leone to 20 pct GDP Growth in 2013—IMF' Reuters, 3 April 2014, at <<http://www.reuters.com/article/2014/04/03/leone-imf-gdp-idUSL5N0MV37J20140403>> accessed 7 June 2017.

¹² Bruch, Jensen, Nakayama, and Unruh (n 10).

¹³ Alex de Waal, 'Sizzling South Sudan: Why Oil Is Not the Whole Story' Foreign Affairs, 7 February 2013.

¹⁴ Elisha Bala-Gbogbo, 'Nigeria's Oil Revenue Rose 46% to \$59 Billion in 2010' Bloomberg, 14 April 2011.

¹⁵ OECD, 'Development Aid Reaches an Historic High in 2010', at <<http://www.oecd.org/dac/stats/developmentaidreachesanhistorichighin2010.htm>> accessed 7 June 2017.

¹⁶ Africa Progress Panel, *Equity in Extractives: Stewarding Africa's Natural Resources for All* (2013), 101.

¹⁷ Mats Berdal and David H. Ucko (eds.), *Reintegrating Armed Groups after Conflict: Politics, Violence and Transition* (Abingdon, Oxon: Routledge, 2009). For a review of the literature on DDR and conflict recurrence, see Jonah Schulhofer-Wohl and Nicholas Sambanis, *Disarmament, Demobilization, and Reintegration Programs: An Assessment* (Stockholm: Folke Bernadotte Academy, 2010) at <https://fba.se/contentassets/7da0c74e1d22462db487955f2e373567/ddr_programs_-an-assessment.pdf> accessed 7 June 2017.

¹⁸ Bruch, Jensen, Nakayama, and Unruh (n 10).

¹⁹ *ibid.*

²⁰ *ibid.*

Gulf War. More often, the environmental harm from conflicts is either more localized in environmental hot spots (as in the 1999 Kosovo Conflict²¹) or less acute (most conflicts).

Based on 150 case studies and analyses in a series of six books on post-conflict peacebuilding and natural resource management²²—as well as the broader literature—environmental considerations after conflict most often relate to one of five key areas:

- (1) Regaining control of illicit and illegal exploitation of natural resources. This is especially the case for conflict resources—natural resources that can finance rebel groups or peace spoilers. For example, since 1990, at least thirty-five conflicts have been financed in part by natural resources ranging from diamonds and gold to coffee and bananas.²³ Some of these resources—such as narcotics—are illegal or illicit, and generally outside the realm of taxation.
- (2) Using natural resources (and particularly high-value natural resources) to jump-start the economy.²⁴ Economic dimensions of post-conflict environmental recovery include transparency of natural resource contracts, payments, expenditures of resource revenues, and social and environmental impacts; sharing of benefits, including through natural resource trust funds; and smoothing the national budget in light of volatile commodity prices, for example through stabilization funds.
- (3) Supporting livelihoods and food security, especially through agriculture.²⁵ Often, addressing land tenure issues is a central governance consideration, including for returning refugees and internally displaced persons (with rights of return and restitution), addressing underlying causes of conflict, and ensuring recognition of land held under customary tenure even in light of priorities to develop (and addressing challenges associated with large-scale land acquisitions).²⁶ Another key dimension is restoring the productive capacity of natural resources degraded by conflict, refugees and IDPs, and neglect.²⁷ This includes measures such as replanting orchards, rebuilding irrigation infrastructure, and

²¹ UNEP and UN Centre for Human Settlements, *The Kosovo Conflict: Consequences for the Environment and Human Settlements* (1999), at <<http://postconflict.unep.ch/publications/finalreport.pdf>> accessed 7 June 2017.

²² Paivi Lujala and Siri Aas Rustad (eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding* (London: Routledge, 2012); David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (London: Routledge, 2012); Jon Unruh and Rhodri C. Williams (eds.), *Land and Post-Conflict Peacebuilding* (London: Routledge, 2013); Erika Weinthal, Jessica Troell, and Mikiyasu Nakayama (eds.), *Water and Post-Conflict Peacebuilding* (London: Routledge, 2014); Helen Young and Lisa Goldman (eds.), *Livelihoods, Natural Resources, and Post-Conflict Peacebuilding* (London: Routledge, 2015); Bruch, Muffett, and Nichols (n 2).

²³ Bruch, Jensen, Nakayama, and Unruh (n 10).

²⁴ World Bank, *World Development Report 2011: Conflict, Security, and Development* (2011).

²⁵ Young and Goldman (n 22).

²⁶ Jon Unruh and Rhodri C. Williams, 'Lesson Learned in Land Tenure and Natural Resource Management in Post-Conflict Societies' in Unruh and Williams (n 22); Peter Van der Auweraert, 'Institutional Aspects of Resolving Land Disputes in Post-Conflict Societies' in Unruh and Williams (n 22).

²⁷ David Jensen and Steve Lonergan, 'Natural Resources and Post-Conflict Assessment, Remediation, Restoration, and Reconstruction: Lessons and Emerging Issues' in Jensen and Lonergan (n 22).

removing land mines, unexploded ordnance, and in a few instances depleted uranium.

- (4) Providing basic services, including access to water and sanitation.²⁸ Priorities in addressing this need include mobilizing finance and engaging the informal sector.
- (5) Using natural resources and the environment to facilitate cooperation, dialogue, and reconciliation.²⁹

The tension between the historic focus on environmental damage arising from armed conflict and the broader range of environmental priorities actually faced by post-conflict countries raises an important consideration for defining the scope of environmental inquiry related to *jus post bellum*. We can focus narrowly on intentional targeting of the environment and ask how *jus post bellum* can address the wrongful targeting of the environment during armed conflict. This is a worthwhile endeavour. However, based on the breadth of needs in post-conflict natural resource management, *jus post bellum* can have a much broader and much more significant role in laying the normative, institutional, and procedural foundations for a lasting transition to peace. To do that, though, it is necessary to take a broad view of the environment in *jus post bellum*.

The second observation is that notwithstanding the importance of the environment to post-conflict peacebuilding, most programming in conflict-affected countries pays little thought to law—and even less to international law. To the extent that people are thinking about the law, it is usually domestic legislation. There are frequently efforts to reform a country's Land Law, the Mining Law, the Forestry Law, and other sectoral legislation.³⁰ International treaty law rarely influences these reforms. There is consideration of international processes and soft-law principles, such as the Extractive Industries Transparency Initiative, the Pinheiro Principles, the Sphere Principles, and the Non-Binding Forest Principles.³¹ The Peacebuilding and State building Goals (PSGs) of the Busan New Deal³²

²⁸ Jessica Troell and Erika Weinthal, 'Harnessing Water Management for More Effective Peacebuilding: Lessons Learned,' in Weinthal, Troell, and Nakayama (n 22).

²⁹ Bruch, Jensen, Nakayama, and Unruh (n 10); Munqeth Mehyar, Nader Al Khateeb, Gidon Bromberg, and Elizabeth Koch-Ya'ari, 'Transboundary Cooperation in the Lower Jordan River Basin' in Weinthal, Troell, and Nakayama (n 22); Todd Walters, 'A Peace Park in the Balkans: Cross-Border Cooperation and Livelihood Creation through Coordinated Environmental Conservation' in Young and Goldman (n 22); Matthew Wilburn King, Marco Antonio González Pastora, Mauricio Castro Salazar, and Carlos Manuel Rodríguez, 'Environmental Governance and Peacebuilding in Post-Conflict Central America: Lessons from the Central American Commission for Environment and Development' in Bruch, Muffett, and Nichols (n 2).

³⁰ Sandra S. Nichols and Mishkat Al Moumin, 'The Role of Environmental Law in Post-Conflict Peacebuilding' in Bruch, Muffett, and Nichols (n 2).

³¹ See, for example, Jill Shankleman, 'Mitigating Risks and Realizing Opportunities: Environmental and Social Standards for Foreign Direct Investment in High-Value Natural Resources' in Lujala and Aas Rustad (n 22); Eddie Rich and T. Negbalee Warner, 'Addressing the Roots of Liberia's Conflict through the Extractive Industries Transparency Initiative' in Lujala and Rustad (n 22); Barbara McCallin, 'The Role of Restitution in Post-Conflict Situations' in Unruh and Williams (n 22).

³² International Dialogue for Peacebuilding and Statebuilding, *A New Deal for Engagement in Fragile States* (2011).

increasingly guide post-conflict interventions; and while none of the PSGs relate specifically to natural resources, natural resources underpin them.

To the extent that international law is considered, it tends to be around human rights, especially related to gender and indigenous rights.³³ Commentators have also called for recognition of the right to a healthy environment and to the right to water.³⁴ This is not to say that international environmental law is irrelevant. Multilateral environmental agreements ('MEAs') are often invoked in efforts to develop or revise framework environmental laws and environmental ministries. Moreover, the UN Department of Peacekeeping Operations ('DPKO') / United Nations Department of Field Support ('DFS') Environmental Policy explicitly applies MEA norms and approaches to UN peacekeeping operations.³⁵ In practice, though, there is too little coordination and cross-talk between the environmental ministries and the sectoral ministries.

International law plays a critical role in shaping the peacebuilding landscape of a post-conflict country, but it is not the international treaties, protocols, and case law that international lawyers so often focus on. The key corpus of international law is the body of relevant UN Security Council resolutions.³⁶ Security Council resolutions are binding on member states and international organizations alike. They have three key functions. They establish and empower Groups of Experts to investigate the role of natural resources in conflict (as in Liberia, DRC, and elsewhere).³⁷ They impose sanctions on targeted conflict resources (e.g. diamonds from Sierra Leone and diamonds and timber from Liberia).³⁸ And they provide mandates to peacekeeping forces to address conflict resources (e.g. in DRC, Sierra Leone, and Liberia), protect critical infrastructure (e.g. oil infrastructure in the Abyei area), and consider their own environmental footprint (e.g. in Mali).³⁹

For specific conflict-affected countries, there often are a series of UN Security Council resolutions, as the Security Council reviews the status of security and the effectiveness of actions to date. Moreover, there often are a series of resolutions on particular issues (such as sanctions to curb specific instances of conflict resources). However, despite the efforts of Global Witness and other advocates to adopt more universal approaches

³³ See, for example, UNEP, UN Entity for Gender Equality and the Empowerment of Women, UN Peacebuilding Support Office and United Nations Development Programme, *Women and Natural Resources: Unlocking the Peacebuilding Potential* (6 November 2013).

³⁴ See, for example, Mara Tignino, 'The Right to Water and Sanitation in Post-Conflict Legal Mechanisms: An Emerging Regime?' in Weinthal, Troell, and Nakayama (n 22); Michael Painter, 'Rights-Based Conservation and the Quality of Life of Indigenous People in the Bolivian Chaco' in Jessica Campese, Terry Sunderland, Thomas Greiber, and Gonzalo Oviedo (eds.), *Rights-Based Approaches: Exploring Issues and Opportunities for Conservation* (Bogor Barat, Indonesia: Centre for International Forestry Research/International Union for Conservation of Nature, 2009).

³⁵ UN Department of Peacekeeping Operations and UN Department of Field Support, *Environmental Policy for UN Field Missions* (31 May 2009); Sophie Ravier, Anne-Cecile Vialle, Russ Doran, and John Stokes, 'Environmental Experiences and Developments in United Nations Peacekeeping Operations' in Bruch, Muffett, and Nichols (n 2).

³⁶ Peter Aldinger, Carl Bruch, and Sofia Zazykova, 'Revisiting Securitization: An Empirical Analysis of Environment and Natural Resource Provisions in UN Security Council Resolutions, 1946–2016' in Ashok Swain and Joakim Öjendal (eds.), *Handbook of Environmental Conflict and Peacebuilding* (London: Routledge, forthcoming 2017).

³⁷ Mark B. Taylor and Mike Davis, 'Taking the Gun out of Extraction: UN Responses to the Role of Natural Resources in Conflicts' in Bruch, Muffett, and Nichols (n 2).

³⁸ *ibid.*

³⁹ *ibid.*

(such as a clear definition of what constitutes a conflict resource and what actions follow), the Security Council has yet to adopt a consistent definition or approach to these various issues.⁴⁰

This has yielded a patchwork of more than 200 ad hoc Security Council resolutions addressing different linkages between the environment and security.⁴¹ This patchwork is reinforced by the patchwork of administrative instruments governing the United Nations Environment Programme ('UNEP'), the Food and Agriculture Organizations of the United Nations ('FAO'), the United Nations Development Programme ('UNDP'), and other UN agencies. These instruments include UN Environment Assembly decisions (and before those, UNEP Governing Council decisions), UN General Assembly resolutions, UN policies,⁴² and institutional guidance. In short, there is an overwhelming body of ad hoc and targeted institutional decisions (which is essentially international administrative law) and—as yet—little codified hard law.

The ongoing effort to articulate and elaborate *jus post bellum* is essential to codifying practice and collecting the disparate legal norms, principles, mandates, and procedures to provide more clear direction for post-conflict peacebuilding. Towards this end, I offer a challenge and my second key question: to the extent that we are able to articulate a body of norms, principles, and practices related to the environment and *jus post bellum*, what effect will this have on the ground in conflict-affected countries?

A couple years ago, I had the pleasure of working on an article with Professor Michael Bothe—who co-chairs the Specialist Group on Armed Conflict and the Environment with me.⁴³ We discussed at length whether and under what circumstances peacetime international environmental law continued to apply during armed conflict. We ultimately agreed that it did, to the extent that it did not contradict any specific provisions of international humanitarian law—a position consistent with the approach adopted by the International Law Commission on the effect of armed conflict on treaties.⁴⁴ Then, Michael asked 'So, what provisions might apply?' Even if we agreed in principle that the full body of international environmental law continued to apply during armed conflict, relatively little was sufficiently specific or relevant to preventing the sort of wartime environmental harms that we were considering.

In that vein, it is essential that articulation of the scope of *jus post bellum* bears in mind the practical question: 'So what?' How and to what extent would the provisions of *jus post bellum* actually influence, constrain, or guide someone working in a post-conflict country?

To be clear, the effort to articulate and elaborate *jus post bellum* is valuable and necessary. It is still early in the process. There is such a large body of practice—state practice and otherwise—that there are underlying provisions of international law from a wide range of fields: international criminal law, international humanitarian law, international human rights law, international environmental law, and public international

⁴⁰ *ibid.* ⁴¹ Aldinger, Bruch, and Yazykova (n 36).

⁴² In this context, the UN-wide guidance on natural resources on post-conflict peacebuilding (endorsed by thirty-eight UN entities) is particularly relevant.

⁴³ Bothe, Bruch, Diamond, and Jensen (n 1).

⁴⁴ See ILC, Draft Articles on the Effects of Armed Conflicts on Treaties with Commentaries (2011), at <http://legal.un.org/ilc/texts/instruments/english/commentaries/1_10_2011.pdf> accessed 7 June 2017.

law broadly. In many cases, this international law is still emerging; in others, provisions may be said to be established.

As a brief aside, it is worth mentioning one area that is intriguing, controversial, and important: shared sovereignty. This may be a controversial topic, but the fact remains that many conflict-affected countries are not able to maintain peace and security, control the illicit and illegal flow of conflict resources, or govern. Under these circumstances, the UN Security Council has time and again adopted resolutions that intrude—temporarily—on national sovereignty through sanctions on trade in natural resources, by mandating groups of experts to investigate trade in conflict resources, and by empowering peacekeeping missions to help governments in addressing conflict resources and other natural resources. In an extreme example, the Liberia Governance and Economic Management Assistance Program ('GEMAP') provided that for every government expenditure and contract (including those related to natural resources), two signatures were necessary: one by the relevant government official, and one by a World Bank staff person.⁴⁵ Gradually the various government agencies 'graduated' and regained independent budgetary and procurement authority, but for an extended period the Government of Liberia shared one of the most basic responsibilities that a sovereign country has with an international organization.

It is essential to use practice as a touchstone. To what extent does a particular provision reflect state practice in post-conflict countries? To what extent will the provision affect practice?

The third observation is that the space for political dialogue on environmental peacebuilding has expanded dramatically. When the Environmental Law Institute (ELI), UNEP, the University of Tokyo, and McGill University started examining the role of natural resources and the environment in post-conflict peacebuilding, we faced both indifference and hostility. Aside from like-minded individuals, most funders and agencies thought that this was not a priority. The project was viewed as an 'environmental' effort, and not particularly relevant to peacebuilding. A number of states were openly hostile—they were nervous that the UN Security Council might become more actively involved in how countries manage their natural resources, and they actively sought to redefine the issue as one of national sovereignty over natural resources.

Over the past few years, there has been a growing recognition of the relevance of natural resources to peacebuilding. It helped that Liberia, Sierra Leone, and other conflict-affected countries clearly stated that natural resource management has presented challenges and opportunities to ultimately ending conflict in those countries. Objective, peer-reviewed documentation of experiences also helped. Now, there is much more leeway to talk about the linkages between natural resources and peacebuilding. The discussions are lively, and can be contentious, but they are now on the merits.

Jus post bellum fills a critical gap in this space. Over the past fifty years, countries have adopted international treaties protecting the environment during armed conflict (*jus in bello*)⁴⁶ and applied *jus ad bellum* to Iraq's 1990 invasion of

⁴⁵ See K. W. James Rochow, 'Concession Reviews: Liberian Experience and Prospects for Effective Internationalized Solutions' in Bruch, Muffett, and Nichols (n 2).

⁴⁶ UNEP, *Protection of the Environment during Armed Conflict: An Inventory and Analysis of International Law* (UNEP, 2009).

Kuwait.⁴⁷ While more than fifty countries have experienced major armed conflict⁴⁸ since the end of the Cold War, the body of norms, state practice, and requirements from various sources of international law (highlighted above) are only starting to be collected and codified.

The work of the International Law Commission's ('ILC') and its Special Rapporteur on Protection of the Environment in Relation to Armed Conflicts (Marie Jacobsson) is an important step towards addressing international law protecting the environment after armed conflict.⁴⁹ As important as this work is, it is unclear whether ILC's focus on *protection of the environment* is the appropriate scope. Does 'protection of the environment' include sound management and governance of the environment that is necessary for delivery of water, sanitation, and other resource-dependent basic services (some of which are human rights)? Does it include the economic aspects of natural resource governance, for example related to conflict resources? Does it include cooperation around shared environmental threats, such as flooding and drought?

The Special Rapporteur has prepared three reports on international legal rules applicable to the environment before, during and after armed conflict, and a set of eighteen principles on the topic were drafted. The ILC has provisionally adopted principles relating to protection of the environment during armed conflict, and is considering the other principles relating to preventive and post-conflict measures. While the principles aim to reflect existing international law, some question whether the principles—for example, those relating to non-international armed conflict and reprisals—go beyond *lex lata*. Of note, the reports and draft principles integrate relevant provisions of not only international humanitarian law, but also international environmental law, international human rights law, and international criminal law.

With respect to *jus post bellum*, the reports and draft principles constitute a critical first step in codifying existing international law. Elements of environmental *jus post bellum* address environmental assessments, remedial measures, addressing the toxic remnants of war (on land and at sea), indigenous peoples, and information sharing. The three-year mandate for the Special Rapporteur provided a tight window in which to examine protection of the environment before, during, and after conflict; and so it not surprising that conflict resources and some other environmental dimensions of *jus post bellum* need further elaboration. Nevertheless, the work of the Special Rapporteur and the ILC represents one of the most important advances in the field in decades, and it is striking how quickly the international legal community has recognized that international law does protect the environment after armed conflict.

⁴⁷ Sand and Payne (n 2).

⁴⁸ *Major armed conflict* is defined as one that has more than 1,000 battle-related deaths. See Uppsala Conflict Data Program, n.d. UCDP Database, at <<http://www.ucdp.uu.se/>> accessed 7 June 2017; Bruch, Jensen, Nakayama, and Unruh (n 10).

⁴⁹ See Marie G. Jacobsson, Special Rapporteur, Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts International Law Commission, Sixty-sixth session, ILC Doc. A/CN.4/674, 30 May 2014; Marie G. Jacobsson, Special Rapporteur, Second Report on the Protection of the Environment in Relation to Armed Conflicts, International Law Commission, Sixty-seventh session, ILC Doc. A/CN.4/685, 28 May 2015.

1.3 Challenges Ahead

Moving forward, there are two broad ways that the international community can strengthen the environmental dimensions of *jus post bellum*: (1) through the codification, clarification, and development of norms; and (2) through the implementation and operationalization of those norms.

The ILC should continue its groundbreaking work on protection of the environment in relation to armed conflict. As noted, the work done under the first three-year mandate provided a framework that addressed the post-conflict period (directly related to *jus post bellum*), but it focused primarily on environmental damage, and did not squarely address natural resources, including conflict resources or the role of natural resource-related grievances as a contributing cause of conflict. Future work should explore the natural resource dimensions of conflict and *jus post bellum*, including resource allocation, benefit-sharing mechanisms, autonomous governance of certain regions, and conflict resources (including the application, e.g. international law prohibiting pillage). Second, it should also explore further the relevant international law applicable to countries affected by and recovering from non-international armed conflict. A third area that warrants further examination is international law governing the post-conflict review and renegotiation of natural resource concessions that may have been issued illegally. Fourth, there is a need to clarify the legal authorities, powers, and limitations of international actors (including the UN, World Bank, regional institutions, and bilateral agencies) that may serve as a *de facto* or even *de jure* interim government—what authority and obligations do these institutions have over management of natural resources, their concessions, and their revenues? Over environmental protection?

Second, there is a need to support countries, international organizations, and others in implementing and operationalizing the draft ILC principles and the environmental dimensions of *jus post bellum* more broadly. Implementation will reinforce the normative nature of the principles and build awareness of the environmental dimensions of *jus post bellum*. It will also help to make the principles more widely accepted and lay the foundation for the potential expansion of the relevant body of norms governing the environment (including natural resources) after conflict—and more generally in relation to armed conflict.

There are many avenues and contexts for supporting implementation of the environmental dimensions of *jus post bellum*. The UN Security Council should more consistently provide a mandate and dedicated staff for peacekeeping missions to prevent environmental issues from destabilizing the post-conflict recovery. These mandates should: (1) address environmental dimensions of the causes of conflict; (2) address conflict resources (including secure extraction sites and trade routes, and monitoring trade through UN Groups of Experts); (3) prevent new conflicts that may arise, for example around refugees and IDPs seeking to return to lands they once occupied; and (4) help the government rebuild its governance capacity and practices (through the civilian side of peacekeeping missions).

Another avenue is to focus resources on prosecuting cases relating to violations of *jus post bellum*, so that legal provisions are more than just words on paper. On 15 September 2016, the Office of the Prosecutor for the International Criminal Court announced—via a Policy Paper on Case Selection and Prioritisation—that it would prioritize cases with environmental and natural resource dimensions.⁵⁰ This was an important step forward both for its own docket and for countries, as it committed to assisting countries in domestic prosecution of cases, even if the underlying act was not a violation of the Rome Statute. Prosecution of these cases may require new approaches and expertise, for example, bringing in expertise in financial crimes (e.g. in money laundering) to help prosecute cases involving conflict resources. Similarly, there may be opportunities for utilizing different tribunals than historically used for prosecuting war crimes and crimes against humanity; for example, human rights tribunals can apply international human rights law in support of *jus post bellum*.

This book is an important step in a fuller exploration of international law governing environmental considerations after conflict. The effort to articulate the environmental dimensions of *jus post bellum* is likely to take many years. In many instances, there is existing international law, mechanisms, and procedures. In others, there is still the need for development. The expanded political space around various dimensions of environmental peacebuilding provides cause for cautious optimism—both for identifying existing law and for filling the environmental gaps in *jus post bellum*.

⁵⁰ OTP, Policy Paper on Case Selection and Prioritisation, 15 September 2016, para. 41 ('The Office will give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land').

2

Defining the Environment

Environmental Integrity

Cymie R. Payne*

2.1 Introduction

A primary motivation for including protection of environment and natural resources in the law of armed conflict ('LOAC') and post-conflict legal regimes (*jus post bellum*) is to establish productive, peaceful societies. Natural resources and environmental conditions influence a country's ability to provide security, deliver basic services, restore its economy and livelihoods, and rebuild governance—four peacebuilding objectives.¹ US Rear Admiral LeGrand reasoned that legal protection of the environment is needed during conflict, because:

There's a growing recognition that environmental devastation produces additional security concerns by depleting natural resources, by causing competition for scarce resources, and by displacing entire populations from devastated areas.²

As a conflict draws to a close, a whole suite of institutions and processes engage with environmental remediation, reconstruction, and reparations, when they are authorized and compelled to do so by law.

Defining what we mean by 'the environment' as an object of protection in the post-conflict period (e.g. in reparations proceedings)³ is a starting point for a discussion of what this law is and how it should develop. There is no commonly agreed definition of 'environment' in international law, or in the sub-field of the LOAC.⁴ The International Court of Justice ('ICJ') gave this eloquent, but non-binding, description of environment in its *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion: 'the

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¹ David Jensen, and Steve Lonergan, 'Placing Environment and Natural Resource Risks, Impacts, and Opportunities on the Post-Conflict Peacebuilding Agenda' in David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (London: Earthscan, 2012), 2, 7.

² Carlston N. Le Grand, "Framing the Issues" in Richard J. Grunawalt, John E. King, and Ronald S. McClain (eds.), *Protection of the Environment During Armed Conflict* (Newport, Rhode Island: Naval War College Press, 1996). See also, UN General Assembly, Progress Report on the Prevention of Armed Conflict: Report of the Secretary-General, UN Doc. A/60/891, 18 July 2006.

³ See chapter 14 in this volume.

⁴ Alexandre Timoshenko (ed.), *Conclusions by the Working Group of Experts on Liability and Compensation for Environmental Damage Arising from Military Activities, in Liability and Compensation for Environmental Damage, Compilation of Documents* (Nairobi: UNEP, 1998), para. 30.

environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.⁵

More precise definitions of the scope of ‘environment’ are in some respects controversial, as they may include public and private property; different media (water, soil, air); natural resources traded in the marketplace; ‘pure’ environment such as wildlife and ecosystem dynamics; common concerns such as the conservation of biodiversity; and cultural elements.⁶ A United Nations Environment Programme (UNEP) Experts Group suggested a broad definition: “environment” includes abiotic and biotic components, including air, water, soil, flora, fauna and the ecosystem formed by their interaction’ and might even include ‘cultural heritage, features of the landscape and environmental amenity’, but it excluded private property.⁷ Different aspects of the environment may be treated differently during various phases of armed conflict. Mollard-Bannelier suggested that perhaps states have not defined ‘environment’ in the many declarations, treaties, and resolutions where they might have done so in recognition of the fact that new and changing definitions would be needed as greater scientific knowledge changes our understanding;⁸ a view that is also reflected in the International Law Commission’s (ILC) work on the topic.⁹ This kind of new information is regularly incorporated in international environmental treaty systems through mechanisms such as the UN Framework Convention on Climate Change’s Subsidiary Body for Scientific and Technological Advice and its use of regular reporting on new information by the states parties.¹⁰ International humanitarian law (IHL) treaties have opted instead for vague terms undefined in the text, perhaps because of the sensitivity and difficulty of negotiating security agreements and a desire for stability in the legal regime.

If, on investigation, a precise definition of ‘environment’ is, as Mollard-Bannelier suggests, difficult, dangerous, and ultimately unhelpful, a guiding principle would be useful. The current treaty regime does not adequately address the scope or magnitude of the environment which concerns the international community. Legal protection of the environment in relation to armed conflict has expanded—to a limited degree—from protecting property and core necessities of human life like drinking water to a more inclusive scope that acknowledges the importance of the environment itself.

The unresolved challenge for international lawyers is whether treaties and customary international law can be made effective through interpretation or whether a new

⁵ Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, Judgment of 8 July 1996, ICJ Reports 226, para. 29.

⁶ See Cymie R. Payne, ‘Protection of the Natural Environment’ in Dapo Akande and Ben Saul (eds.), *Oxford Guide to International Humanitarian Law* (Oxford University Press, forthcoming, 2017).

⁷ Timoshenko (n 4) para. 31. This phrasing is notably similar to, but more inclusive than, the Institut de Droit International’s definition of environment: ‘For the purposes of this Resolution, the concept of “environment” includes abiotic and biotic natural resources, in particular air, water, soil, fauna and flora, as well as the interaction between these factors. It also includes the characteristic features of the landscape.’ Institut de Droit International, Resolution: Environment, Art. 1 (1997) (the resolution addresses international law for the management of the environment).

⁸ Karine Mollard-Bannelier, *La Protection de L’Environnement en Temps de Conflit Armé* (Paris: Pedone, 2001), 20–2.

⁹ See Report of the International Law Commission, Sixty-eighth session (2 May–10 June and 4 July–12 August 2016), A/71/10, 336.

¹⁰ UNFCCC, Arts. 5 and 9.

agreement is needed. After the spectacular oil well fires and oil spills of the 1991 Gulf War, there was an unsuccessful push for a new treaty.¹¹ Koppe suggested, more recently, the addition of an environmental principle¹² to the four fundamental principles of LOAC (military necessity, humanity, proportionality, and distinction).¹³ An alternative to a new instrument is a new interpretive approach that evaluates damage to the environment in terms of ‘environmental integrity’ rather than in the narrow terms considered sufficient in the nineteenth and early twentieth centuries. The principle of ‘environmental integrity’ expresses a complex set of concepts that describe a healthy natural system that can support essential processes.¹⁴

The image that most of us have when we think of environmental integrity is likely some Edenic vision of pristine nature—quiet forests, sparkling rivers, silvery deserts. If we knew a city before it was bombed, we will think of it as we knew it. This is also the image that is conjured for many victims by the touchstone standard for reparations, stated by the Permanent Court of International Justice (PCIJ) in the *Case Concerning the Factory at Chorzów*: ‘reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed’.¹⁵

More realistically, experts in the relatively new field of natural resource damages—legal compensation for damage to the environment under statute and common law—understand the *Chorzów Factory* reparations standard to reflect the changing baseline conditions discussed in this chapter, not an intention to return things to the way they were pre-incident. From the perspective of ecology, a perfect restoration to the moment of loss is an impossible image, as artificial as the restoration of Warsaw.¹⁶

However, appreciation of the lessons of ecology and related disciplines still has not fully penetrated *jus post bellum*. Legal traditions persist into the present, defining harms

¹¹ See Glen Plant (ed.), *Environmental Protection and the Law of War: A ‘Fifth Geneva’ Convention on the Protection of the Environment in Time of Armed Conflict* (London: Belhaven Press, 1992).

¹² Koppe suggested calling it the principle of ambiguity, Erik V. Koppe, ‘The Principle of Ambiguity’ in Rosemary Rayfuse (ed.), *War and the Environment: New Approaches to Protecting the Environment in Relation to Armed Conflict* (Leiden: Brill Nijhoff, 2014), 67; See also Erik V. Koppe, *The Use of Nuclear Weapons and the Protection of the Environment During Armed Conflict* (Oxford: Hart, 2008).

¹³ The US Department of Defense adds a fifth principle, honour, which it says ‘may be understood to provide a foundation for obligations that help enforce and implement the law of war or special agreements between belligerents during armed conflict. For example, honor may be understood to provide the foundation for the requirement for persons to comply with the law of war in good faith.’ See US Department of Defense, *Law of War Manual* 50, 66-9 (2015) (citations omitted).

¹⁴ Aspects of integrity that others have described include ‘wild, untrammelled nature and the self-creative capacities of life to organize, regenerate, reproduce, sustain, adapt, develop, and evolve itself’; as signifying that ‘the combined functions and components of whole natural systems are valuable for their own sake; their life support functions; their psychospiritual, scientific, and cultural significance; and the goods and services they provide’; and as ‘a system’s vigor, organization and resilience’. See Peter Miller and William E. Rees, ‘Introduction’ in David Pimentel, Laura Westra, and Reed F. Noss (eds.), *Ecological Integrity: Integrating Environment, Conservation, and Health* (Washington, DC: Island Press, 2000) 11, 12.

¹⁵ *Case Concerning the Factory at Chorzów (Germany v. Poland)* Merits, Claim for Indemnity, Judgment, PCIJ Reports (Series A No. 17, 47) 13 September 1928.

¹⁶ UNESCO, World Heritage List: ‘During the Warsaw Uprising in August 1944, more than 85% of Warsaw’s historic centre was destroyed by Nazi troops. After the war, a five-year reconstruction campaign by its citizens resulted in today’s meticulous restoration of the Old Town, with its churches, palaces and market-place. It is an outstanding example of a near-total reconstruction of a span of history covering the 13th to the 20th century’, at <<http://whc.unesco.org/en/list/30>> accessed 10 June 2017.

in terms of private property, infrastructure, or iconic landscape elements, overlooking ecosystem services provided by such humble life forms as organisms that keep soil fertile. This is also how policy-makers tend to perceive the environment and natural resources. For example, on the rare occasions when reparations are sought, claims are more likely to resemble Ethiopia's claim seeking compensation for loss of commercially valuable gum Arabic and resin plants before the Eritrea-Ethiopia Claims Commission¹⁷ than Jordan's claim to the United Nations Compensation Commission ('UNCC') for 'remediation of its rangelands, loss of forage production in its rangelands, damage to rangeland wildlife habitats, loss of wildlife, and disruption of a captive-breeding programme for two endangered species (the Arabian oryx and the sand gazelle)' resulting from Iraq's 1990 invasion and occupation of Kuwait.¹⁸ That is, states still perceive their environmental damage in terms of market-priced resources like crops and overlook pure environmental damage, such as a damaged ecosystem, which is likely to be more crucial to their long-term recovery from the conflict.¹⁹

Although this is a more dynamic concept of the environment than that found in much of the LOAC, it does also reflect norms with deep roots in the law of war, post-conflict reparations processes, and current state practice.²⁰ Those norms have been developing from changing social attitudes, as military personnel and civilians have adopted an environmental protection ethic.²¹ The operational law under which the military works incorporates environmental law.²² They are also influenced by changes in domestic law,

¹⁷ Sean D. Murphy, Won Kidane, and Thomas R. Snider, *Litigating War: Arbitration of Civil Injury by the Eritrea-Ethiopia Claims Commission* (New York: Oxford University Press, 2013), 146 (rejected for insufficient evidence). Murphy, Kidane, and Snider report that Ethiopia had also claimed for the loss of wild animals but withdrew that portion of the claim. *ibid.* 228 (Ethiopia claimed in the alternative that the damage to plants and wildlife was the result of Eritrea's breaches of *ius ad bellum* and *ius in bello*).

¹⁸ Report and Recommendations made by the Panel of Commissioners Concerning the Fifth Instalment of 'F4' claims, UN Doc. S/AC.26/2005/10, 30 June 2005, para. 353.

¹⁹ In domestic legal regimes, reparations for environmental damage are often resolved by reducing the harm to a monetary value, which can then be paid to the public trustee for the damaged resource. This is practical, but misleading if the international community comes to define environmental value in financial terms. A team of economists, whose work recently attempted to value all ecosystem services provided by the planet, argue that '[m]any ecosystem services are public goods or the product of common assets that cannot (or should not) be privatized ... [their] value in monetary units is an estimate of their benefits to society expressed in units that communicate with a broad audience.' See Robert Costanza, Rudolf de Groot, Paul Sutton, Sander van der Ploeg, Sharolyn J. Anderson, Ida Kubiszewski, Stephen Farber, and R. Kerry Turner, 'Changes in the Global Value of Ecosystem Services' (2014) 26 *Global Environmental Change* 152, 157 ('the estimate for the total global ecosystem services in 2011 is \$125 trillion/yr (assuming updated unit values and changes to biome areas) and \$145 trillion/yr (assuming only unit values changed), both in 2007 \$US. From this we estimated the loss of eco-services from 1997 to 2011 due to land use change at \$4.3–20.2 trillion/yr, depending on which unit values are used.') Miller and Rees observe that, 'Most economic analyses are money- and market-based and are thus thoroughly abstracted from nature. Conventional analyses ignore biophysical conditions and the behavioral dynamics of ecosystems. ... Ecology does little better. ... ecologists focus almost exclusively on other species, expending little effort on humans as ecological entities in their own right.' See Peter Miller and William E. Rees (n 14) 6–7.

²⁰ Cymie R. Payne, 'The Norm of Environmental Integrity in Post-Conflict Legal Regimes' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum* (Oxford: Oxford University Press, 2014).

²¹ Ronald A. DeMarco and John P. Quinn, 'The Impact of War and Military Operations other than War on the Marine Environment: Policy Making on the Frontiers of Knowledge' in Grunawalt, King, and McClain (n 2).

²² See, for example, US Department of Defense (n 13) 20, footnote 80; ILC, Second Report on the Protection of the Environment in Relation to Armed Conflicts, A/CN.4/685, 28 May 2015 ('ILC Second PERAC Report'), paras. 63, 64 (summaries of statements by states that operational law for their armed forces incorporates environmental rules).

which impose environmental accountability on the military for its activities whether or not related to armed conflict.²³ These changes in both social attitudes and in domestic environmental law result from human experience of a degraded environment and from better knowledge of the relevant science.

Section 2.2 of this chapter looks at the development over time of the ability for military actors to apply ecological and earth systems knowledge to their activities and the halting development of the legal regime that sets standards for their conduct. Reports from three 1970s conferences where negotiations led to treaty articles for environmental protection during armed conflict are suggestive. It appears that negotiators debated the feasibility of incorporating an ecological standard, decided it could not be operationalized, and opted for terms that they felt were consistent with the capability of the military.

Thus, Section 2.3 of this chapter aims to put the concept of environmental integrity into context with some important developments in ecology, conservation biology, and natural resource management to advance the project of articulating legal principles that can be applied by military actors, reparations bodies, governments, and others engaged in peacebuilding. These ideas apply as well to transitional justice measures, international criminal law proceedings, investment and development aid (particularly major infrastructure projects and development of high-value natural resources), peacekeeping deployments, and managing the toxic remnants of war.²⁴

To clarify the analysis of environment and natural resources in *jus post bellum*, two concepts are worthy of attention: first, coupled human and natural systems and second, change in the environment. These are fundamental to understanding the effects of perturbations on natural systems and management interventions to restore pre-existing conditions. Ultimately, we return to the question of what concepts like ‘natural’, ‘pristine’, ‘pre-existing conditions’, and ‘integrity’ mean and consider fundamental empirical concepts that are relevant to peacebuilding and environmental damage in *jus post bellum*.

2.2 The Classic Approach in International Law

There is no legal definition of ‘environment’ grounded in a *jus post bellum* legal framework. Legal definitions of ‘environment’ during all phases of armed conflict are relevant: transitional justice activities are concerned with accountability and compensation for illegal damage to the environment during the conflict; peace agreements contain terms that address environment and natural resources; occupying forces are subject to legal rules that balance military considerations with private and public rights; domestic and international environmental law resume if they were suspended during conflict.

²³ DeMarco and Quinn (n 21) (‘under all circumstances the environmental consequences of military operations remain a legal, moral and public relations concern of the military commander’).

²⁴ Although my references are to US parks, these scientists and managers participate in an international community of protected area managers. According to the International Union for Conservation of Nature, ‘roughly a tenth of the world’s land surface is under some form of protected area’. See Nigel Dudley (ed.), *Guidelines for Applying Protected Area Management Categories* (Gland, Switzerland: IUCN, 2008).

However, sources for international law definitions that apply explicitly to the environment in relation to armed conflict are limited to the three *in bello* treaties:

- Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques ('ENMOD'),²⁵
- Protocol I Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts ('AP I'), Articles 35(3), 55,²⁶ and
- Rome Statute of the International Criminal Court, Article 8(2)(b)(iv).²⁷

None of these define environment. Other sources of legal definitions of environment include the practice of international tribunals and the views of highly respected jurists, such as the ILC.²⁸ The relative novelty of environmental damage as a subject of concern means that these sources are few in number, but here the awards of the UNCC can be helpful as can the ILC's work on the topic 'Protection of the environment in relation to armed conflicts ('PERAC')'.²⁹

The classic international law approach defines damage to the environment from armed conflict in two dimensions: scope and magnitude. Whether an impact on the environment is 'adverse' is not a point of great concern—there are few impacts of armed conflict that will benefit the environment—though a requirement to prove net adverse impacts is sometimes argued by litigants.³⁰ The scope of what is protected has expanded from property and marketable natural resources to include ecosystems. As the definition grows more encompassing, a central challenge is where to draw a line between what is protected specially as 'environment'. By the broadest view, any manifestation can be considered 'environment', while narrower views are represented in the legal measures described below. Whether there should be a threshold of magnitude for environmental damage to be considered legally material is a disputed question. The three twentieth-century treaties use similar language in this regard, but their interpretations were never consistent and they are now challenged as unrealistically narrow and vague.

A more traditional approach—based on the Hague Regulations and the Fourth Geneva Convention (protection of civilians)—is still the basis for legal analysis

²⁵ Adopted 10 December 1976, entered into force 5 October 1978, 1108 UNTS 151.

²⁶ Adopted 8 June 1977, entered into force 7 December 1978, 1125 UNTS 609.

²⁷ Adopted 17 July 1998, entered into force 1 July 2002, UN Doc. A/Conf.183/9 as corrected by the *procès-verbaux* of 10 November 1998 and 12 July 1999 in PCNICC/1999/INF/3.

²⁸ ICJ, Statute, Article 38. See also, Timoshenko (n 4) para. 30 (sources of a definition can be found in state practice, international agreements, and the practice of international organizations).

²⁹ ILC, Sixty-Third Session, A/66/10, Annex E, paras. 365–7 (2011); ILC, Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts, A/CN.4/674 (2014), ('ILC Preliminary PERAC Report'); ILC Second PERAC Report (n 22); ILC, Third Report on the Protection of the Environment in Relation to Armed Conflicts, A/CN.4/700, 3 June 2016 ('ILC Third PERAC Report').

³⁰ It has been observed that activities related to armed conflict sometimes keep humans out of particular areas, effectively providing protected areas for flora and fauna. See Mollard-Bannelier (n 8) 14–15; Gary E. Machlis and Thor Hanson, 'Warfare Ecology' (2008) 58(8) *BioScience* 729, 731 (reviewing accounts of such benefits and of harmful effects).

of PERAC obligations by many states. For example, the United States specifically objects to the environmental provisions in Additional Protocol I to the 1949 Geneva Conventions (deeming them ‘too broad and too ambiguous for effective use in military operations’) and applies instead customary international law and these earlier agreements.³¹

Developing environmental awareness in the late twentieth century led to the inclusion of specific provisions protecting the ‘natural environment’³² in new LOAC instruments (ENMOD, AP I, and later the Rome Statute), which have not become fully incorporated into LOAC for all states. Indeed, in its 1996 Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, the ICJ reported that although some states argued that ‘any use of nuclear weapons would be unlawful by reference to existing norms relating to the safeguarding and protection of the environment’,³³

Other States questioned the binding legal quality of these precepts of environmental law; or, in the context of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, denied that it was concerned at all with the use of nuclear weapons in hostilities; or, in the case of Additional Protocol I, denied that they were generally bound by its terms, or recalled that they had reserved their position in respect of Article 35, paragraph 3, thereof.³⁴

Moreover, the current treaty regime leaves gaps. The legal regime is still evolving through state practice that is yet to be codified into rules acknowledged as binding international law.

The rules that apply in a given situation will vary with the circumstances, and definitions will as well. The scope and threshold of the definition of ‘environment’ also vary with respect to the temporal aspect of the context: going to war (*ad bellum*), during war (*in bello*), or right after war (*post bellum*).³⁵ The definition of ‘environment’ may depend on whether the conflict is international or internal,³⁶ whether the law of occupation or

³¹ Michael J. Matheson, ‘The United States Position on the Relation of Customary International Law to the 1977 Protocols Additional to the 1949 Geneva Conventions’ (1987) 2 *American University Journal of International Law and Policy* 419, 436; US Department of Defense (n 13) 20. See also, US Army, 86th Law of War Course, B-6 (2006); and Walter G. Sharp, ‘The Effective Deterrence of Environmental Damage during Armed Conflict: A Case Analysis of the Persian Gulf War’ 137 *Military Law Review* 1, 14 (1992) (‘This convention also is considered declaratory of customary international law’).

³² The ILC has explicitly left open the question of whether ‘environment’ or ‘natural environment’ is the preferred term. Both appear in the ILC documents; the Draft Principles prepared at the 2016 session refer to ‘natural environment.’ A decision on this point will thus benefit from further analysis and discussion by the Commission in the future. ILC, Protection of the Environment in Relation to Armed Conflicts: Statement of the Chairman of the Drafting Committee, Mr. Pavel Šturma, (5 August 2016) 2.

³³ *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, Judgment of 8 July 1996, ICJ Reports 226, para. 27.

³⁴ *ibid.* para. 28.

³⁵ Jens Iverson, Jennifer S. Easterday, and Carsten Stahn, ‘Epilogue: Jus Post Bellum—Strategic Analysis and Future Directions’ in Stahn, Easterday, and Iverson (n 20) (quoting Immanuel Kant) 545.

³⁶ Marie Jacobsson, the Special Rapporteur for the ILC PERAC topic, proposed defining ‘armed conflict’ as ‘a situation in which there is resort to armed force between States or protracted resort to armed force between governmental authorities and organized armed groups or between such groups within a State.’ See ILC Preliminary PERAC Report (n 29) para. 78. She distinguished the ILC’s restricted definition of armed

a Status of Forces Agreement ('SOFA') is in effect, whether state responsibility or international criminal law is used, whether war and emergency conditions have suspended environmental treaties or domestic law, and so on.

There is also a distinction between the environment to be protected, such as a river, and environmental manipulations, such as causing fires and breaching dams. The latter are age-old tools of war³⁷ subject to *jus in bello* as weapons ('dangerous forces').³⁸ Dams themselves might be considered part of the 'environment' for *jus post bellum* purposes such as reparations to provide flood protection or drinking water supply. Other aspects of the natural world are less multifaceted: we do not ordinarily protect radioactive materials, chemical agents, or disease vectors as part of the environment; they are addressed as weapons under the law of war. Considering the environment as a victim of war, rather than as a weapon, there may be a distinction between targeting the environment (as Iraq did in mining the Kuwaiti oil wells)³⁹ and causing collateral damage to it (as the tracked vehicles of all belligerents caused to the desert in the Gulf War).⁴⁰

Finally, as Richard Falk wrote in 1992, 'issues of relative authoritativeness [of legal norms] are of surprisingly great importance for the description and evaluation of existing international law; if general norms are treated as authoritative, then almost all environmentally harmful belligerent practices are illegal; if general norms are ignored, then almost nothing is prohibited.'⁴¹ The situation is not materially improved today.

conflict as between states from the International Criminal Court's wider jurisdiction over conflicts between states or between organized armed groups and others; the definition proposed by the ICRC; the definition used in the *Tadić* case, ICTY, Prosecutor v. Duško Tadić, Appeals Chamber, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction (IT-94-1-A, 2 October 1995), para. 70; and others. ILC Preliminary PERAC Report, para. 71.

³⁷ LeGrand (n 2) 25. The Fourth Hague Convention of 1907, Art. 23, provides a general limitation on unnecessary destruction of property not justified by military necessity; see also its Regulations, Arts. 22 and 23. Additional Protocol I to the 1949 Geneva Conventions, Art. 56, prohibits targeting dams as 'dangerous forces' in certain circumstances. The ENMOD Convention prohibits using the environment as a weapon during armed conflict, but it has been said that 'Diversion of a river, destruction of a dam, release of millions of barrels of oil, and destruction of water supplies do not violate ENMOD.' David E. Mosher, Beth E. Lachman, Michael D. Greenberg, Tiffany Nichols, Brian Rosen, and Henry H. Willis, *Green Warriors: Army Environmental Considerations for Contingency Operations from Planning Through Post-conflict* [prepared for the United States Army] (Volume 632, Rand Corporation, 2008), 161. Karine Mollard-Bannelier described occasions when nations breached their own dams—causing severe flood damage—to delay foreign military invasions: the Dutch to stop the French in 1672; the Chinese against Japanese troops in 1937; the Soviets fighting Germany in 1941. She recounts aggressive use of dam breaches when Germany flooded Dutch lands with saltwater to slow the Allies in 1944 and the Allies bombed dams on two rivers, depriving Germany of potable water and 75 per cent of the hydroelectric generation used in its industrial region; and US bombing of Korea and Vietnam. In each of these cases she identifies resulting damage to agricultural land, cultural objects, and life. See Mollard-Bannelier (n 8) 2–5.

³⁸ Additional Protocol I, Art. 56 (dangerous forces, namely dams, dykes, and nuclear electrical generating stations). The United States specifically objects to inclusion of this article in customary international law. See US Department of Defense (n 13).

³⁹ UNCC, Report and Recommendations made by the Panel of Commissioners Concerning the First Instalment of 'F4' Claims, UN Doc. S/AC.26/2001/16, 22 June 2001, para. 363 ('First 'F4' Report').

⁴⁰ *ibid.* paras. 365; Samira Omar, N.R. Bhat, S.A. Shahid, and A. Asem, 'Land and Vegetation Degradation Caused by Military Activities: A Case Study of the Sabah Al-Ahmad Nature Reserve of Kuwait' (2006) 14(1) European Journal of Scientific Research 146.

⁴¹ See Richard Falk, 'The Environmental Law of War: An Introduction' in Plant (n 11).

2.2.1 Scope

No treaty defines 'environment' in this context, as noted above. Case law applying the doctrine of state responsibility to a breach of *jus ad bellum* rules is more helpful and therefore will be discussed first. A review of the treaty regime follows.

A partial definition of environment for *jus post bellum* can be inferred from the environmental compensation awards made by the UNCC. By invading Kuwait in 1990, Iraq breached its obligations regarding the use of force under the UN Charter. The UN Security Council established the UNCC for the purpose of awarding reparations as a remedy for the breach, consistent with the doctrine of state responsibility. Iraq was held responsible for direct losses that resulted from its invasion and occupation of Kuwait, including 'environmental damage and the depletion of natural resources.'⁴² Those terms were left undefined by the resolution.

The UNCC compensation awards allowed the broadest possible scope for the definition of 'environment' in the context of reparations for harm caused as a result of a breach of the *jus ad bellum*, with the proviso that all claims characterized as 'environmental' (i.e. in the 'F4' category) were brought by governments. The Commission was not asked to rule on the issue of private property versus public environment, but the environmental claims were handled as public claims where the government was in the role of trustee.⁴³ David Caron put this in terms of a government acting 'as an agent for the environment, for a community's interest in that environment.'⁴⁴

The UNCC commissioners for the environmental claims category found that the Security Council and the UNCC policy-making body, its Governing Council, established a sufficient scope that no claims received in the category needed to be excluded as beyond its scope.⁴⁵ Consistent with the turn towards a modern, science-based approach, the commissioners stated, 'there is no justification for the contention that general international law precludes compensation for pure environmental damage.'⁴⁶ The UNCC made awards to assess ecological function of damaged areas, to restore ecosystem services, and for 'pure' environmental damage (i.e. non-market) as well as more

⁴² UN Security Council Resolution 687 (3 April 1991), para. 16, *International Legal Materials* 30 (1991) 846.

⁴³ See Peter H. Sand, 'Environmental Principles Applied' in Cymie R. Payne and Peter Sand (eds.), *Gulf War Reparations and the UN Compensation Commission: Environmental Liability* (New York: Oxford University Press, 2011), 174–90. See also David D. Caron, 'The Place of the Environment in International Tribunals' in Jay Austin and Carl E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic and Scientific Perspectives* (Cambridge: Cambridge University Press 2000), 253, 256.

⁴⁴ David D. Caron, 'The Profound Significance of the UNCC for the Environment' in Payne and Sand (n 43). Caron ties this shift in perspective to an equivalent change from a government owning the claims of its citizens (and residents) to the UNCC approach where the government acted as an agent for the individual claimants. Reflecting the earlier practice, a British court found that the British government properly declined to pay a citizen money that it had received from the Chinese government 'on account of debts due to British subjects', stating that the relationship was not 'the duty of an agent to a principal, or of a trustee to a cestui que trust'. *Rustomjee v The Queen*, II QB 74 quoted in Marjorie M. Whiteman, *Damages in International Law*, Vol. III 2051–2 (Washington: US Government Printing Office 1943).

⁴⁵ José Allen, 'Points of Law' in Payne and Sand (n 43) 152–5. Allen notes that the claimant states often used the terms 'environmental damage' and 'depletion of natural resources' interchangeably.

⁴⁶ Fifth 'F4' Report (n 18) paras. 57–8.

traditional compensation for lost crops, de-mining, and oil-spill cleanup.⁴⁷ To indicate the range that this covered, the UNCC made awards for the cost to remediate oil-damaged ecosystems in the desert, coastal zones, and ocean floor; soils compacted by refugees and their livestock; desert soil ecosystems damaged by tracked military vehicles; and groundwater polluted by oil. An award was made to replace a disrupted wildlife restoration programme; and awards for (human) public health damage included long-term health studies and clinical monitoring.⁴⁸ Other claims that were considered within the environmental loss claim category but which were not awarded compensation included decreases in fisheries catches and oil-spill damage to fishing nets.⁴⁹

With respect to the traditional scope of LOAC, the 1907 Hague and 1949 Geneva Conventions provide protection to public and private property, much of which we might today consider to be 'environment'. The Hague Regulations, which establish that there are some limitations on the means of warfare, denote various forms of public and private property as protected objects.⁵⁰ Article 25 of the Hague Regulations prohibits, if unqualified by military necessity, attacks and bombardments of towns, villages, dwellings, and buildings. It further states, in relevant part, that in sieges and bombardments buildings dedicated to religion, art, science, or charitable purposes and historic monuments should be spared if possible, provided they are not being used at the time for military purposes; and Article 28 prohibits pillage. During an occupation, the occupying state has a usufructuary obligation to safeguard 'public buildings, real estate, forests, and agricultural estates belonging to the hostile state' under Article 55, and Article 56 provides for legal proceedings for any seizure, destruction, or wilful damage to such institutions.⁵¹ The Fourth Geneva Convention, Article 53, prohibits occupying powers from destroying property of individuals, public or private, except when 'rendered absolutely necessary by military operations'. Article 33 of Geneva Convention IV also prohibits pillage.

⁴⁷ See, for example, First 'F4' Report (n 39) paras. 146, 456, 473, 629; Fifth 'F4' Report (n 18) paras. 71–82. For an explanation of ecosystem services in the context of pollution regulation, James Salzman, 'A Field of Green? The Past and Future of Ecosystem Services' (2006) 21(2) *Journal of Land Use* 133.

⁴⁸ Freeland excluded 'an anthropocentric element—for example, a concrete endangerment to human health or life' from his attempt to define a crime against the environment. See Steven Freeland, *Addressing the Intentional Destruction of the Environment During Warfare Under the Rome Statute of the International Criminal Court* (Cambridge: Intersentia, 2015), 242.

⁴⁹ Report and Recommendations made by the Panel of Commissioners Concerning the Second Instalment of 'F4' Claims, UN Doc. S/AC.26/2002/26, 3 October 2002 ('Second 'F4' Report'), paras. 73–4 (claim failed due to insufficient evidence).

⁵⁰ 1907 Hague Regulations, Annex to the 1907 Hague Convention (IV) Respecting the Laws and Customs of War on Land, 18 October 1907, 36 Stat. 2277, T.S. No. 539 (the '1907 Hague Regulations') (Art. 22 states the 'right of belligerents to adopt means of injuring the enemy is not unlimited') and Art. 23 states destroying or seizing property is allowed only when 'imperatively demanded by the necessities of war'). Other measures similarly identify property as a specially protected category, for example the Hague Rules of Aerial Warfare 1923.

⁵¹ 1899/1907 Hague Regulations, Art. 55: 'The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct.' Compensation for 'the value of the felled trees and of the wood carried away' was awarded in the First World War cases, *Héritiers Gény* and *Alfred et Pierre Gény*, by the Franco-German Mixed Arbitral Tribunal established under the Treaty of Versailles where the trees were unnecessarily felled. Marjorie M. Whiteman, *Damages in International Law*, Vol. II 1458 (Washington: US Government Printing Office, 1943).

Additional Protocol I was negotiated at the time when awakening environmental consciousness intersected with awareness of US attacks on the environment during the United States war with Vietnam. By the time of the ENMOD negotiations at the Conference on Disarmament, environmental issues had drawn the attention of the United Nations and its states parties, and the Additional Protocol I and ENMOD negotiations ran on parallel tracks for some time.⁵² The 1972 UN Conference on the Human Environment had issued the Stockholm Declaration, which included a call for states to ‘reach prompt agreement’ on the elimination of nuclear weapons and other means of mass destruction.⁵³ Also in 1972, the United Nations Educational, Scientific and Cultural Organization (UNESCO) Convention for the Protection of the World Cultural and Natural Heritage was adopted in Paris. The states parties to the World Heritage Convention agreed that to protect ‘natural heritage’ (also referred to as ‘natural property . . . to whatever people it may belong’), they would not ‘take any deliberate measures which might damage [property listed as world heritage] directly or indirectly’ in Article 6(3). Armed conflict is referenced as one of the threats that might lead to placing a site on the List of World Heritage in Danger.⁵⁴ The convention defines natural heritage in Article 2 as:

Natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

Geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

Natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.⁵⁵

Where the World Heritage Convention, Article 2, defines ‘cultural heritage’, it does so in a manner that overlaps with perceptions of the environment, particularly the phrase ‘combined works of nature and man.’

Against this background, the 1977 Additional Protocol I⁵⁶ (and 1998 Rome Statute) use the term ‘natural environment,’ but without providing a definition in the text. Additional Protocol I, Article 35, focuses on methods and means of warfare and

⁵² Off. Rec. of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts, Geneva (1974–1977) Vol 14, 142, at <https://www.loc.gov/rr/frd/Military_Law/RC-dipl-conference-records.html> accessed 9 June 2017 (referring to the Soviet Union’s introduction a year earlier of ‘a draft Convention on the prohibition of action to influence the environment and climate for military and other purposes incompatible with the maintenance of international security, human wellbeing and health (United Nations General Assembly resolution 3264 (XXIX), annex)’).

⁵³ Declaration of the United Nations Conference on the Human Environment, Principle 26 (1972).

⁵⁴ Robert L. Meyer, ‘Travaux Préparatoires for the UNESCO World Heritage Convention’ (1976), 2 *Earth Law Journal* 52–3 (reprinted in Peter H. Sand, *The History and the Origin of International Environmental Law* (Cheltenham: Elgar, 2015)). Meyer discusses the various approaches to referencing armed conflict during the negotiations.

⁵⁵ However, note that the marine environment is not mentioned. Meyer suggested that this was intended to avoid conflict with the Law of the Sea Convention, negotiated during the same period. Meyer (n 54) 50.

⁵⁶ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977. The relevant articles are:

establishes the general rule that they are not unlimited; it specifically prohibits those that ‘cause superfluous injury or unnecessary suffering’ and ‘methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment’. It may be considered more ecocentric, whereas part of Article 55 is more anthropocentric.⁵⁷ Article 55 falls under the rules for protection of civilian objects. The first sentences of paragraph 1 and paragraph 2 address the natural environment alone, creating an obligation to take care ‘to protect the natural environment against widespread, long-term and severe damage’ and prohibiting reprisals against the natural environment. In the second sentence of paragraph 1, the object of prohibition is damage to the natural environment that prejudices the health and survival of the civilian population. This provision serves to emphasize the human need for the environment, without excluding pure environmental damage.

According to the International Committee of the Red Cross (‘ICRC’) commentary, Additional Protocol I, Article 55, was intended to be very broad in scope:

The concept of the natural environment should be understood in the widest sense to cover the biological environment in which a population is living. It does not consist merely of the objects indispensable to survival mentioned in Article 54 ... food-stuffs, agricultural areas, drinking water, livestock—but also includes forests and other vegetation mentioned in the Convention of 10 October 1980 on Prohibitions or Restrictions on the Use of Certain Conventional Weapons, (3) as well as fauna, flora and other biological or climatic elements.⁵⁸

That at least some states were aware of environmental complexity is borne out by discussions at the time. The delegate for Vietnam observed, for example, that the chemicals, bombs, and Roman plows used to destroy vegetation during the Vietnam War resulted in the ‘destruction of the soil and the micro-organisms of rivers and forests’⁵⁹

Article 35. BASIC RULES

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.
3. It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

Article 55. PROTECTION OF THE NATURAL ENVIRONMENT.

1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.
2. Attacks against the natural environment by way of reprisals are prohibited.

⁵⁷ Michael Bothe, Karl Partsch, and Waldemar A. Solf, *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions 1949* (Den Haag: Martinus Nijhoff Publishers, 2nd edn, 2013) 387. See also, Koppe, (n 12) 116–46 (both articles ‘seem to be derived from the fundamental principle of environmental protection’).

⁵⁸ ICRC, *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (Dordrecht: ICRC/Martinus Nijhoff Publishers, 1987), 662.

⁵⁹ Off. Rec. of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts, Geneva (1974–77) Vol. 14, 143, at <https://www.loc.gov/rr/frd/Military_Law/RC-dipl-conference-records.html>.

and Hans Blix, of the Swedish delegation, recommended that '[A] reference to the ecological balance would be preferable to placing a ban on the impairment of the natural environment.'⁶⁰ The decision to choose the simpler, vaguer language of 'natural environment' was close: the vote to remove the words 'to such a degree as to disturb the stability of the ecosystem' was decided by twenty-six votes to twenty-five with nine abstentions.⁶¹ Some explanation is given by the representative of the Soviet Union, who voted against the ecosystem language 'to strengthen the defence and protection of the environment and to prohibit all acts that disturbed its stability and were prejudicial to the health of the civilian population'.⁶²

The marine environment is not mentioned and there is extensive debate whether it can be included in the ambit of Additional Protocol I.⁶³ The US delegate to the negotiation expressed concern that 'Although the article applied to attacks on land from the sea or air, the law of sea warfare was too complex to be dealt with at the Conference [and] might inadvertently modify the Law of the Sea.'⁶⁴ Koppe, after analysing the texts and the views of commentators, argued, 'the conclusion seems justified that both articles [35(3) and 55] do not only protect the "natural environment" on land, but also the marine environment and the atmosphere.'⁶⁵ If this is correct, it means that areas beyond national jurisdiction are included.

Under the Rome Statute,⁶⁶ Article 8(2)(b)(iv), an attack will only be a war crime if it is intentionally launched in the knowledge that it will cause 'widespread, long-term and severe damage to the natural environment' and that the damage is clearly excessive in relation to the military advantage. In its work preparing a draft of the Rome Statute, the ILC, deciding that 'the concept of vital human asset had been considered to be vague and likely to cause difficulties of interpretation, had limited the scope of the

⁶⁰ Off. Rec. of the Diplomatic Conference Vol. 14, 146; See also *ibid.* 173–4, 310. The Biotope Group, an informal subcommittee of Working Group III, was established to work on protection of the environment. Off. Rec. of the Diplomatic Conference Vol. 15, 268.

⁶¹ Off. Rec. of the Diplomatic Conference Vol. 14, 405; Off. Rec. of the Diplomatic Conference Vol. 15, 268.

⁶² Off. Rec. of the Diplomatic Conference Vol. 14, 410.

⁶³ Koppe (n 12) 130–7.

⁶⁴ Off. Rec. of the Diplomatic Conference Vol. 14, 17.

⁶⁵ Koppe (n 12) 136.

⁶⁶ Rome Statute of the International Criminal Court, 17 July 1998 (123 parties). The relevant article is:

Article 8 - War crimes

1. The Court shall have jurisdiction in respect of war crimes in particular when committed as part of a plan or policy or as part of a large-scale commission of such crimes.
2. For the purpose of this Statute, "war crimes" means:
 - (a) Grave breaches of the Geneva Conventions of 12 August 1949, namely, any of the following acts against persons or property protected under the provisions of the relevant Geneva Convention:
 - ...
 - (iv) Extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly
 - ...
 - (b) Other serious violations of the laws and customs applicable in international armed conflict, within the established framework of international law, namely, any of the following acts:
 - ...
 - (iv) Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated ...

article to the “natural environment”, which ... borrowed from article 55 of Additional Protocol I.⁶⁷

The ENMOD convention is so *sui generis* and its criteria are so contested by its parties that it is a poor guide to a definition for protection of the environment in relation to armed conflict more generally—although it does count the major military powers as parties. ENMOD provides rules for conduct during armed conflict, so *jus post bellum* would address accountability for a breach of ENMOD. The convention regulates hostile (though not necessarily military) manipulations of ‘natural processes’ in a way that changes ‘the dynamics, composition or structure of the Earth, including [but not exclusively] its biota, lithosphere, hydrosphere and atmosphere, or of outer space’ (Article 2) and are thereby the ‘means of destruction, damage or injury’ to other states parties (Article 1).

Thus, ENMOD addresses the environment as a weapon and as a target. ENMOD does not define the scope of environment as a target. The summary of the negotiations reported that the US delegation understood the object of ‘destruction, damage or injury’ to be, in its broad sense, ‘the military forces and civilian population of a State party [*sic*] to its cities, industries, agriculture, transportation and communications system and its natural resources and assets.’⁶⁸ In other words, the United States interpreted ENMOD to protect a wide range of vulnerable targets, not solely the natural environment.

The examples illustrating prohibited environmental modifications referred to in ENMOD, Article 2—environment as a weapon—offered during the negotiations included: ‘earthquakes; tsunamis; an upset in the ecological balance of a region; changes in weather patterns (clouds, precipitation, cyclones of various types, and tornadoic storms); changes in climate patterns; changes in ocean currents; changes in the state of the ozone layer; and changes in the state of the ionosphere.’⁶⁹ The ENMOD states parties have continued to argue whether the convention deals only with exotic, futuristic technologies capable of producing this kind of effect, a question that was partially resolved at the Second (and last) Review Conference of the Parties to ENMOD in 1992 by agreement that herbicides that upset the ecological balance of a region can be such instruments of environmental modification within the scope of Article 2.⁷⁰

⁶⁷ ILC, Yearbook of the International Law Commission, Draft Code of Crimes against the Peace and Security of Mankind, A/CN.4/L.459 [and corr.1] and Add.1, (1991), para. 62.

⁶⁸ UN General Assembly, Report of the Conference of the Committee on Disarmament: Official Records: Thirty-First Session, Supplement No. 27, 92, UN Doc. A/31/27 (Vol. I) (1976), para. 333 (h ‘Disarmament Conference Report’). The ENMOD Convention was negotiated as one small part of the much larger discussions of a comprehensive nuclear test ban, security of non-nuclear-weapon states and chemical weapons; one delegate suggested that its value might be that it ‘offered a possibility to unfreeze the current situation with regard to the Committee’s work’, while another observed that ‘for reasons difficult to understand, the Committee had concentrated its attention on the question of environmental warfare while totally ignoring the highest priority items on its agenda.’ *ibid.* paras. 280, 288. See also, Cyrus Vance, Letter of Submittal, 31 August 1978, ‘Message from the President of the United States Transmitting the Convention on the Prohibitions of Military or Any Hostile Use of Environmental Modification Techniques’ Signed at Geneva on 18 May 1977, Executive K 4 (22 September 1978).

⁶⁹ Disarmament Conference Report (n 68) 93.

⁷⁰ ENMOD/CONF.II/12, Part II (Final Declaration), 12 (22 September 1992). The United States used herbicides extensively against the North Vietnamese from 1962 until 1971; an account of US reluctance to give up herbicide use can be found in *Vietnam Association for Victims of Agent Orange/Dioxin et al. v. Dow*

Protection of cultural sites and objects has a long tradition;⁷¹ but whether there is a basis to link cultural heritage to environment in this context is contested.⁷² Marie Jacobsson, the ILC Special Rapporteur for the topic, observed that,

There exists an intricate relationship between environment and cultural heritage, in particular, when speaking of the aesthetic or characteristic aspects of the landscape. This relates also to the indigenous people's rights to their environment as a cultural as well as natural resource.⁷³

In 2015, the ILC adopted a PERAC draft principle calling on states to designate protected zones, including 'areas of major environmental and cultural importance'.⁷⁴ Previous ILC reports had highlighted the challenges of including cultural heritage as part of the PERAC topic, given the special regime of conventions specifically devoted to it and the inconsistency in definitions between the relevant treaties.⁷⁵ The inclusion of culture as an element of the environment is supported by such diverse organizations as the US Army ('environmental considerations, to include the protection and the conservation of natural and cultural resources')⁷⁶ and the International Union for Conservation of Nature in its definition of a protected area ('an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means').⁷⁷ The ILC, in the different context of principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, used a working definition that included 'non-service values such as aesthetic aspects of the landscape'.⁷⁸

Chemical Co. et al., 517 F.3d 76 (2d Circuit, 2008) (stating 'to date, the United States never has agreed that it has a legal duty to provide funds or assistance to remediate harms allegedly caused by Agent Orange').

⁷¹ Francis Lieber, Instructions for the Government of Armies of the United States in the Field, Arts. 34–6 (1863) (Lieber Code).

⁷² ILC, Second PERAC Report (n 22), para. 24 (whether protection of cultural and natural heritage should be addressed as part of the PERAC topic was raised by ten states in the discussion of the ILC Second Report at the UN General Assembly Sixth Committee (Legal) session in 2014); *ibid.* para. 224 ('In 2014, some members of the Commission suggested that cultural heritage should be included in the present report because to do otherwise would lead to inconsistencies. Most speakers, however, remained of the view that cultural heritage should be excluded'). See also, Julio Barboza, 'Environmental Damage' in Alexandre Timoshenko (ed.), *Liability and Compensation for Environmental Damage* (UNEP, 1998).

⁷³ ILC, Second PERAC Report (n 22) para. 224. For information about UNESCO's implementation: <www.unesco.org/new/en/culture/themes/armed-conflict-and-heritage> accessed 9 June 2017.

⁷⁴ ILC, Protection of the Environment in Relation to Armed Conflict—Text of the Draft Introductory Provisions and Draft Principles Provisionally Adopted So Far by the Drafting Committee, A/CN.4/L.870/Rev.1.

⁷⁵ ILC Preliminary PERAC Report (n 29) para. 65; ILC, Second PERAC Report (n 22) para. 224. Cultural property is protected under the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954 and cultural objects—'historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples'—under Additional Protocol I, Art. 53. Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 14 May 1954, and its Protocol I (1954) and Protocol II (1999).

⁷⁶ Department of the Army, Environmental Considerations, FM 3-34.5/MCRP 4-11B (2010), 1–1.

⁷⁷ International Union for the Conservation of Nature, 2008. Guidelines for Applying Protected Area Management Categories. (Gland, Switzerland: IUCN, 2008).

⁷⁸ ILC, Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries, A/61/10 (2006), 133.

Although the UNCC reviewed cultural heritage claims by Syria and Iran within the environmental category, that could as easily be understood as a procedural convenience (particularly as the claims included cultural objects in museums as well as outdoor sites).⁷⁹ Sjöstedt argued that including natural heritage could be a means to mobilize multilateral agreements like the World Heritage Convention to provide protection for environmental ‘hot spots’ of international importance.⁸⁰ The point that Special Rapporteur Jacobsson makes is perhaps the one to focus on: the special meaning of a landscape or other aspect of an environment for a community that is not captured by the other measures we have discussed—its market value, its ecosystem services, or its ecological function. The cultural value of the environment is under-studied and not well represented in present law.

From this review, two points can be highlighted: the problematic of human/not-human persists; and our collective interest in ‘environment’ makes it distinct from environmental features of private property. The dividing line between the human and other environment is a source of some confusion, evinced in the treatment of injury to humans (in Additional Protocol I, human health is the *raison d’être* of Article 55; the UNCC reviewed public health claims) and in the grey area where cultural heritage and natural heritage become difficult to distinguish.

The nature of environment as a public interest versus private property is addressed obliquely, but it highlights an important characteristic of the environment to be protected: that it is a common concern that ‘entails obligations towards the international community and future generations.’⁸¹

As we have seen, private property, real and personal, is explicitly protected under the Geneva Conventions. Elements of the environment that are traditionally not owned privately—wildlife, the sea, habitat, and other commons resources—are among those that are left out of the traditional LOAC regimes. In the UNCC’s practice, the government takes on the role of a public trustee, responsible for ‘a community interest in full remediation of the damage.’⁸² Two compensation bodies—the UNCC and the United Nations Register of Damage (‘UNRoD’)—established categories exclusively for government claimants. The UNCC provided a sub-category for environmental claims (UNCC-F4), while UNRoD’s Public Resources category (UNRoD-F) is a general government claims category.⁸³ The logic of this approach was carried out through the UNCC’s

⁷⁹ The UNCC awards for cultural heritage claims included awards to Iran in the amount of US\$ 1.4 million for assessment of damage from oil fire emissions to ‘stone relics in Persepolis; tilework in Esfahan and Kermán; wall paintings in Esfahan, Fârs and Yazd; construction materials at the Tchoga Zanbil Ziggurat in Khūzestân; and construction materials, archaeological sites and artefacts in Susa.’ First ‘F4’ Report, para. 90; UNCC, Report and Recommendations made by the Panel of Commissioners Concerning the Fifth Instalment of ‘F4’ Claims, UN Doc. S/AC.26/2005/10, 30 June 2005, para. 33.

⁸⁰ See chapter 10 in this volume.

⁸¹ Third ‘F4’ Report, para. 42 (43 ILM 713); Fourth ‘F4’ Report, part 2 para. 38; and Fifth ‘F4’ Report, para. 40.

⁸² Sand (n 43) 173. See also David D. Caron, ‘Finding Out What the Oceans Claim: The 1991 Gulf War, the Marine Environment, and the United Nations Compensation Commission’ in David D. Caron and Harry N. Scheiber, *Bringing New Law to Ocean Waters* (Brill, 2004), 393, 394 Caron (n 44).

⁸³ UN Register of Damage, Rules And Regulations Governing the Registration of Claims, Art. 11(1) (19 June 2009).

Follow-Up Programme, which was established to ensure that (unlike compensation for private property, which is simply money paid to the owner) awards for environmental damage were used to restore the damaged resource.⁸⁴

By analysing environment in terms of the government as agent and the environment as the principal, Caron makes it possible to evaluate a particular element of the environment as either property or as environment in terms of a collective or public interest—at least in the context of a reparations proceeding. Imagine, he says, that rhinoceroses are nearly wiped out by a war. The government of the state where the rhinoceroses live, acting as the principal, may make a claim for loss of tourism. But if the government is acting as agent for the environment—the rhinoceroses (and the ecosystem they participate in)—it may make a claim for a rhinoceros species recovery programme.⁸⁵ By this logic, the limitation on public entities as claimants for this type of harm seems unnecessary: the claimant's identity should not matter if it is acting as an agent for the environment and is bound to act in the interests of its principal.

Because they use approaches similar to that taken by the UNCC, it is useful to look briefly at environmental liability in US and EU law, which extend special protection to certain public environmental resources.⁸⁶ The US oil-spill law (Oil Pollution Act)⁸⁷ and the US hazardous waste cleanup law ('CERCLA')⁸⁸ require compensation for injury to, destruction of, or loss of natural resources. Under CERCLA, these include,

land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone), any State or local government or Indian tribe, or any foreign government.⁸⁹

The Oil Pollution Act is intended to address 'injuries to natural resources and services' pertaining to navigable waters of the United States, adjoining shorelines, and the Exclusive Economic Zone. The EU's Environmental Liability Directive covers damage to protected species and natural habitats, the ecological, chemical and/or quantitative status and/or ecological potential of protected waters, and land; it expressly does not apply to damage to private property.⁹⁰

⁸⁴ Cymie R. Payne, 'Oversight of Environmental Awards and Regional Environmental Cooperation' in Cymie R. Payne and Peter H. Sand (eds.), *Gulf War Reparations and the UN Compensation Commission: Environmental Liability* (Oxford: Oxford University Press, 2011).

⁸⁵ Caron (n 44) 270.

⁸⁶ A comprehensive explanation of the US practice and international frameworks, including the International Oil Pollution Compensation Funds and the UNCC approach, is given in Michael T. Huguenin, Michael C. Donlan, Alexandra E. van Geel, Robert W. Paterson, 'Assessment and Valuation of Damage to the Environment' in Cymie R. Payne and Peter H. Sand (eds.), *Gulf War Reparations and the UN Compensation Commission: Environmental Liability* (Oxford: Oxford University Press, 2011).

⁸⁷ US Code Annotated, Title 33, Section 2701 *et seq.*

⁸⁸ US Code Annotated, Title 42, Section 9601 *et seq.*

⁸⁹ US Code Annotated, Title 33, Section 2701(20) (2010).

⁹⁰ Council Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (Environmental Liability Directive), OJ L143/56 (2004), as amended by Council Directive 2006/21/EC, OJ L102 (2006), Council Directive 2009/31/EC, OJ L140, and Council Directive 2013/30/EU, OJ L170, Preamble (14).

Meyer, reviewing the *travaux préparatoires* for the World Heritage Convention, described ‘the general sentiment and concern on the part of the peoples of the world that certain cultural sites and natural areas “of outstanding universal value” belong to mankind as a whole, and are important to his [*sic*] psychological, moral, spiritual, educational and recreational well-being’, places such as the Pyramids, the Grand Canyon, and Mt. Kilimanjaro;⁹¹ the property status of the site seems unimportant. Meyer further observed, ‘the threat of armed conflict or a transnational environmental catastrophe affecting the world heritage has made this area one of international concern.’⁹²

2.2.2 Magnitude

Treaty law takes notice of harm to the environment only when it reaches a certain threshold. The apparent reasons for requiring a minimum amount of harm are, first, to limit state liability in recognition that some harms occur and should be tolerated rather than attempt an absolute prohibition. Second, to provide a management device to limit enforcement of liability to really meaningful cases and to exclude those where the claimant is not materially injured. It is almost instinctive for lawyers to seek a limiting principle to a theoretical standard. States seek limitations for practical reasons and many are likely to reject a principle of unlimited liability. Of course, in this context the threshold of harm provides a critical limitation on liability that is secondary to the more important question of responsibility. If law makes a state responsible for any harm it causes to the environment, regardless of the wrongfulness of its conduct, the state will seek a limitation on the magnitude of the harm that triggers reparations or other consequences. The British delegate to the AP I negotiations was reported as finding that the agreed text was fair,

since it struck the necessary balance by providing protection of the environment against deliberate and serious damage, while not making, for instance a tank commander who flattened a clump of trees liable as a war criminal.⁹³

The magnitude of this threshold of ‘harm’ is defined in the three treaties—ENMOD, Additional Protocol I to the Geneva Conventions, and Treaty of Rome—by the terms widespread, long-term (or long-lasting), and/or severe. For liability under Additional Protocol I and the Rome Statute, all three criteria must be breached. Additional Protocol I was negotiated first. An earlier draft proposed the wording ‘to such a degree as to disturb the stability of the ecosystem’, demonstrating that at that time a systems understanding of the environment existed; it was rejected.⁹⁴ The only guidance to interpret the three elements is found in the report of Working Group III on its negotiation, with regard to Article 35(3):

⁹¹ Meyer (n 54) 46. ⁹² *ibid.* 46.

⁹³ Off. Rec. of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts, Geneva (1974–1977) Vol. 14, 410, at <https://www.loc.gov/rr/frd/Military_Law/RC-dipl-conference-records.html> accessed 7 June 2017.

⁹⁴ ICRC (n 58) 663.

The time or duration required (i.e., long-term) was considered by some to be measured in decades. References to twenty or thirty years were made by some representatives as being a minimum. Others referred to battlefield destruction in France in the First World War as being outside the scope of the prohibition. The Biotope report states that 'Acts of warfare which cause short-term damage to the natural environment, such as artillery bombardment, are not intended to be prohibited by the article,' and continues by stating that the period might be perhaps for ten years or more. However, it is impossible to say with certainty what period of time might be involved. It appeared to be a widely shared assumption that battlefield damage incidental to conventional warfare would not normally be proscribed by this provision. What the article is primarily directed to is thus such damage as would be likely to prejudice, over a long term, the continued survival of the civilian population or would risk causing it major health problems.⁹⁵

And with regard to Article 55:

It was recognized in the Working Group that environmental change or disturbances of the ecosystem might be on a very low scale. Trees may be cut down or destroyed as the result of normal artillery fire. Artillery fire also causes cratering. As the Group Biotope put it, 'Acts of warfare which cause short-term damage to the natural environment, such as artillery bombardment, are not intended to be prohibited by the Article.' That thought lies behind both proposed texts.

It was pointed out that there are a number of ecosystems in the natural environment, and the precise meaning attached to 'the ecosystem' was left somewhat unclear.⁹⁶

The word 'population' was used without its usual qualifier of 'civilian' because the future survival or health of the population in general, whether or not combatants, might be at stake. The population might be that of today or that of tomorrow, in the sense that both short-term and long-term survival was contemplated. The bracketed term 'health' reflected the consideration that it would not be enough that the civilian population survived; impairment of the health of the civilian population in general could not be tolerated.⁹⁷

... the first sentence enjoining the taking of care lays down a general norm, which is then particularized in the second sentence. Care must be taken to protect the natural environment against the sort of harm specified even if the health or survival of the population is not prejudiced. An instance would be environmental harm which is widespread, long-term and severe but in an unpopulated area.⁹⁸

There was no objection to the suggestion by one delegation which was specifically agreed to by others, that this report should reflect that widespread, long-term and severe damage to the natural environment would constitute such damage as to jeopardize the survival of the civilian population.⁹⁹

For the Rome Statute, as with the term 'natural environment' discussed above, the three-part standard is 'a form of wording borrowed from article 55 of Additional

⁹⁵ Off. Rec. of the Diplomatic Conference Vol. 15, 268–9.

⁹⁶ *ibid.* 359. ⁹⁷ *ibid.* 360. ⁹⁸ *ibid.* 360.

⁹⁹ *ibid.* 366.

Protocol I,¹⁰⁰ according to the ILC's report on its draft (upon which the Rome Statute is based). Several members of the ILC expressed concerns with the standard, for example that 'a lengthy investigation would be necessary before it was possible to determine accurately whether or not the harm caused to the natural environment was widespread, long-term and severe, and that might divest the article of its substance.'¹⁰¹

As criteria for thresholds of material harm, widespread, long-term, and/or severe are generally recognized as problematic. Falk considered that they lack authority, are incoherent, lack sufficient specificity to be operationalized, are overly subjective, and have too many qualifications.¹⁰² A review by the United Nations Environment Programme ('UNEP') criticized them as both too stringent and too imprecise;¹⁰³ the ICRC finds a less restrictive standard in its commentary on customary international law.¹⁰⁴ The magnitude of harm required to be recognized as a legal breach is the point of greatest weakness in the present regime. Although both the NATO bombing of the Former Yugoslavia and Iraq's invasion, occupation, and retreat from Kuwait caused acknowledged environmental damage, legal experts advised that neither reached the threshold of Additional Protocol I to the 1949 Geneva Conventions or the Rome Statute for the International Criminal Court.

ENMOD applies to a different context: using the environment itself as a weapon. Under its Article 1, parties undertake:

not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

Note that exceeding any one of the three parameters (called 'the troika') triggers the obligation, in contrast to Additional Protocol I and the Rome Statute, where they all must be exceeded.

The co-chairs of the ENMOD negotiation, the United States and the Soviet Union, provided interpretations of the three criteria.¹⁰⁵ The meaning of the terms when used in the ENMOD Convention is defined as follows in 'Understandings' that were included in the final report of the negotiating committee to the UN General Assembly:

- (a) 'widespread': encompassing an area on the scale of several hundred square kilometres;
- (b) 'long-lasting': lasting for a period of months, or approximately a season;
- (c) 'severe': involving serious or significant disruption or harm to human life, natural and economic resources or other assets.

¹⁰⁰ ILC, Yearbook of the International Law Commission, Draft Code of Crimes against the Peace and Security of Mankind, A/CN.4/L.459 [and corr.1] and Add.1, para. 60 (1991).

¹⁰¹ *ibid.* paras. 67, 60–93.

¹⁰² Falk (n 41) 93–4.

¹⁰³ Elizabeth M. Mrema, Carl Bruch, and Jordan Diamond, *Protecting the Environment during Armed Conflict: An Inventory and Analysis of International Law* (Nairobi: UNEP, 2009), 4.

¹⁰⁴ ICRC, Customary IHL Database, Rule 43. Application of General Principles on the Conduct of Hostilities to the Natural Environment, available at <<https://ihl-databases.icrc.org/customary-ihl/eng/docs/home>> accessed 7 June 2017.

¹⁰⁵ Disarmament Conference Report (n 68) 91.

The purpose of these restrictive interpretations was explained:

Referring to suggestions at the previous year's session and at the General Assembly that the phrase 'having widespread, long-lasting or severe effects' be eliminated, the delegation of the United States held that the phrase was necessary to ensure that the ban could be implemented successfully and would not give rise to friction over trivial issues: the phrase served to avoid the risk of unprovable claims of violation while eliminating the use of techniques with significant effects.¹⁰⁶

The United States considers that earthquakes, tsunamis, and cyclones would likely fit these criteria, while 'dispelling fog to facilitate military or combat operations' likely would not.¹⁰⁷

During the ENMOD negotiation, one state delegation explained its dissent: '[i]t was alarming that the use of such monstrous techniques could be legitimized provided their effects were not "widespread" ... or "long-lasting" ... especially since in the assessment of such effects there would always be a large subjective element.'¹⁰⁸ At the First Review Conference of the Parties to ENMOD, another state argued that these interpretations should be eliminated or modified, arguing that 'There were, however, States whose total area was smaller than that; could they reasonably be asked to adhere to the Convention when, under that provision, an aggressor could resort with impunity to the use of environmental modification techniques on their territory?'¹⁰⁹ At the Second Review Conference of the Parties to ENMOD, the states parties concluded that in light of the diverse views expressed, there was a 'need to keep its provisions under continuing review and examination in order to ensure their global effectiveness'.¹¹⁰

The Understandings are not part of the ENMOD treaty nor are they included in the UN General Assembly resolution requesting that it be opened for signature, and in light of both the negotiating history and the Review Conferences, they should not be applied restrictively in enforcing the convention nor taken as a model for interpreting other treaty or customary rules.

The UNCC addressed the issue of magnitude in the context of reparations for a breach of state responsibility with respect to the use of force.¹¹¹ Iraq, in defending itself against those reparations claims, argued that there was a threshold that must be reached for environmental harm to be compensable. It said that the threshold had evolved from 'serious' to 'significant' and should be based on case-by-case factual assessment.¹¹² The UN Compensation Commission, operating under Security Council Resolution 687

¹⁰⁶ *ibid.* para. 298. ¹⁰⁷ US Department of Defense (n 13) 353.

¹⁰⁸ Disarmament Conference Report (n 68) (including summary of ENMOD negotiations), para. 288.

¹⁰⁹ ENMOD/CONF.I/SR.7, 2. Only one more Review Conference was held; when the UN Secretary-General, as treaty depositary, solicited interest in a Third Review Conference in 2013, fewer than the ten parties required to convene a conference replied affirmatively. UN Secretary General, ODA/63-2013/ENMOD (2014).

¹¹⁰ ENMOD/CONF.II/12, Part II (Final Declaration), 11 (22 September 1992).

¹¹¹ Iraq did cause massive oil well fires and a tremendous oil spill in the Persian Gulf, which it claimed were defensive measures against the Allied Coalition; both would seem to fall under ENMOD. ENMOD was not tested in relation to the 1991 Gulf War because neither Iraq nor several other affected states in the region were party to the treaty at the time.

¹¹² Report and Recommendations made by the Panel of Commissioners Concerning the Third Instalment of 'F4' claims, UN Doc. S/AC.26/2003/31 (2003).

and in a context where the respondent was not a party to the IHL treaties, declined to apply either ‘significant’ or ‘widespread, long-term and/or severe’ as a threshold in its claims review.

The UNCC rejected the need to identify a minimum level of harm in its review of war reparations claims. It found that the Security Council resolution and decisions of its Governing Council, which provided the applicable law, did not require a minimum threshold for environmental claims. The UNCC report also states, with respect to magnitude of environmental harm:

In considering the reasonableness of remediation measures, it is appropriate to have regard to the extent of the damage involved. However, in the view of the Panel, this is not the only factor to be considered. Other factors, such as the location and nature of the damage and its actual or potential effects on the environment may also be relevant. Thus, for example, where damage that might otherwise be characterized as ‘insignificant’ is caused to an area of special ecological sensitivity, or where the damage, in conjunction with other factors, poses a risk of further or more serious environmental harm, it may not be unreasonable to take remediation measures in order to prevent or minimize potential additional damage.¹¹³

Attempts to identify a customary international law threshold of harm that would be necessary for state responsibility to be invoked are likely doomed. The law of state responsibility provides secondary rules that determine consequences when a state has breached a primary rule of international law, so a treaty or customary international law is where one would find a threshold requirement. Sachariew attempted to find a common rule, but found little consistency other than frequent reference to vague general terms—serious, appreciable, significant, considerable, and so on.¹¹⁴

2.2.3 Non-international armed conflict

Finally, a caveat is called for. Internal, or non-international armed conflict (‘NIAC’), the most common form of war today, is not subject to most of the international humanitarian law described above.¹¹⁵ The four Geneva Conventions of 1949 each include ‘common Article 3’ which purports to extend some of the core constraints on all parties to an internal conflict. It makes no reference that directly applies to the environment.

¹¹³ *ibid.* para. 36. See also Allen (n 45) 156.

¹¹⁴ Kamen Sachariew, ‘The Definition of Thresholds of Tolerance for Transboundary Environmental Injury under International Law: Development and Present Status’ (1990) 38 *Netherlands International Law Review* 193–206. Sachariew traced the use of these terms in state practice for breaches of ‘rules of a general character’ resulting in state responsibility. He observed that they did not have a clear meaning or even a hierarchy, referencing notable international cases that included *Trail Smelter* and *Lac Lanoux*. Sachariew at 193–5 (observing that ‘currently the use of this and other related terms like ‘substantial’ or ‘appreciable’ in doctrinal works and within different international bodies is often inconsistent and confusing’). While he found that some treaty regimes identified specific, quantitative levels of harm as ‘significant’, he concluded that more commonly ‘significant’ was intended to mean just that the harm must be more than trivial, minor, barely detectable or inconsequential. *ibid.* 198.

¹¹⁵ See Kristen E. Boon, ‘The Application of *Jus Post Bellum* in Non-International Armed Conflicts’ in Stahn, Easterday, and Iverson (n 20). See also chapter 10 in this volume.

Other international instruments also state that some of their terms apply to NIAC,¹¹⁶ and the ILC Special Rapporteur has written ‘it is clear that fundamental principles, such as the principle of distinction and the principle of humanity (the dictates of public conscience), reflect customary law and are applicable in all types of armed conflict.’¹¹⁷ While it seems unlikely that belligerents in many cases will respect these legal rules,¹¹⁸ the existence of the rules provides the basis for sanctions to be imposed eventually and a standard of behaviour for would-be leaders to observe if they wish to be admitted to the community of nations.

2.2.4 Summary

Use of the very general term ‘natural environment’ in the LOAC treaties allows the legal rules to be interpreted according to the capacity of the actors. However, subsequent efforts to provide greater clarity misguided this area of law with narrow definitions imposed through ‘understandings’ and selective readings of the *travaux préparatoires*. Reading the text in light of current scientific and technical information and modern military capability can cure that.

A more difficult issue is the imposition of treaty terms setting minimum scope, extent, and duration of the environmental damage. Here again, a better result can be obtained by rejecting the interpretations offered in the 1970s in favour of the best information available from the scientific and military communities. The way forward is to recognize that contextual interpretation, in light of the best information, is legitimate and necessary. ‘Environment’ is a dynamic system, not merely a collection of objects to be protected. Moreover, the system is already under pressure by climate destabilization and other forces of global change. Therefore, a principle of environmental integrity is needed at the heart of this subject.

2.3 Environmental Integrity

We have just seen that in this area of international law, concern for the environment is framed almost entirely in anthropocentric terms.¹¹⁹ For example, remediation of

¹¹⁶ For example, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (‘CCW’), and its Protocol III on Prohibitions or Restrictions on the Use of Incendiary Weapons (1980) UNEP at 12, 15.

¹¹⁷ ILC Second PERAC Report (n 22), para. 6. The Special Rapporteur notes that it is difficult to obtain information on practice in NIAC and that such practice tends not to be considered state practice that would form a rule of customary international law. *ibid.* para. 8.

¹¹⁸ Geneva Call, a non-governmental organization, has compiled a collection of humanitarian commitments made by armed non-state actors (ANSAs), <theirwords.org> accessed 7 June 2017.

¹¹⁹ For example, Anne Peters argues, with regard to UN Security Council resolutions sanctioning wildlife poachers in two conflict zones, ‘if human needs and interests were not in the foreground, the Security Council would not have taken any robust action at all. ... In the long run, however, an ecocentric approach to peace and security seems more appropriate to guarantee a sustainable peace for all living beings on earth.’ Anne Peters, ‘Novel practice of the Security Council: Wildlife poaching and trafficking as a threat to the peace’ (12 February 2014) EJIL Talk! at <<https://www.ejiltalk.org/novel-practice-of-the-security-council-wildlife-poaching-and-trafficking-as-a-threat-to-the-peace/>> accessed 19 June 2017. See also, Boelaert-Suominen, Sonja Ann Jozef, ‘International environmental law and naval war: The effect of marine

conflict-related pollution protects public health; demining allows safe public access to agricultural land; and restoration of natural resources and ecosystems can be essential to recovery of resource-based livelihoods.¹²⁰ The necessities of life figure centrally in humanitarian law: water and food, freedom from toxics ('poisons'). These are followed closely in terms of priority by access to means of economic activity and cultural objects and places. Yet this narrow focus on immediate human needs may compromise the resilience of natural systems that supply essential services—and that may have inherent value.

The Working Group for Additional Protocol I recognized this and had proposed that the threshold of harm should be 'to such a degree as to disturb the stability of the ecosystem', language that was later replaced.¹²¹ A proposal to develop an interdisciplinary new research field of 'warfare ecology' calls attention to the 'complex relationships between warfare and natural systems' that require treatment of 'biophysical and socioeconomic systems as highly coupled systems.'¹²² Restating this in terms used by the Millennium Ecosystem Assessment,¹²³ provisioning services such as food, water, timber, and fibre are already protected under international humanitarian law; however other equally important services are not:

- regulating services that affect climate, floods, disease, wastes, and water quality;
- cultural services that provide recreational, aesthetic, and spiritual benefits; and
- supporting services such as soil formation, photosynthesis, and nutrient cycling.

The *jus post bellum* framework is intended to restore human society after traumatic events.¹²⁴ Included in the conditions for human society to thrive are nature and culture. The extent to which humans have historically managed the peacetime environment and the challenge of providing stable, familiar conditions provide important insights into the vulnerabilities that law must protect. This section describes the current scientific understanding of change, the coupled human and natural system, and management guidelines that incorporate these concepts in a way that may be integrated into *jus post bellum*.¹²⁵

safety and pollution conventions during international armed conflict' (1998) PhD thesis, London School of Economics and Political Science (United Kingdom), 32–7, (providing an excellent historical discussion of various approaches to defining 'environment' for international law, and concluding that restrictive definitions should be avoided and that a precise definition is 'neither possible nor advisable') at <http://etheses.lse.ac.uk/view/creators/Boelaert-Suominen=3Asonja_Ann_Jozef=3A=3A.html> accessed 7 June 2017.

¹²⁰ Jensen and Lonergan (n 1) 8. ¹²¹ ICRC Commentary (n 58) comment 2131.

¹²² Gary E. Machlis and Thor Hanson, 'Warfare Ecology' (2008) 58(8) *BioScience* 729, 730.

¹²³ The Millennium Ecosystem Assessment was an effort under the auspices of the UN involving more than 2000 scientists in a process similar to the IPCC that undertook a 'massive synthesis of scientific knowledge about global ecosystems and their capacity to support human well-being.'

¹²⁴ See, for example, Gary J. Bass, 'Jus Post Bellum Philosophy and Public Affairs' (2004) 32 *Philosophy & Public Affairs* 384–412.

¹²⁵ Gregory Aplet has addressed this from multiple perspectives. See Gregory H. Aplet and David N. Cole, 'The Trouble with Naturalness: Rethinking Park and Wilderness Goals' in David N. Cole and Laurie Yung (eds.), *Beyond Naturalness: Rethinking Park and Wilderness Stewardship in an Era of Rapid Change* (Covelo, CA: Island Press, 2010); Gregory H. Aplet and John Gallo, 'Applying Climate Adaptation Concepts to the Landscape Scale: Examples from the Sierra and Stanislaus National Forests' (Washington, DC: The Wilderness Society, 2012), at <http://ecoadapt.org/data/documents/Aplet_Gallo_2012_Climate_Adaptation_Portfolio_Sierra-Stanislaus-Low-Res_Version.pdf> accessed; Gary Aplet, 'On the Nature of

2.3.1 Change in baseline conditions

Ecological systems were previously believed to be relatively stable, and to tend towards static 'climax' states, a belief that subsequent research shattered. The author of a classic study wrote, 'the climax forest ... is the final and permanent vegetation stage, toward the establishment of which all other plant societies are successive steps'.¹²⁶ However, since at least the 1960s, scientists have observed that particular ecosystems change over time with and without human intervention.¹²⁷ For example, fire and drought are natural perturbations that occur with varying frequency, and long-term pre-industrial changes in climate have caused observable longer-term shifts in ecosystems.¹²⁸

In a static world, concepts of preservation and conservation would have objective meaning and legal standards could be defined to maintain those conditions. The example of national parks illustrates the tension between the image of a natural world and the reality of the modern world. Parks, after all, represent the most prized places identified by nations around the world.¹²⁹ An advisory document prepared for the US National Park Service (NPS), the Leopold Report, recommended that,

As a primary goal ... the biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by the white man [*sic*]. A national park should represent a vignette of primitive America.¹³⁰

The Leopold Report proposed active management techniques to reestablish and then to maintain that static view of the ecosystems that were perceived to be original, or 'natural', unaffected by humans.

In sharp contrast, a review commissioned a half-century after the Leopold Report reflects a very different view of the world, one which includes stewardship for 'continuous change that is not yet fully understood, in order to preserve ecological integrity and cultural and historical authenticity'.¹³¹ While weather and ecological functions are only partially understood, the more recent report also records a host of new anthropogenic changes added to the conditions that shaped the park lands over hundreds and thousands of years: 'biodiversity loss, climate change, habitat fragmentation, land use

Wildness: Exploring what Wilderness Really Protects' (1999) 76 University of Denver Law Review 347–67. Other authors who have considered this question include Ulrich Heink, Robert Bartz, and Ingo Kowarik, 'How Useful are the Concepts of Familiarity, Biological Integrity, and Ecosystem Health for Evaluating Damages by GM Crops?' (2012) 25(3) Journal of Agricultural and Environmental Ethics 17.

¹²⁶ Cooper (1913), quoted in Daniel B. Botkin and Matthew J. Sobel, Stability in 'Time-Varying Ecosystems, The American Naturalist' (Nov–Dec 1975) Vol. 109, No. 970. 625–46. [W. S. Cooper, 'The Climax Forest of Isle Royale, Lake Superior, and its Development' (1913) 55 Bot. Gaz. 1–44, 115–40, 189–234.]

¹²⁷ Botkin and Sobel (n 126) 628–9. ¹²⁸ *ibid.* 626–9.

¹²⁹ The 1972 Convention concerning the Protection of the World Cultural and Natural Heritage recognizes some sites as 'parts of the cultural or natural heritage [that] are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole'.

¹³⁰ Advisory Board on Wildlife Management appointed by Secretary of the Interior Udall, 'Wildlife Management in the National Parks: The Leopold Report' (4 March 1963), at <https://www.nps.gov/parkhistory/online_books/leopold/leopold.htm> accessed June 2017.

¹³¹ Rita Colwell *et al.*, 'Revisiting Leopold: Resource Stewardship in the National Parks' (Washington, DC: National Park System Advisory Board Science Committee, 2012) ('NPS 2012').

change, groundwater removal, invasive species, overdevelopment and air, noise, and light pollution, and cultural and socioeconomic changes in the people who interact with the land.¹³² These are changes that are predicted to affect the environment everywhere, sometimes to levels that risk passing a tipping point into system collapse.¹³³

The concept that ecosystems are inherently changing alters the approach to management and puts in question traditional management techniques. Drought is a classic unplanned-for change that impacted the Iraqi Marshes restoration project discussed below.

2.3.2 Coupled human and natural systems and the ‘pristine myth’

The 2012 National Park Service report conceptualized humans as participants in ecosystems—a very different vision from the pre-contact conditions imagined by the Leopold Report. The 2012 report advised that cultural and natural resources cannot be separated and must be managed together; it used the American Bison as an example of a resource that is both ecologically important in maintaining grassland ecosystems and culturally significant.¹³⁴ The report defines *ecological* integrity as ‘the quality of ecosystems that are largely self-sustaining and self-regulating. Such ecosystems may possess complete food webs, a full complement of native animal and plant species maintaining their populations, and naturally functioning ecological processes such as predation, nutrient cycling, disturbance and recovery, succession, and energy flow.’¹³⁵ This image of the human-nature relationship resulted from decades of research that revealed human influences on what had appeared to be a virtually untouched continent.

It will be obvious that in Europe the human imprint is everywhere and ‘pristine’ environments are essentially nonexistent; it is less obvious but equally true in places like the

¹³² *ibid.* 4–5.

¹³³ Jonathon Rockström, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart III Chapin, Eric Lambin, Timothy M. Lenton, Martin Scheffer, Carl Folke, Hans Joachim Schellnhuber, Björn Nykvist, Cynthia A. De Wit, Terry Hughes, Sander van der Leeuw, Henning Rodhe, Sverker Sörlin, Peter K. Snyder, Robert Costanza, Uno Svedin, Malin Falkenmark, Louise Karlberg, Robert W. Corell, Victoria J. Fabry, James Hansen, Brian Walker, Diana Liverman, Katherine Richardson, Paul Crutzen, and Jonathon Foley, ‘Planetary Boundaries: Exploring the Safe Operating Space for Humanity,’ (2009) 14(2) *Ecology and Society* 32, at <<http://www.ecologyandsociety.org/vol14/iss2/art32/>> accessed June 2017. The boundaries are: climate change (CO₂ concentration in the atmosphere <350 ppm and/or a maximum change of +1 W m⁻² in radiative forcing); ocean acidification (mean surface seawater saturation state with respect to aragonite ≥ 80% of pre-industrial levels); stratospheric ozone (<5% reduction in O₃ concentration from pre-industrial level of 290 Dobson Units); biogeochemical nitrogen (N) cycle (limit industrial and agricultural fixation of N₂ to 35 Tg N yr⁻¹) and phosphorus (P) cycle (annual P inflow to oceans not to exceed 10 times the natural background weathering of P); global freshwater use (<4000 km³ yr⁻¹ of consumptive use of runoff resources); land system change (<15% of the ice-free land surface under cropland); the rate at which biological diversity is lost (annual rate of <10 extinctions per million species); chemical pollution (no boundary determined yet) and atmospheric aerosol loading (no boundary determined yet).

¹³⁴ NPS 2012 (n 131) 9. Anderson and Barbour argue that ‘many of the classic landscapes of our national parks ... were shaped by the unremitting labor of generations of indigenous peoples’, that they are now changing because the cultural and natural processes that shaped them are missing, and that restoration will not work unless indigenous practices are reintroduced. See M. Kat Anderson and Michael G. Barbour, ‘Simulated Indigenous Management: A New Model for Ecological Restoration in National Parks’ (2003) 21(4) *Ecological Restoration* 269, 270.

¹³⁵ NPS 2012 (n 131) 12.

pre-contact Americas.¹³⁶ Just as idealized images of climax ecosystems reflected limited knowledge and short-term observations, the 'pristine myth' has been refuted by evidence that Native Americans altered their environments to enrich the species, location, and life-stage of plants and animals that they used for food, shelter, and goods.¹³⁷ There is evidence that fire and cultural practices have shaped Amazonian forests, the Great Plains, and the Pantanal to suit the human inhabitants to such an extent that Denevan says 'There are no virgin tropical forests today, nor were there in 1492.'¹³⁸ Human impact is so significant that serious people propose identifying a new geologic epoch as the 'Anthropocene'; they debate whether the boundary line should be at the point when dams blocked sedimentation transport to continental shelves; when CO₂ added to the atmosphere lowered the pH of the ocean; when radiation was released to the atmosphere from the first atomic tests; or when genes were first modified.¹³⁹

Coupled human and natural systems, like those observed in these examples, are now studied in different settings, including cities, rural areas, developed and developing countries.¹⁴⁰ They can be defined as 'integrated systems in which people interact with natural components.'¹⁴¹ A synthesis study of six case studies observed several common features: 'nonlinear dynamics with thresholds, reciprocal feedback loops, time lags, resilience, heterogeneity, and surprises ... past couplings have legacy effects on present conditions and future possibilities.'¹⁴²

This realization led land managers to the conclusion that desirable ecological conditions that seemed to characterize the Americas have to be actively managed,¹⁴³ an enterprise which has its own problems when applied to natural or cultural landscapes. To explain the problem, the ecologist David Ehrenfeld invoked von Neumann and Morgenstern's theorem demonstrating the mathematical impossibility of maximizing more than one variable at a time in an interlinked system.¹⁴⁴ In other words, it might be possible to manage a forest to maximize the deer population, but the results (empirically demonstrated) are likely to reduce or extirpate populations of other species. There is no general rule to solve the paradox that this creates: that there is no

¹³⁶ 'Pre-contact' refers to the period before Europeans contacted the peoples of the Americas.

¹³⁷ M. Kat Anderson, 'The Fire, Pruning, and Coppice Management of Temperate Ecosystems for Basketry Material by California Indian Tribes' (1999) 27(1) *Human Ecology* 79–113; William M. Denevan, 'The Pristine Myth: The Landscape of the Americas in 1492' (1992) 82(3) *Annals of the Association of American Geographers* 369–85.

¹³⁸ Denevan (n 137) 375.

¹³⁹ Davor Vidas, 'The Anthropocene and the International Law of the Sea' (2011) *Philosophical Transactions of the Royal Society* 369, 909–25.

¹⁴⁰ Jianguo Liu, Thomas Dietz, Stephen R. Carpenter, Marina Alberti, Carl Folke, Emilio Moran, Alice N. Pell, Peter Deadman, Timothy Kratz, Jane Lubchenco, Elinor Ostrom, Zhiyun Ouyang, William Provencher, Charles L. Redman, Stephen H. Schneider, William W. Taylor, 'Complexity of Coupled Human and Natural Systems' (2007) 317 *Science* 1513–17.

¹⁴¹ *ibid.* 1513. ¹⁴² *ibid.* 1513.

¹⁴³ M. Kat Anderson and Michael G. Barbour, 'Simulated Indigenous Management: A New Model for Ecological Restoration in National Parks' (2003) 21(4) *Ecological Restoration* 269–77.

¹⁴⁴ David Ehrenfeld, 'The Management of Diversity' in F. Herbert Bormann and Stephen R. Kellert (eds.), *Ecology, Economics Ethics: The Broken Circle* (New Haven: Yale University Press, 1991) 26–39, 30.

‘natural’ condition; that there are preferable conditions; that management is necessary to maintain them; and that managing complex natural systems¹⁴⁵ is prone to failure.

The proponents of warfare ecology as a new discipline are intensely aware of these dynamics. They argue that the ‘distinctive characteristics of warfare ecology emerge from the deliberateness (often to deprive enemies of advantage), destructiveness, and intensity of ecological and socioeconomic perturbations brought on by warfare’ and that coupled systems frameworks adapted to these particular conditions are needed.¹⁴⁶ They call attention to cascading effects of reconstruction. In a typical post-conflict situation, humanitarian efforts to provide potable water and fuel for human survivors may have widespread negative consequences for key components of the ecosystems they will rely on in the future—fisheries, agricultural land, forests, soil, climate, and so on. As the factual connections between coupled biophysical and socioeconomic systems become clear, the gaps and incongruities in a legal regime that does not fully recognize them become clear.

2.3.3 Goals

The pristine myth dissipates in light of the knowledge that environmental conditions are and have been shaped by natural forces and human intention. The 2012 National Park Service report argued that essential characteristics and processes of healthy ecosystems are equally important management goals as ‘observable features of iconic species and grand land- and seascapes’.¹⁴⁷ One of these is system resilience.

System resilience can be analysed in terms of ‘animal movements, gene flow, and response to cycles of natural disturbance’¹⁴⁸ or other features like watersheds and airsheds. For seasonally mobile migratory species and other species that move in response to short- and long-term system changes (including armed conflict), life-cycle stewardship and collaborative resource management are needed to achieve system resilience.

Loneragan made this point in his analysis of the stop and start restoration of the Iraqi Marshes (perhaps the original Garden of Eden).¹⁴⁹ The marshes were drained by Saddam Hussein to quash political dissidents in the region. After the 2003 invasion forced Hussein from power, an international coalition contributed funds, technical support, and political assistance to restore the marshes. Fed by the Tigris and Euphrates Rivers, the marshes’ ultimate health would depend on cooperation with the upper riparians—Syria and Turkey—and with neighbouring Iran. Natural drought conditions, exacerbated by the failure of collaborative management efforts with Turkey and Iran, have led to inadequate water supply. Lonergan predicted that climate change will worsen this situation. He also found that in some areas the marshes had lost so

¹⁴⁵ Note that ‘complex system’ is a term of art in systems theory. Systems may be simple, complicated, complex, or chaotic. In complex systems, ‘there is no immediately apparent relationship between cause and effect, and the way forward is determined based on emerging patterns’. David Snowden and Mary E. Boone, ‘A Leader’s Framework for Decision Making’ (2007) *Harvard Business Review* 69–76, 72. See also, Cymie R. Payne, ‘Balancing the Risks: Choosing Climate Alternatives’ (2009), 8 *IOP Conference Series: Earth and Environmental Science* 53–7.

¹⁴⁶ Machlis and Hanson (n 122) 733. ¹⁴⁷ NPS 2012 (n 131) 10. ¹⁴⁸ *ibid.* 9.

¹⁴⁹ Steve Lonergan, ‘Ecological Restoration and Peacebuilding: The Case of the Iraqi Marshes in Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding’ in Jensen and Lonergan (n 1).

much ecosystem function that ‘the marshes’ resiliency might be exhausted’, although other areas began to recover naturally once water was restored. In his view, though the Convention on Wetlands of International Importance (the Ramsar Convention) could have provided a useful institutional structure for the riparian states to cooperate, it lacked incentives to force them to work together. He believed that the Iraqi Marsh restoration was not a peacebuilding success.

2.4 Lessons for *Jus Post Bellum*

It is evident that relevant legal interpretations of ‘environment’ for a *jus post bellum* regime cannot rely on the scant treaty regime established at the end of the twentieth century. As discussed, ENMOD states parties have explicitly agreed to disagree on its key definitions of what constitutes the environment as a weapon and its threshold for the magnitude of damage to trigger the convention’s obligations, and it does not address the scope of the environment as a target.

The existing legal rules do not provide sufficient clarity to satisfy the needs of post-conflict interventions and legal regimes: accountability, deterrence, reparations, or guidance for progressive legal development. The failure to properly characterize the ‘environment’ erodes the normative influence that law could exert to stigmatize behaviour. Confusion about what aspects of environment are legally protected and how to characterize them in a legal claim may explain the failure to bring environmental damage claims in post-conflict legal proceedings, including the Ethiopia-Eritrea Claims Commission and the UN Register of Damage Caused by the Construction of the Wall in the Occupied Palestinian Territory.¹⁵⁰ Drumbl has commented on the failure to use international criminal courts to charge environmental crimes, for similar reasons.¹⁵¹ The military practices of many states do ‘take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives’ in the words of the ICJ,¹⁵² but these measures do not exercise the broader normative and positive effects of law.

These five proposals could help the *jus post bellum* framework fill these gaps:

1. Define ‘environment’ recognizing the collective interest in its integrity.

Belligerents and peace-time governments alike owe obligations to protect and restore environmental resources in which the international community has an interest. The special interests of local and national communities should also be recognized.

¹⁵⁰ UN General Assembly resolution, UN Doc. A/RES/ES-10/17, para. 3 (establishing the Register). The damage categories established by the Register are: ‘A: Agriculture, category B: Commercial, category C: Residential, category D: Employment, category E: Access to Services, and category F: Public Resources and Other. Category F claims may not be submitted by individuals.’ UNRoD Rules and Regulations Governing the Registration of Claims, Art. 11. No Category F (Public Resources and Other) claims—where environmental claims might be expected to be filed—are recorded in the annual progress reports of the UNRoD board to the UN General Assembly, UN Docs. A/ES-10/498 (2010); A/ES-10/455 (2011); A/ES-10/598 (2012); A/ES-10/599 (2013); A/ES-10/658 (2014); A/ES-10/683 (2015).

¹⁵¹ Mark A. Drumbl, ‘Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes’ (1998) 22 *Fordham International Law Journal* 122, 145–6.

¹⁵² *Legality of the Threat or Use of Nuclear Weapons* (n 5), para. 30.

2. Define 'environment' in context and in light of the best information available.

Post-conflict legal regimes can broaden their scope to recognize all of the elements required for environmental integrity, not just provisioning services. That means that the less glamorous regulating services and supporting services of the environment will be identified, protected during armed conflict, and given priority for restoration post-conflict. Cultural services provided by the environment should be considered important elements in rebuilding post-conflict societies. Multidisciplinary scientific teams can be used for assessment. Reparations programmes would do well to recognize all these services as compensable heads of damage.

3. Account for change.

The role of change seems most relevant to future-oriented post-conflict activities, such as remedies for environmental harms, economic development projects, and environmental restoration efforts. The lessons from studies of ecosystem management suggest that change at multiple scales, resulting from both natural and human causes, means that active management of ecosystem characteristics replaces fixed management of a historic condition. This might lead to difficult choices, which will require thoughtful analysis of normative and empirical questions. For example, if sea level rise and storm surge are predicted to inundate a conflict-damaged wetland in the next ten years, how should a legal right to restoration be implemented? How should local community interests in restoring preexisting conditions be weighed in such a scenario? How can the environmental integrity of that area be recovered?

4. Consider how human activities and environment function as an interactive system and do not focus exclusively on one element.

The implication for judicial processes, civil or criminal, is to take account of the coupled human and natural system. Measures would include: at the outset, when soliciting claims, to inform potential claimants that systemic harmful impacts are compensable; to define liability and causation in terms that account for interactions within the system; to obtain expert assistance to evaluate complex claims in light of current scientific knowledge; and to consider the systemic effects of remedies provided.¹⁵³

For interventions in the immediate post-conflict period, like supplying water and fuel to refugees, information about coupled systems will be limited and certain priorities will predominate. However, best practices can be incorporated to minimize unintended harm.¹⁵⁴

For long-term investments by international aid donors, private investors, or governments, safeguards established for similar activities during peacetime may

¹⁵³ For example, Kuwait sought compensation to excavate and remove the asphalt-like layer of oil residue left on its desert surface from the oil well fires set by retreating Iraqi troops. Scientific experts advised that excavation of the tarcrete layers (although it would have restored the visual appearance of the sites) could reduce the success of revegetation efforts. Report and Recommendations made by the Panel of Commissioners Concerning the Third Instalment of 'F4' claims () UN Doc. S/AC.26/2003/31, 18 December 2003, 47.

¹⁵⁴ Annica Waleij, Timothy Bosetti, Russ Doran, and Birgitta Liljedahl, 'Environmental Stewardship in Peace Operations: The Role of the Military' in Carl Bruch, W. Carroll Muffet, and Sandra S. Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (London: Earthscan, 2016).

be used to evaluate and control for collateral damage. For example, environmental impact assessment is a common practice used to discern this kind of information. It is widespread in domestic legal regimes and the International Court of Justice¹⁵⁵ and Law of the Sea Tribunal¹⁵⁶ have recognized environmental impact assessment as an international obligation in cases of potential significant transboundary harm. However, armed conflict can be used as a pretext to suspend peacetime laws, and urgency to initiate post-conflict projects may encourage accelerated approvals.¹⁵⁷ It is important that military forces and investors alike recognize the continuing applicability of environmental safeguards.

Expanding the focus of law from single concerns—gold mining, refugee water supply, a fishery—to complex systems complicates the task of post-conflict activities but is likely to make the result more robust.

5. Recognize that armed conflict constitutes a severe disruption to the environment and that recovery to the conditions before the conflict may not be possible or desirable.

A preferred historical condition may not be recoverable. As *jus post bellum* rules evolve, new criteria may be used, including:

- system resilience;
- regional, including transboundary, analysis, and potential for collaborative management; and
- biodiversity and evolutionary potential.

The present is a time of development for the norms and practices of protection of the environment in relation to armed conflict. By considering the definition of ‘environment’ in broad terms, based on the best science available at the time of interpretation, it should be possible to understand the legal regimes of IHL and *jus post bellum* consistently with the evolving views of the international community.

¹⁵⁵ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment of 20 April 2010, ICJ Reports 113.

¹⁵⁶ Seabed Disputes Chamber of the Int’l Trib. for the Law of the Sea, *Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, ITLOS Reports, 1 February 2011, paras. 145–8.

¹⁵⁷ Jensen and Lonergan (n 1) 8.

PART II

LEGAL NORMS AND FRAMEWORKS

The Ability of Environmental Treaties to Address Environmental Problems in Post-Conflict

*Britta Sjöstedt**

3.1 Introduction

In this chapter, I argue that environmental treaties, commonly sharing four elements, can be useful to address challenges to protect and restore the environment arising during the transition from armed conflict to peace (post-conflict). The elements consist of: (1) treaty bodies (also referred to in this chapter as treaty institutions) with a broad mandate to make appropriate use of the other elements; (2) loosely worded provisions; (3) supportive compliance systems; and (4) ability to cooperate with other institutions. The elements enable the environmental treaties to adapt to the specific context of post-conflict and fill a normative as well as an institutional gap to safeguard the environment. As international environmental treaties encapsulate obligations attached to the international community to address environmental damage, which may also serve as a means to achieve a sustainable peace in post-conflict, they may be of particular relevance for the search of a *jus post bellum* framework.¹ As explained by Carsten Stahn, *jus post bellum* may be viewed as a legal framework gathering rules from different bodies of international law that apply in the blurred phase between war and peace.² Environmental treaties can offer types of measures that are relevant both in peacetime, wartime, and in post-conflict. For instance, they have the potential through their treaty bodies to engage various stakeholders in responding to environmental damage, and thereby, further the principle of international cooperation, which has been identified as a crucial requirement in peacebuilding and the *jus post bellum* framework.³

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¹ The concept of *jus post bellum* is described in various manners and it appears that there is not any agreed or unified view of what the concept is or should be. For further reading, see Eric de Brabandere, 'The Concept of Jus Post Bellum in International Law, A Normative Critique' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press 2014), 124–42. Cymie Payne has explored the aspect of *jus post bellum* that relates to 'environmental integrity,' see Cymie Payne, 'The Norm of Environmental Integrity in Post-Conflict Legal Regimes' in Stahn, Easterday, and Iverson *ibid.* 503–19.

² Carsten Stahn, "'Jus ad bellum', 'jus in bello' ... 'jus post bellum?'"—Rethinking the Conception of the Law of Armed Conflict' (2007) 17 *European Journal of International Law* 921.

³ Dieter Fleck, 'Jus Post Bellum as Partly Independent Legal Framework' in Stahn, Easterday, and Iverson (n 1) 47.

To exemplify and explain my argument, I examine the application of the World Heritage Convention⁴ in relation to the armed conflicts taking place in the Democratic Republic of the Congo ('DRC')⁵ to protect its five natural World Heritage Sites.⁶ In the case of the DRC, the World Heritage Convention has fostered cooperation among the international community to safeguard the World Heritage Sites during and after the armed conflicts taking place in the region. My analysis shows that the World Heritage Convention is useful as a tool to guide states, international organizations, non-governmental organizations ('NGOs'), and other stakeholders in the protection and restoration of natural World Heritage in a post-conflict context. Other environmental treaties with a comparable structure could be of similar use to protect and restore other aspects of the environment.

The chapter is structured as follows. The next Section (3.2) describes the environmental problems related to armed conflict. Section 3.3 describes the application of the World Heritage Convention in relation to the armed conflicts in the DRC and its structural elements that enable the convention, and potentially other environmental treaties, to influence the environmental protection during and after armed conflict. In the final Section (3.4), I provide some conclusions on how environmental treaties add to the concept of *jus post bellum*.

3.2 Problems in Environmental Protection Work Related to Armed Conflicts

Armed conflicts can cause direct as well as indirect harm to the environment in different ways.⁷ In the DRC, the warfare has severely affected five natural World Heritage Sites and threatened, among other species, the endangered mountain gorillas.⁸ Armed groups have used the inaccessibility of the Sites for their military

⁴ Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), 1037 UNTS 151; 27 UST 37; 11 ILM 1358, 16 November 1972.

⁵ The First Congo War lasted between 1996–1998 and involved Rwanda, Uganda, and Angola. The second Congo War lasted between 1998–2000 and involved DRC, Rwanda, Uganda, Zimbabwe, Burundi, Angola, Namibia, Chad, Eritrea, and Sudan to varying degrees. A peace agreement was signed between warring parties in April 2002. The fighting has however continued with such intensity and organization among the concerned armed groups, including the DRC Army, that it should be classified as a conflict of non-international character (although it still may have some international elements). The lines are however blurring. See also United Nations Office for the Coordination of Humanitarian Affairs (OCHA), *Democratic Republic of the Congo Mapping Exercise* (2010) 8–10, documenting the most serious violations of human rights and international humanitarian law 1993–2003, at <http://www.ohchr.org/Documents/Countries/CD/DRC_MAPPING_REPORT_FINAL_EN.pdf> accessed 14 June 2017.

⁶ The DRC ratified the World Heritage Convention on 23 September 1974. See <<http://whc.unesco.org/en/statesparties>>, accessed 14 June 2017. The DRC has now five natural World Heritage Sites protected under the World Heritage Convention including the Virunga National Park, Salonga National Park, Okapi Wildlife Reserve, Kahuzi-Biega National Park, and Garamba National Park.

⁷ See for instance Aaron Schwabach, 'Environmental Damage Resulting from the NATO Military Action Against Yugoslavia' (2000) 25 *Columbia Journal of Environmental Law* 117, 121; John Alan Cohan, 'Modes of Warfare and Evolving Standards of Environmental Protection under the International Law of War' (2003) 15 *Florida Journal of International Law* 481, 532.

⁸ The mountain gorilla has been included since 1975 on Appendix I of the 1973 Convention of International Trade in Endangered Species (adopted 3 March 1973, entered into force 1 July 1975), 993 UNTS 243 (CITES). Appendix I lists species that are the most endangered among CITES-listed animals

operations, as hiding places, and to set up base camps for planning and launching attacks.⁹ The armed groups have also entered World Heritage Sites for the purpose of exploiting natural resources by engaging in artisanal mining, charcoal production, and wildlife poaching. The revenues sustain their military operations and provide personal profit.¹⁰ To deny rebel groups their cover, the Congolese Army has entered the World Heritage Sites where it has jeopardized the integrity of the Sites by, for example, cutting down trees and placing army camps inside the Sites.¹¹ In addition, poor discipline, irregular pay, and lack of food have resulted in the growing participation of the Congolese Army in such illegal activities. Several army members have collaborated with rebel groups in the illegal charcoal trade. The army uses their official positions to facilitate exploitation of the dealers bypassing any official controls.¹² Such practice establishes a parallel administration system. This is one example of how the exploitation of natural resources and wildlife can continue without being addressed by the authorities, which is common in post-conflict. The existing governmental structures are often disrupted followed by an 'institutional vacuum' and lack of governance, which particularly affects the environmental work in the transition from conflict to peace.¹³ Moreover, due to the lack of investment in the infrastructure in war-torn societies, these problems can continue and accelerate well into the post-conflict period.¹⁴ Poor infrastructure affects a state's ability to handle waste, sewage, or provide sanitation, water, and fuel. This is particularly noticeable when dealing with large numbers of displaced persons generated by armed conflicts. Pollution, like water contamination or deforestation, is often caused by the large concentrations of displaced persons living without sanitary facilities, access to fuel, or waste removal services.¹⁵

and plants (see Art. 2(1) of the Convention). See CITES website <<http://www.cites.org/eng/app/appendices.php>>, accessed 14 June 2017.

⁹ See UNESCO World Heritage Committee, Report, distributed 8 February 2002, Doc. WHC-01/CONF.208/24, 17. For example, between 2008 and 2009, armed rebel groups occupied the gorilla sector in the Virunga National Park. See also UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 11 May 2009, Doc. WHC-09/33.COM/7A, 12.

¹⁰ See UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 26 May 2006, Doc. WHC-06/30.COM/7A, 27; State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 10 May 2007, Doc. WHC-07/31.COM/7A, 9; State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 22 May 2008, Doc. WHC-08/32.COM/7A, 8. See also Alec Crawford and Johannah Bernstein, *MEAs, Conservation and Conflict—A Case Study of Virunga National Park, DRC* (Winnipeg: International Institute for Sustainable Development, 2008), 17–18.

¹¹ In 2006 it was reported that four brigades totalling 12,000 soldiers, were deployed inside or close to one of the World Heritage Sites, some of them with their families. See UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 26 May 2006, Doc. WHC-06/30.COM/7A, 27; State of Conservation of the Properties Inscribed on the List of World Heritage in Danger distributed 22 May 2008, Doc. WHC-08/32.COM/7A, 10. See also Joseph Kalpers, *Overview of the Armed Conflict and Biodiversity in Sub-Saharan Africa: Impact, Mechanisms and Responses* Washington DC Biodiversity Support Program, 2001), 13.

¹² United Nations Environment Programme (UNEP), *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (Switzerland: UNEP, 2009), 17.

¹³ *ibid.* ¹⁴ *ibid.*

¹⁵ Judy Oglete, James Shambaugh, and Rebecca Kormos, 'Parks in the Crossfire: Strategies for Effective Conservation in Areas of Armed Conflict' (2004) 14 *War and Protected Areas*, *International Journal for Protected Areas Managers*, 3, at <https://cmsdata.iucn.org/downloads/14_1.pdf> accessed 14 June 2017.

For example, after the Rwandan genocide in 1994, approximately 720,000 displaced persons were permitted by the United Nations High Commissioner for Refugees ('UNCHR') to settle in and around Virunga National Park, one of the Congolese World Heritage Sites.¹⁶ The UNCHR allowed the displaced population to cut firewood inside the site due to the lack of fuel. This led to deforestation of an area of 300 km² that imperilled the unique ecosystem and threatened the mountain gorillas.¹⁷

Armed conflict also generates practical challenges to addressing post-conflict environmental damage. One of the main challenges in undertaking environmental work in post-conflict situations is the absence of human and technical capacity. Foreign and national staff with higher education is often evacuated first during armed conflict. As there is a shortage of competent staff, operative facilities, intact premises, and financial means as a result of an armed conflict, much of the environmental protection work halts. Furthermore, in the aftermath of an armed conflict, most stakeholders involved in rehabilitation and restoration are mainly focused on humanitarian assistance and democracy issues, while the environment is a low priority.¹⁸ Nevertheless, in war-torn societies, managing natural resources has been highlighted as an important aspect to meet basic needs of the population, such as providing water, food, shelter, and livelihoods, to reconstruct the financial system, and to re-build governmental structure.¹⁹ Environmental degradation has the potential to endanger health, livelihoods, and security of the population.²⁰ The states that are unable to give their population the support they require may create additional environmental degradation and foster further conflicts. As the war-torn states' incomes often end up in private pockets they become financially exhausted. For example, in the DRC, a large number of public officials benefit from the wars on a personal level and the revenues of the natural resources do not enrich the state. The DRC remains unable to build strong governmental institutions, and the environmental degradation continues and, as a result, the population suffers.²¹ Consequently, infrastructure deteriorates, governmental institutions become non-functioning and public officials are underpaid, if paid at all, which further nurtures corruption and instability. The environmental damage caused in relation to armed conflict impedes the outlook for peace and for the societies to recover.²²

¹⁶ Crawford and Bernstein (n 10) 15–16.

¹⁷ UNEP, *The Democratic Republic of the Congo Post-Conflict Environmental Assess Synthesis for Policy Makers* (Nairobi: UNEP, 2011), 26.

¹⁸ Oglete, Shambaugh, and Kormos (n 15) 3–4.

¹⁹ Carl Bruch and others, 'Post-conflict Peace building and Natural Resources' (2009) *Yearbook of International Environmental Law* 58, 67.

²⁰ Onita Das, *Environmental Protection, Environmental Security and Armed conflict, A Sustainable Development Perspective* (Cheltenham: Edward Elgar Publishing, 2013), 122–3; Michael Bothe *et al.*, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) *International Review of the Red Cross* 570–1.

²¹ Phoebe Okowa, 'Sovereignty Contests and the Protection of Natural Resources in Conflict Zones' (2013) 66 *Current Legal Problems* 33, 40–2.

²² UNEP (n 12) 19.

3.3 Environmental Treaties' Alternative Approach

As described above, the transition from conflict to peace is often characterized by the lack of governmental control and institutional collapse. This is a challenge for undertaking environmental protection work and implementing international environmental law, which rely heavily on institutions of the state. If these are not in place, little can be achieved in that area. Still, environmental treaties may be prominent in such situations. Environmental treaties' application is dependent on the treaty system and its treaty bodies, rather than states' domestic institutions.²³ I use the example of the application of the World Heritage Convention in the DRC to illustrate the potential of environmental treaties in post-conflict.

The World Heritage Convention has played a central role in attempting to protect the natural World Heritage from the adverse impacts of the numerous armed conflicts taking place in the DRC since 1996.²⁴ During the armed conflicts, four out of the five Congolese Sites have been under rebel control.²⁵ For that reason, the Institut Congolais pour la Conservation de la Nature (hereinafter referred to as Congolese Wildlife Authority), a Congolese state organization entrusted with the management of the World Heritage Sites, requested support for protection of the Sites.²⁶ As response, a pilot project titled Biodiversity Conservation in Regions of Armed Conflict: Conserving World Heritage Sites in the Democratic Republic of the Congo (DRC project) was launched under the convention.²⁷ The project aims at

²³ Robin Churchill and Geir Ulfstein, 'Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law' (2000) *American Journal of International Law* 623–59.

²⁴ For further reading on the application of the World Heritage Convention during the armed conflicts in the DRC, see Britta Sjöstedt, 'The Role of Multilateral Environmental Agreements in Armed Conflict: "Green-keeping" in Virunga Park, Applying the UNESCO World Heritage Convention in the Armed Conflict of the Democratic Republic of the Congo' (2013) *Nordic Journal of International Law* 129–53.

²⁵ These included the World Heritage Sites of Okapi Reserve, Garamba National Park, Virunga National Park, and Kahuzi-Biega National Park.

²⁶ UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, Doc. WHC-99/CONF.209/13, Paris, 18 October 1999, 3–5.

²⁷ UNESCO World Heritage Committee, Decision 23.COM.X.A4 adopted at twenty-third session on 29 November–4 December 1999, Doc. WHC-99/CONF.209/22, 2 March 2000, 22. In response to requests submitted by the Congolese Wildlife Authority in cooperation with the conservation NGOs and other partners, the Bureau approved a total sum of US\$ 105,000 for the four sites. These funds are being disbursed via contracts established with conservation NGOs and partners. The Task Force representatives, in consultation with the Centre, the UNESCO Division of Ecological Sciences and the International Union for Conservation of Nature (IUCN) elaborated a 4-year project expected to cost about US\$ 4 million. The project primarily focuses on: (a) specific and collaborative support to the four sites, including the payment of salaries and salary supplements linked to performance of anti-poaching and surveillance duties; (b) raising awareness and support of international and regional diplomatic and political communities dealing with conflict in DRC and in neighbouring states to the conservation of the sites; (c) disseminating information of the critical role that the Site staff is playing in the protection of the Sites despite risks to their lives and property, and develop sustainable financing mechanisms to support the staff and the conservation of the sites; and (d) identify, document, and disseminate lessons learnt in the conservation of the four sites in the DRC to improve preparedness of the international community to meet conservation problems of World Natural Heritage properties in regions of armed conflict. UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, Doc. WHC-99/CONF.209/13, Paris, 18 October 1999, 3–5.

providing rudimentary protection of the universal values of World Heritage in relation to armed conflict by empowering the international society to respond in such situations.²⁸

The ability to launch the project under the World Heritage Convention and adopt measures to meet the challenges related to armed conflicts has been facilitated by four elements regarding its character, structure, and operation. These elements include: (1) broad mandate of the treaty institutions to apply the convention; (2) open-ended treaty provisions; (3) non-confrontational compliance system focused on supportive application measures; and (4) the possibility of the treaty bodies to cooperate with other environmental treaty bodies as well as with other actors including states, international organizations, NGOs, and private actors.²⁹ The elements are structural components of how most environmental treaties are managed and applied. They are assets contributing to the creation of dynamic instruments competent to adopt context-based measures. By enabling innovative context-based strategies to achieve treaty objectives, the World Heritage Convention has contributed to filling the post-conflict institutional and legal gap in the DRC to protect and restore the natural World Heritage Sites. Therefore, practice developed could be of significance while identifying the legal norms of *jus post bellum*.

In the first subsection, I briefly introduce the World Heritage Convention, and in the second subsection, I examine the application of the World Heritage Convention in relation to the armed conflicts in the DRC.

3.3.1 The World Heritage Convention

The World Heritage Convention protects natural and cultural World Heritage of unique value to humankind. As the World Heritage Convention also focuses on cultural heritage, it goes beyond the scope of environmental protection. Nevertheless, it is structured and operates like most environmental treaties. Pursuant to Article 4 of the World Heritage Convention, the states parties to the convention are under the obligation to identify, protect, and preserve, for future generations, the cultural and natural World Heritage situated in their territory. Article 6(3) of the World Heritage Convention requires all states parties to not deliberately cause direct or indirect damage to the World Heritage Sites situated in other states parties' territory. To enhance protection, pursuant to Article 11(2), states parties can nominate sites in their territory to be inscribed on the World Heritage List. To be added onto the list, a natural World Heritage Site has to fulfil the requirements set out in Article 2 of the convention by having outstanding value to humankind. The World Heritage List is supported by a separate 'List of World Heritage in Danger' (the 'Danger List'), provided for in Article 11(4)

²⁸ UNESCO World Heritage Committee, Report of the Rapporteur on the twenty-third session of the Bureau of the World Heritage Committee, Doc. WHC-99/CONF.209/4, Paris 11 October 1999, 5.

²⁹ These elements may also contribute to overcome fragmentation. See Britta Sjöstedt, 'The Reconciliatory Approach: How Multilateral Environmental Agreements Can Harmonize International Legal Obligations' in Andrzej Jakubowski and Karolina Wierczyńska (eds.), *The Arguments on Fragmentation and Constitutionalisation: An Inquiry into the Practice of International Law* (London and New York: Routledge, 2016).

World Heritage Convention. This is the case when a site's integrity is threatened by certain events and requires enhanced protection. The 'outbreak of an armed conflict' is expressly identified as such an event.³⁰ All the Sites in the DRC have been put on the Danger List partly because of the wars.³¹

3.3.2 Making use of the four elements in relation to the Congolese armed conflicts

To respond to the challenges facing the Congolese natural World Heritage Sites, as described in Section 3.2, several supportive measures have been undertaken within the project that was launched under the World Heritage Convention—thanks to the four elements. The treaty bodies of the World Heritage Convention have used their wide mandate (first element) by interpreting the loosely formulated provisions (second element) and applying the supportive compliance system (third element) to realize the measures of the project. The project has employed a partnership approach establishing international cooperation of the treaty bodies with other actors (fourth element), including the UNESCO,³² other UN agencies and UN programmes, Congolese Wildlife Authority and other national governmental bodies, states, international organizations, as well as NGOs active in the DRC.³³

I will analyse how the four elements have enabled the environmental protection measures of the Sites under the project in the following sub-subsections. To this end, I will make some general remarks on the similarities/differences of the World Heritage Convention with the other environmental treaties, mainly with the Ramsar Convention as it also protects specific areas of international environmental importance.

³⁰ Other serious and specific dangers listed in Art. 11(4) of the World Heritage Convention include: 'threat of disappearance caused by accelerated deterioration, large-scale public or private projects or rapid urban or tourist development projects; destruction caused by changes in the use or ownership of the land; major alterations due to unknown causes; abandonment for any reason whatsoever; calamities and cataclysms; serious fires, earthquakes, landslides; volcanic eruptions; changes in water level, floods and tidal waves.'

³¹ Guy Debonnet and Kes Hillman-Smith, 'Supporting Protected Areas in a Time of Political Turmoil: the Case of World Heritage Sites in the Democratic Republic of Congo' (2004) 14 *War and Protected Areas*, *International Journal for Protected Areas Managers* 11, at <https://cmsdata.iucn.org/downloads/14_1.pdf> accessed 14 June 2017.

³² The World Heritage Convention was adopted at the General Conference of United Nations Educational, Scientific and Cultural Organization (UNESCO). Thus, UNESCO and the operation of the World Heritage Convention is intertwined.

³³ The partnership consists of UNESCO's World Heritage Centre and Division of Ecological Sciences in cooperation with Institut Congolais pour la Conservation de la Nature (ICCN) (referred to as the Congolese Wildlife Authority in this chapter), IUCN, German Technical Cooperation (GTZ) (now GIZ), and a task force of conservation NGOs including International Rhino Foundation, International Gorilla Conservation Programme, Wildlife Conservation Society, the World Wide Fund for Nature (WWF), and the Gilman International Conservation. In addition, the European Union and states (i.e. Belgium, Italy, and Germany) as well as UN agencies or programmes (i.e. UN Development Programme, UNEP) and the UN Mission to DRC (MONUC) (later MONUSCO) collaborate with the Committee and the World Heritage Centre to address issues relating to the safeguarding of World Heritage Sites in the DRC.

A. First element: broad mandate of treaty institutions

The World Heritage Committee ('Committee') is the executive treaty body and has decision-making powers for applying the World Heritage Convention. The Committee has a broad mandate to ensure effective application of the World Heritage Convention, including defining and developing the provisions of the convention by adopting decisions, recommendations, and guidelines.³⁴ The treaty bodies are central for most environmental treaties' efficiency as they enable the instruments to be revised, developed, and adjusted to shifting conditions.³⁵ As the bodies are empowered to direct the general goals of the treaties within the limits of the treaty provisions, they can adopt various measures guided by the circumstances and practical considerations. Hence, the establishment of treaty institutions with degrees of context-based decision-making authority would enable them to adjust measures to respond to armed conflict related damage. For instance, such decision-making authority has made it possible for the Committee to instigate the specific project aimed at protecting the World Heritage Sites in relation to the armed conflicts in the DRC. Within the framework of the DRC project, the treaty institutions of the World Heritage Convention have undertaken various activities that make use of the other elements to safeguard the environment of the Sites despite the conditions of armed conflict. These include enacting green diplomacy³⁶ between the parties of the conflicts to advocate neutrality of the World Heritage Sites and their staff, providing support and equipment to the park management, and attracting other stakeholders to endorse the project's aim.³⁷

Most environmental treaties have, similarly to the World Heritage Convention, established an institutional structure. While the World Heritage Convention has a General Assembly with representation of all states parties, most environmental treaties have the equivalent of a 'Conference of the Parties' ('COP').³⁸ In contrast

³⁴ The Committee is composed of twenty-one member states and meets at least once a year. See The Operational Guidelines for Implementation of the World Heritage Convention ('Operational Guidelines') (November 2011), at <<http://whc.unesco.org/archive/opguide11-en.pdf>> accessed 14 June 2017.

³⁵ Nele Matz, 'Approaches to Coordination of International Environmental Agreements' in Rüdiger Wolfrum and Nele Matz, *Conflicts in International Environmental Law* (Berlin and Heidelberg: Springer, 2003), 167.

³⁶ Green diplomacy or environmental diplomacy is described by UNEP as an activity that aims at promoting the shared use of natural resources or addressing common environmental threats by establishing a platform for dialogue, confidence-building, and cooperation between divided communities or states, at <http://staging.unep.org/disastersandconflicts/Introduction/EnvironmentalCooperationforPeacebuilding/EnvironmentalDiplomacy/tabid/54581/Default.aspx> accessed 14 June 2017. See also Pamela Griffin, 'The Ramsar Convention: A New Window for Environmental Diplomacy?' The Institute for Environmental Diplomacy and Security (2013), at <http://www.uvm.edu/ieds/sites/default/files/Ramsar_IEDSResearchSeries.pdf> accessed 14 June 2017.

³⁷ World Heritage Papers 17, *Promouvoir et Préserver le patrimoine congolais, Lier diversité biologique et culturelle/Proceedings and Preserving Congolese Heritage, Linking biological and cultural diversity*, Proceedings of the conference and workshops, UNESCO, 13–17 September 2004, 110, at <<http://whc.unesco.org/en/documents/6411>> accessed 14 June 2017.

³⁸ The General Assembly corresponds to a conference of the parties, which is usually the supreme decision-making organ in environmental treaties. See Diana Zacharias, 'The UNESCO Regime for the Protection of World Heritage as Prototype of an Autonomy-Gaining International Institution' (2008) 9 *German Law Journal* 1842.

to most other environmental treaties, the World Heritage Convention has assigned all the decision-making competencies to the executive organ—the Committee—as opposed to the COP (or the General Assembly in the case of the World Heritage Convention).³⁹ The Committee consists of twenty-one states parties, which makes decision-making smoother than if it were to go through all the states parties in the General Assembly of the Convention. As the institutions under most environmental treaties share the broad mandate to develop the provisions; therefore they too may be able to instigate comparable projects to address war-torn environments, although the process has to go through the convention's COP, which may prolong and obstruct the process.

B. Second element: open-ended provisions

The second element is closely connected to the first. The World Heritage Convention is a framework convention with open-ended provisions providing general principles and flexible obligations. Therefore, the treaty institutions must further develop the provisions into substantive rules by adopting secondary decisions and/or recommendations.⁴⁰ For instance, Article 4 of the World Heritage Convention calls for states parties to do all they can to protect World Heritage 'to the utmost of [their] own resources'. Likewise, Article 5 states that each state party 'shall endeavour, in so far as possible, and as appropriate for each country ... to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation' of its World Heritage Sites. The wording used in both these articles does not prescribe exact conduct of the states parties but allows a degree of discretion to adapt the measures.⁴¹

This element applies to most environmental treaties. There are two underlying reasons explaining why most environmental treaties use flexibly worded provisions. Firstly, because of the struggle to achieve political consensus on global environmental issues, the treaties replicate compromises of negotiations.⁴² The conventions provide platforms for continued dialogue on unsettled issues putting much emphasis on the process of developing the rules, in which the treaty institutions play the key role. Secondly, because of the particularities of environmental problems, they need to be addressed using a less formal approach that can be modified to consider specific geographical, economic, and social factors of the states parties or evolution of scientific

³⁹ See Arts. 8–14 in the World Heritage Convention.

⁴⁰ Annecos Wiersema, 'The New International Law-makers? Conferences of the Parties to Multilateral Environmental Agreements' (2009) 31 *Michigan Journal of International Law* 53; Patricia Birnie, Alan Boyle, and Catherine Redgwell, *International Law and the Environment* (Oxford: Oxford University Press, 2009), 17.

⁴¹ Guido Carducci, 'Articles 4–7, National and International Protection of Cultural and Natural Heritage' in Francesco Francioni (ed.), *The 1972 World Heritage Convention: A Commentary* (Oxford: Oxford University Press, 2008), 145.

⁴² Maurice Kampt, 'Normative Uncertainties' in Yann Kerbrat and Sandrine Maljean-Dubois (eds.), *The Transformation of International Environmental Law* (Paris and Oxford: Hart Publishing and Editions A. Pedone, 2011), 57. See also Churchill and Ulfstein (n 23) 628.

knowledge.⁴³ The treaty provisions provide enough discretion so they offer an adjustable and context-based response.⁴⁴

In the case of the DRC, the flexibility incorporated in the convention provisions has enabled the Committee to interpret the measures to address specially the insecure situations in the DRC and the particular challenges. Because of the armed conflicts, the World Heritage Sites as well as the park rangers are imperilled. The conflicts have partly taken place in the remote areas of the World Heritage Sites where the park rangers patrol the Sites. Thus, the rangers have ended up inside the war zone and they have been exposed to risks, in particular as they carry weapons while on duty.⁴⁵ Interpreting Article 5 of the convention, the Committee has called for the state party (the DRC) to employ the Congolese Army to protect the World Heritage Sites and the park rangers as an appropriate measure. The suggested measure has been adapted to the realities and the challenges of the national context of the DRC. As a result, the Congolese Army have collaborated and performed joint patrols and exchanged information with the park rangers. It has also assisted in monitoring the Sites and has taken measures to disarm and evacuate armed groups inside the World Heritage Sites. The Committee has also requested military support for the park rangers as a measure under Article 5 of the convention, including that the park rangers must be provided with adequate arms and ammunition.⁴⁶ The park rangers have received weapons and ammunition to some extent. The assistance of the army is well established, but it has not been formalized. It takes place on an *ad hoc* and short-term basis depending on the locations of the rebel groups as well as on the security needs of the Sites.⁴⁷ A special environmental brigade was installed in the World Heritage Site of Garamba National Park. In the central sector of Virunga National Park, a mixed brigade consisting of both members of the Congolese Army and park rangers has been established to secure this area.⁴⁸

The support of the army has been somewhat problematic. Since many Congolese Army soldiers are underpaid, if paid at all, they have been involved in illegal activities harming the World Heritage Sites. Thus, there have been some violent confrontations between the park rangers and the army. Such confrontations have resulted in the Committee demanding the Congolese Army to relocate its military posts from the Sites.⁴⁹ Furthermore, it requested the DRC to prosecute its staff engaged

⁴³ Laurence Boisson de Chazournes, 'Features and Trends in International Environmental Law' in Kerbrat and Maljean-Dubois (eds.), *The Transformation of International Environmental Law* (n 42) 10–11.

⁴⁴ Dinah Shelton, 'Comments on the Normative Challenge of Environmental 'Soft Law' in Kerbrat and Maljean-Dubois (n 42) 71.

⁴⁵ Interview with Ephrem Balole, Planning officer Virunga National Park, Congolese Wildlife Authority, Goma, DRC, 4 April 2015.

⁴⁶ See UNESCO World Heritage Committee, Decision 30 COM 7A.4 adopted at thirtieth session on 8–16 July 2006, Doc. WHC-06/30.COM/19, 23 August 2006, 14.

⁴⁷ Interview with Jeff Mapilanga, Director, Congolese Wildlife Authority, Kinshasa, DRC, 30 March 2015.

⁴⁸ UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, Doc. WHC-11/35.COM/7A.Add, 27 May 2011, 13.

⁴⁹ See UNESCO World Heritage Committee, Decision 28 COM 15A.3 adopted at twenty-eighth session on 28 June–7 July 2004, Doc. WHC-04/28/COM/26, 29 October 2004, 52; Decision 31 COM 7A.7 adopted at thirty-first session on 23 June–2 July 2007, Doc. WHC-07/31.COM/24, 31 July 2007, 11.

in wildlife poaching and illegal exploitation of natural resources.⁵⁰ However, in the case with the mixed brigade in Virunga National Park, the park authority has provided salaries to the brigade's army members. Therefore, there have not been any major instances with illegal activities from the army side and, overall, this arrangement has functioned well.⁵¹

Other environmental treaties have also flexible provisions concerning the measures that the states parties have to undertake to comply with the treaty in question.⁵² In addition, other treaty institutions could make similar interpretation efforts as the Committee of the World Heritage Convention in regard to the provisions to prevent the environment from being put at risk by armed conflict. For instance, Article 3 in the Ramsar Convention uses flexibly worded provisions and requires that states parties 'formulate and implement their planning so as to promote the conservation of the wetlands' and 'as far as possible the wise use of the wetlands in their territory'. Such wording gives the treaty bodies under the Ramsar Convention enough flexibility to adapt measures in relation to armed conflict.

C. Third element: non-confrontational compliance mechanisms

The third element concerns the non-confrontational compliance mechanism installed under the World Heritage Convention. Most other environmental treaties employ this type of compliance mechanism and it is designed as a supportive scheme seeking to facilitate states parties' fulfilment of their obligations, rather than punishing failures.⁵³ The non-confrontational mechanism builds from the idea that states parties are unable but willing to comply.⁵⁴ The World Heritage Convention institutions, similarly to most other environmental treaty institutions, collect and share information on the implementation procedure, analyse causes of non-compliance, and provide recommendations and assistance for the states parties rather than engage in robust enforcement measures.⁵⁵ The purpose is to change behaviour among the states parties and not to achieve a specified result. This could be achieved through establishing action plans, providing financial and technical support, implementing capacity building measures including workshops,

⁵⁰ See UNESCO World Heritage Committee, Decision 34 COM 7A.4 adopted at thirty-fourth session on 25 July–3 August 2010, Doc. WHC-10/34.COM/20, 3 September 2010, 20; see also State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, Doc. WHC-10/34.COM/7A, 1 June, 2010, 11–12.

⁵¹ Interview with Ephrem Balole, Planning officer Virunga National Park, Congolese Wildlife Authority, Goma, DRC, 4 April 2015.

⁵² For instance, Art. 4(1) in the Ramsar Convention reads: 'Each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening'.

⁵³ Churchill and Ulfstein (n 23) 629; Nils Goeteyn and Frank Maes, 'Compliance Mechanisms in Multilateral Environmental Agreements: An Effective Way to Improve Compliance?' (2011) *Chinese Journal of International Law* 797–9.

⁵⁴ Goeteyn and Maes (n 53) 799.

⁵⁵ Daniel Bodansky, *The Art and Craft of International Environmental Law* (Cambridge, MA: Harvard University Press, 2011), 226–7, and in particular on the World Heritage Convention compliance mechanism, see Edward J. Goodwin, 'World Heritage Convention, the Environment, and Compliance' (2008) *Colorado Journal International Environmental Law and Policy* 157.

consultations, and training etc.⁵⁶ Under the World Heritage Convention, states parties can request international assistance from the Committee for the purposes of securing the protection, conservation, presentation, or rehabilitation of the World Heritage Sites.⁵⁷ International assistance can be offered in terms of studies, provision of experts, skilled labour, training of staff and specialists, supply of equipment, low-interest or interest-free loans, or the granting of non-repayable subsidies under Article 22 of the World Heritage Convention. To this end, the World Heritage Convention has also established a World Heritage Fund to finance application activities.⁵⁸

Prior to the DRC project, many park rangers located in rebel-controlled areas had not received a salary for several years because they were cut off from headquarters. Due to the insecure situation and the fact that salaries were not paid to the rangers, many of them left their posts and the Sites were left uncontrolled. In the case of the DRC, the Committee has facilitated the provision of the park rangers' salaries as international assistance to keep them at their posts to monitor the World Heritage Sites and thus help the DRC to comply with the convention.⁵⁹ In addition to distributing salaries, the park stations, many of which were looted during the hostilities, have been rehabilitated and secured under the project. The park rangers received training and equipment, including trucks, pick-ups, speedboats, and even an airplane, as a part of the international assistance provided under the convention.⁶⁰

The supportive measures have also consisted of green diplomacy of the treaty bodies to advocate for the World Heritage Sites as well as the park rangers having neutral status in relation to the Congolese armed conflicts. The background of the measure was the fact that park rangers became direct targets in the conflicts. Being employees of a Congolese state organ, the park rangers were mistrusted by the rebel groups that associate them with the government and the Congolese Army. At the same time, the Congolese Army has been suspicious towards the park rangers, as they often continue to engage in protection work in the rebel-controlled areas.⁶¹ As a result, the park rangers have been attacked from several sides of the conflicts. Between 1996 and 2008 more than 190 park rangers were killed.⁶² To protect the park rangers and to prevent further casualties, UNESCO called for immunity for the park rangers from attacks similarly

⁵⁶ Goeteyn and Maes (n 53) 814.

⁵⁷ The Committee grants the requests in accordance with Art 13(1) of the World Heritage Convention.

⁵⁸ Art. 15 of the World Heritage Convention.

⁵⁹ As the Kinshasa-based Congolese Wildlife Authority was not in contact with the four rebel controlled Sites in the Eastern DRC, salaries could not be provided. Therefore, it requested the World Heritage Convention Bureau and the Committee to help the park rangers in these Sites by providing assistance. The Bureau did approve the request and funds were distributed via contracts established with conservation NGOs and other partners to UNESCO that remained on the field. The Bureau approved a total sum of US\$ 105,000 for the four sites. See UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, Doc. WHC-99/CONF.209/13, Paris, 18 October 1999, 4.

⁶⁰ During the first phase of the pilot project (2001–2005) approximately US\$ 900,000 was spent on salaries, equipment, etc., UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, Doc. WHC-11/35. COM/7A.Add, 27 May 2011, 4.

⁶¹ Interview with Ephrem Balole, Planning officer Virunga National Park, Congolese Wildlife Authority, Goma, DRC, 4 April 2015.

⁶² Christian Nellemann, Ian Redmond, and Johannes Refisch (eds.), *The Last Stand of the Gorilla, Environmental Crime and Conflict in the Congo Basin* (Birkeland Trykkeri AS, Norway: UNEP, 2010), 21.

to medical staff in armed conflict.⁶³ To achieve this, UNESCO organized a meeting in Nairobi, Kenya with representatives from the Congolese government based in Kinshasa and two rebel groups that controlled parts of the World Heritage Sites in the Eastern DRC at the time. The meeting focused on how to ensure the continuation of the work of the park rangers in order to protect the World Heritage Sites.⁶⁴ Other diplomacy measures consisted of conducting diplomatic missions to the rebel groups, organizing tripartite meetings, targeted missions to the World Heritage Sites, and individual contacts with high-level authorities.⁶⁵ UNESCO sent two diplomatic missions to all the Congolese World Heritage Sites in 1999 and 2000.⁶⁶

This diplomacy achieved an agreement from the Congolese Army and the rebel groups to respect the World Heritage Sites as neutral for conservation purposes. Several rebel groups expressed their commitment to protect the Sites and respect the park rangers' neutral status. For instance, in the World Heritage Site of Kahuzi Biega National Park, the rebel group in control of the Site announced that the gorillas would receive protection and granted the rangers permission to monitor the Sites.⁶⁷ Also, in Virunga National Park, similar announcements were made by rebels during the conflicts.⁶⁸ In the World Heritage Site of Okapi Reserve, the park rangers described how the acknowledgment of their neutral status made it possible for them to continue their work and also keep their weapons for this purpose.⁶⁹ Engaging the different rebel groups and the Congolese Army to preserve the World Heritage Sites has been crucial to maintaining some kind of protection work during the armed conflicts, in particular in the rebel-controlled areas.⁷⁰ UNESCO's diplomatic missions managed to secure the Mikeno sector (gorilla sector) containing the important gorilla habitat of the World Heritage Site of Virunga National Park in 2004.⁷¹ It has also been claimed that to some extent, rebel groups began to respect the sites after UNESCO's intervention. Rebel groups allegedly stopped engaging in bush meat and ivory trade, although this is difficult to verify.⁷²

⁶³ World Heritage Papers 17 (n 37) 112. Also confirmed by interview with Radar Nishuli, Park Director and Chief Warden, Kahuzi Biega National Park, Congolese Wildlife Authority, Bukavu, DRC, 24 March 2015.

⁶⁴ Cosma Wilunga Balongelwa, *Patrimoine Naturel et Conflits Armés* (Paris: Harmattan, 2013) 112.

⁶⁵ World Heritage Papers 17 (n 37) 112.

⁶⁶ Interview with Jeff Mapilanga, Director, Congolese Wildlife Authority, Kinshasa, DRC, 30 March 2015.

⁶⁷ For instance, to convince the rebel leaders to protect the gorillas, the park rangers in the World Heritage Site of Kahuzi Biega National Park brought them to see the gorilla populations. Interview with Radar Nishuli, Park Director and Chief Warden, Kahuzi-Biega National Park, Congolese Wildlife Authority, Bukavu, DRC, 24 March 2015.

⁶⁸ In January 2007, an agreement was made between senior Virunga park warden Paulin Ngobobo and rebel group leader Colonel Makenga for National Congress for the Defence of the People (CNDP). The agreement sought to spare the gorillas during the on-going armed conflict. 'Congo Rebel Agree to End the Gorilla Slaughter' National Geographic News, 25 January 2007, at <<http://news.nationalgeographic.com/news/2007/01/070125-gorillas-congo.html>> accessed 14 June 2017.

⁶⁹ Interview with Richard Tschombe, Country Director for DRC, Wildlife Conservation Society, Kinshasa, 1 April 2015. Tschombe has also experienced working for the Congolese Wildlife Authority in the World Heritage Site of Okapi Reserve.

⁷⁰ Also the German Cooperation directly negotiated with rebel groups in the Kahuzi-Biega National Park. See World Heritage Papers 17 (n 37) 110–12, 117.

⁷¹ World Heritage Papers 17 (n 37) 103, 120.

⁷² Interview with Jeff Mapilanga, Director, Congolese Wildlife Authority, Kinshasa, DRC, 30 March 2015.

Although park rangers have remained in a vulnerable position with several rangers killed in the hostilities even after the diplomacy efforts, their claimed neutral status has reportedly improved their working conditions.⁷³ In most of the Sites, park rangers could move freely around the rebel-controlled areas for protection purposes. The park rangers would advise the rebels of when and where they patrolled the parks to avoid casualties. The efforts also re-established the links between the Congolese Wildlife Authority's headquarters in Kinshasa and the Sites in Eastern DRC.⁷⁴ The park rangers were even allowed to travel to Kinshasa to coordinate their work with the Congolese Wildlife Authority.⁷⁵

The political and diplomatic support for protecting the Sites is an innovative characteristic of the DRC project. UNESCO acted as mediator to convince the parties to the conflict that they needed to respect the World Heritage Sites and more importantly the park rangers. The measure was a result of the treaty bodies using their wide discretionary power to adopt a creative interpretation of the loosely formulated provisions of the World Heritage Convention to support the DRC to comply with the convention in a manner that took into account the circumstances and challenges of the Sites. Park rangers have witnessed how the attention from the international community that the project brought has affected the rebels' attitude towards them. Moreover, although the material support in the form of equipment and monetary compensation has been essential for the park rangers to continue their work, the moral support from the international community has been described as having equal importance. It has created a more secure environment for the park rangers, which has encouraged them to perform their job even in difficult times.⁷⁶

Most environmental treaties like the World Heritage Convention share the primary aim of assisting and motivating states parties to be in full compliance and to secure the treaty objectives.⁷⁷ The opportunities to adopt measures to help them comply creates

⁷³ In 2006–2007 when the rebel group CNDP controlled north of the part of the gorilla sector of Virunga National Park, rangers continued to work to protect park and the gorillas. All governmental institutions left, including the Congolese Wildlife Authority, from the rebel controlled areas of the park. Thus, the rangers who stayed acted outside their official capacity. At this time they got equipment and salaries from NGOs. The International Gorilla Conservation Programme managed to stay and assist the park rangers. The rebel groups did accept that rangers were involved in conservation work. In 2012, the rebel group M23 took control of the Virunga National Park. This time, the park rangers stayed and continued to patrol the Park. Even though rangers were involved in casualties and some were killed at their posts, this did not occur by the rebel groups controlling the area. The gorillas were more or less spared from being subject to bush meat and intentional killing. Although the facts are hard to access in armed conflict, it seems that the gorilla sector in Virunga National Park remained well monitored. Interview with Altor Musema, DRC Country Coordinator, International Gorilla Conservation Programme, Goma, DRC, 20 March 2015.

⁷⁴ World Heritage Papers 17 (n 37) 111.

⁷⁵ Interview with Jeff Mapilanga, Director, Congolese Wildlife Authority, Kinshasa, DRC, 30 March 2015.

⁷⁶ *ibid.*; see also Interview with Richard Tschombe, Country Director for Democratic Republic of Congo, Wildlife Conservation Society, Kinshasa, 1 April 2015.

⁷⁷ Goeteyn and Maes (n 53) 815.

further degrees of flexibility, providing the treaties with tools for pragmatic solutions adapted to particular challenges, such as those posed by armed conflict.

D. Fourth element: institutional cooperation

The fourth element relates to the World Heritage Convention institutions' cooperation with other stakeholders. In accordance with Article 13(7) of the World Heritage Convention, the Committee is authorized to cooperate with other organizations, bodies, and individuals to implement projects and programmes.⁷⁸ The DRC project is a collaboration between UNESCO, the Congolese Wildlife Authority and its governmental and non-governmental partners, other UN agencies, international organizations, and NGOs. The project has enabled the international community to cooperate in protecting the natural World Heritage Sites during and after armed conflicts.

Another example of international cooperation is the Committee's invitation to the UN peacekeeping mission⁷⁹ to assist the park rangers to evacuate armed rebel groups from the World Heritage Sites.⁸⁰ The peacekeepers monitor areas that encompass the World Heritage Sites. Since October 2003, the peacekeeping forces have collaborated with the Committee.⁸¹ The peacekeepers have helped the rangers monitor the Sites and they have conducted some disarmament operations of rebel groups in cooperation with the rangers.⁸² The cooperation has not, however, been formalized between the peacekeeping mission or the UN Security Council and the Committee.⁸³ Furthermore, the cooperation with the peacekeepers has been limited and dissatisfaction has been expressed from the park staff in several Sites regarding the peacekeepers' presence. In addition, the peacekeeping mandate is to protect civilians and not World Heritage Sites or the environment *per se*. Nevertheless, the link between the environment and the hostilities is strong. This was shown in March 2015 when the peacekeeping mission in

⁷⁸ On the World Heritage Convention website, there is a list of different actors which are World Heritage Convention partners, including Earth Watch Institute, Panasonic, International New York Times, Norwegian Foreign Ministry of Affairs, GTZ, Belgian Federal Science Policy, see World Heritage Convention webpage, at <<http://whc.unesco.org/en/partners/>> accessed 14 June 2017.

⁷⁹ As the Security Council has determined that the situation in the DRC constitutes a threat to international peace and security, it has deployed a UN peacekeeping mission (MONUSCO) in accordance with Chapter VII of the UN Charter. See UN Security Council Resolution, adopted on 28 July 2003, UN Doc. S/RES/1493 in preamble para. 12.

⁸⁰ See UNESCO World Heritage Committee, Decision 27 COM 7.A.2 adopted at twenty-seventh session on 30 June–5 July 2003, distributed 10 December 2003, Doc. WHC-03/27.COM/24, 10; see also Decision 30 COM 7A.7 adopted by at thirtieth session on 8–16 July 2006, distributed 23 August 2006, UN Doc. WHC-06/30.COM/19, 18.

⁸¹ UNESCO World Heritage Committee, Decision 28 COM 15A.3 adopted at twenty-eighth session on 28 June–7 July 2004, distributed 29 October 2004, Doc. WHC-04/28.COM/26, 52.

⁸² UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 21 June 2004, Doc. WHC-04/28.COM/15A Rev, 7.

⁸³ UNESCO World Heritage Committee, State of Conservation of the Properties inscribed on the List of World Heritage in Danger, distributed 11 May 2009, Doc. WHC-09/33.COM/7A, 14. In 2011, it was reported that the Committee remained in contact with the UN peacekeeping troops, but that little direct support was provided to the Park. See UNESCO World Heritage Committee, State of Conservation of the Properties Inscribed on the List of World Heritage in Danger, distributed 27 May 2011, Doc. WHC-11/35.COM/7A.Add, 5.

the DRC and United Nations Environmental Programme ('UNEP') proposed inclusion of the protection of the World Heritage Sites in the mandate of the UN peacekeeping mission. Although the protection of the World Heritage Sites was included in a draft decision, it did not end up in the Security Council's final decision.⁸⁴ Thus, the protection of the World Heritage Sites as such remains outside the scope of the peacekeepers' mandate.

Interestingly enough, the role of UNESCO has become less significant since the launching of the project in 2000 because of the international cooperation. As more international organizations, NGOs, and other stakeholders have returned to the DRC to engage in environmental protection work, the project is less influential. Nonetheless, the World Heritage Convention remains crucial as an instrument for international cooperation to safeguard the World Heritage Sites. As the governmental institutions of the DRC are weak and without sufficient financial means, foreign stakeholders are crucial for protection work because they contribute to strengthening capacity building and provide funding. Since the outbreak of armed conflicts, the protection of the World Heritage Sites has mainly been funded by international aid. The management plan of the Sites is developed through close cooperation between national and international agencies, in which process the World Heritage Convention and its treaty bodies provide guidance.⁸⁵ Several of the Sites are under direct management of Private-Public Partnerships or NGOs collaborating with the Congolese Wildlife Authority.⁸⁶ The recognition of World Heritage Sites having rare species like mountain gorillas and okapis facilitates international cooperation and assistance. It gives access to funds not only from UNESCO and the UN system but also from other states, international organizations, and NGOs. Consequently, as the Congolese government is financially challenged, most of the environmental protection work of the Sites is funded by means other than domestic.⁸⁷ Besides the direct support to the World Heritage Sites and the application measures of the World Heritage Convention, several development projects have occurred as a

⁸⁴ During the experts meeting, the following statement was proposed for consideration by the UN Security Council during the upcoming review of MONUSCO's mandate: 'Authorizes MONUSCO to support national and regional efforts to investigate, prosecute and sanction members of armed groups and criminal networks engaged in national and transnational organized crime including, but not limited to, the illicit exploitation and trade in natural resources, such as gold and other minerals, wildlife, charcoal and timber, with special emphasis on addressing sources of conflict and safeguarding protected areas from armed groups, particularly, but not limited to, UNESCO World Heritage Sites.' UNEP MONUSCO Draft report from expert meeting, 'ackground Paper on Illegal Exploitation and Trade in Natural Resources Benefitting Organized Criminal Groups and its Implications on MONUSCO's Role in Fostering Stability and Peace in Eastern DR Congo (Goma, DRC, 21 March 2015). Report is not yet published, but on file with the author.

⁸⁵ As a result of the cooperation, institutional structures were set up to facilitate implementation, including the Congo Conservation Coalition ('CoCoCongo'), a general management plan for all Sites and the Site Coordination Committees ('CoCoSi'), management plans on a site level. These institutions are forums for coordination among all the partners and donors. See World Heritage Papers 17 (n 37) 110.

⁸⁶ Each Site has its own donors. Interview with Ulrich Müller, Senior Planning Officer, German Cooperation (GIZ), DRC, Kinshasa, DRC, 1 April 2015.

⁸⁷ The involvement of UNESCO has made it possible to generate additional funds to the World Heritage Sites. World Heritage Papers 17 (n 37) 111.

byproduct with the aim to protect the Sites and promote stability in the region.⁸⁸ For instance, around the Virunga National Park, investments have been made for building hydro plants. The building of the hydro plants aims to reduce the dependence on charcoal and thus safeguard the park.⁸⁹ Other types of development projects have focused on distributing energy-efficient ovens to the local population and planting fast-growing trees outside the park to prevent deforestation inside the Virunga National Park.⁹⁰ Besides their main purpose of protecting the environment, these types of development projects have positive side effects as they also contribute to rebuilding a war-torn society through aid from the international community. The element of enabling international cooperation is common to the majority of environmental treaties as a means of applying the treaties. The treaties either can explicitly or implicitly empower institutions to instigate cooperation with other stakeholders.⁹¹ Generally, environmental treaties provide great flexibility as to how to conduct this collaboration. Often, the environmental treaties lack explicit provisions or guidance on how the cooperation between organizations should be undertaken.⁹² The cooperation may consist of exchanges of information, partnerships, and joint activities, but there is no set template.⁹³ In the DRC, the project is a collaborative partnership with various international and local stakeholders. The Ramsar Convention has also various partnerships with different types of stakeholders, mainly with other environmental treaty institutions and international organizations, NGOs, and the private sector in order to find innovative solutions and practical actions to protect wetlands. Hence, such cooperation strengthens a state party's capacity to implement the Ramsar Convention by bringing together experts and policy makers to develop guidance and guidelines; tapping expertise and knowledge at a broader level; leveraging resources at all levels; seeking creative or innovative solutions of mutual interest collectively; and forging new linkages and alliances between capacity-building needs and cooperative actions.⁹⁴ This

⁸⁸ Proposals have been made for economic alternatives to promote sustainable development by and for the local population. See World Heritage Papers 17 (n 37) 118–19. One example is projects on charcoal reduction or alternatives, as charcoal production is a major threat to Virunga National Park. It has been estimated that 90 per cent of the population in the surrounding area, such as the city of Goma, depends on it for fuel. Furthermore, 80 per cent of the charcoal is currently estimated to come from Virunga National Park, which causes deforestation in the Park. WWF estimated in 2013 that this would clear about 18,000 hectares of Virunga per year. Thus, the search for alternatives is an important measure to protect the sites. Interview with Juan Seve, WWF Country Director, DRC, Kinshasa, DRC, 31 March 2015.

⁸⁹ Interview with Ephrem Balole, Planning officer Virunga National Park, Congolese Wildlife Authority, Goma, DRC, 4 April 2015.

⁹⁰ Interview with Juan Seve, WWF Country Director, DRC Kinshasa, DRC, 31 March 2015. See also <<https://www.worldwildlife.org/stories/better-stoves-for-a-healthier-planet>> accessed 14 June 2017.

⁹¹ Matz (n 35) 167. ⁹² *ibid.* 164, 170–1.

⁹³ For instance, UNEP promotes cooperation among environmental treaties and coordinates such activities. UNEP has held several conferences to coordinate the secretariats of the treaties. Such a view is confirmed by the UN General Assembly. See UN Doc. A/54/468. Examples of cooperation are given in the text on World Heritage Convention in the DRC.

⁹⁴ Ramsar webpage, at <http://archive.ramsar.org/cda/en/ramsar-activities-partnershipindex/main/ramsar/1-63-506_4000_0__> accessed 14 June 2017.

indicates that an environmental treaty like the Ramsar Convention has the potential to instigate similar conjoint projects as the World Heritage Convention under the pre-condition that the states parties have the political will to do so. The structure for such cooperation is already in place. Environmental treaties can implement their agreements with limited state involvement by relying on cooperation with other treaty bodies or NGOs for instance. The possibility to establish cooperation with other stakeholders is important to apply and achieve the objective of the environmental treaties. This is useful in a post-conflict scenario with weak domestic governance. A similar approach to international cooperation could inform the *jus post bellum* framework.

3.4 Conclusions

Environmental protection work is of low priority in war-torn societies, even though the state of the environment is a factor affecting the recovery of these societies and the ability to create lasting peace in many cases. Nevertheless, environmental treaties may be able to ensure that some environmental protection work can be carried out despite institutional collapse and lack of governance. The mechanisms under the World Heritage Convention have managed to provide alternative support to natural World Heritage Sites during and after armed conflict in a manner that can strengthen the environmental protection throughout the conflict cycle. The operation of other environmental treaties may also be able to adapt to the context-based challenges during and after armed conflict to protect and restore the environment in post-conflict.

In the case of the DRC, the four structural elements of the World Heritage Convention have proven to be of essence to launch a project to protect the Congolese Sites. By using the open-ended provisions (second element) in the convention and the broad mandate of the treaty bodies (first element) to adapt the measures to the national context of the DRC, the Committee has attempted to preserve the World Heritage Sites through institutional collaboration (fourth element). The first element of open-ended provisions combined with the second element of institutions with a broad mandate enable the obligations to be developed on the basis of the contextual challenges for a particular state party. The third and fourth elements of supportive mechanisms and cooperative initiatives, respectively, could embody the principle of international cooperation by ensuring international support from different collaborating stakeholders at the time when a state party may struggle to protect its environment. The World Heritage Convention has minimized damage to these Sites during and after armed conflict by providing funds; supporting the development of national institutions and associated regulations; and enforced the monitoring and controlling of the Sites (third element). These efforts have contributed to the fact that park rangers in the DRC are relatively well paid, respected, and adequately equipped, even though there are some differences among the Sites. The Congolese Wildlife Authority has its own surveillance mechanism, security system, and a security force to monitor and protect the World Heritage

Sites.⁹⁵ These efforts cannot replace national governance, but they can contribute to the environmental protection work in the transition from armed conflict to peace. To some extent international organizations, NGOs, and other actors are filling the ‘institutional vacuum’ that occurs in this transition phase. The World Heritage Sites in the DRC are still under threat from the insecure situation,⁹⁶ but still the project has contributed to restore the management of the Sites and its protection.

Other projects similar to the DRC project but instigated under a different environmental treaty could be launched in other conflicts to protect the environment. The World Heritage Convention of course has a different status than most other environmental treaties as it protects World Heritage Sites representing a universal interest for humankind. However, the World Heritage Convention is not the only environmental treaty that has been applied to address issues connected to armed conflicts.⁹⁷ The advantage of having the four elements addressed allows environmental treaties to adapt to deal with various situations. The environmental treaties operate differently than most international treaties by focusing on supportive measures to remedy the inability of states parties to comply with their international obligations. This may be of particular interest during and after armed conflict, which may be the time when states have particular difficulties providing adequate environmental protection. Although these mechanisms cannot substitute domestic governance, they can minimize environmental destruction through their provisions that enable funding, capacity building, equipment support, data analysis, consultation on national regulation, and coordination of international and local actors involved in protection work. Such measures can be adopted during and after armed conflict. In addition, these types of measures could contribute

⁹⁵ The security force has been described as having a paramilitary structure. It has received training from the Belgian and French Special Forces. Nevertheless, all the training of the rangers has been conducted under the supervision of the Congolese Army as such training would not be permitted without the army’s consent. The ability of the park rangers’ security force was demonstrated in the Virunga National Park when it managed to clear the volcano sector from rebel groups without assistance from the Congolese Army or the UN peacekeeping mission deployed in the DRC. As a result, since October 2014, tourist excursions are conducted to visit the volcano. Interview with Jeff Mapilanga, Director, Congolese Wildlife Authority, Kinshasa, DRC, 30 March 2015. Interview with Richard Tschombe, Country Director for DRC, Wildlife Conservation Society, Kinshasa, 1 April 2015.

⁹⁶ On 2 March 2015, unnamed UN officials stated that Virunga National Park was all cleared from rebels, see <<http://wildlifeneews.co.uk/2015/03/virunga-cleared-of-rebels-claim/>> accessed 14 June 2017. Nevertheless, the park is under threat from potential oil exploration. The government permitted Soco International, a British oil company, to explore the possibility of exploiting oil from Lake Edward, situated in the heart of Virunga National Park.

⁹⁷ For instance, the CITES has operated in war-torn states, including the DRC, Liberia, Central African Republic etc. to ensure that international trade in specimens of wild animals and plants does not threaten their survival. CITES has been involved in several projects that aim to safeguard species from, *inter alia*, effects associated with armed conflicts. For instance, the International Consortium on Combating Wildlife Crime (‘ICCCWC’) project is a collaborated effort involving CITES, INTERPOL, the UN Office on Drugs and Crime (‘UNODC’), the World Bank, and the World Customs Organisation (‘WCO’). ICCWC addresses wildlife crimes, such as poaching, illegal logging, and illegal processing of animal and plant material. Wildlife crimes are often connected with armed conflicts. CITES has launched another project to prevent illegal killing of elephants (the MIKE Project). Killing elephants for ivory trade is a common feature in armed conflicts. This project is in collaboration with UNEP and the European Commission. The objective is to create systems to monitor illegal killing of elephants. See CITES webpage, at <<http://www.cites.org/eng/disc/what.php>> accessed 14 June 2017.

to peacemaking in post-conflict. The practices taking place within the parameters of international environmental treaties are of relevance for *jus post bellum*. Consequently, the role of environmental treaties in relation to *jus post bellum* may be of particular interest in how responses can be designed to be operational in armed conflict as well as in post-conflict.

4

The Environment and Armed Conflict

Employing General Principles to Protect the Environment

Kirsten Stefanik*

4.1 Introduction

The environment is omnipresent. The protection of the environment touches on nearly every area of law because there is little to no human action that does not have an effect, to one degree or another, on some aspect of the environment. The environment encompasses the air which people breathe, the soil from which food is harvested, the water which people drink. When armed conflict breaks out, the environment is equally present in war as it is in peace.

The environment, therefore, does not fit neatly into the ‘law of peace’ or the ‘laws of war’. Instead it transcends such barriers and is more appropriately considered in tripartite fashion in terms of *jus in bellum*, *jus in bello*, and *jus post bellum*.¹ The environment is present during all these phases and must be considered throughout the armed conflict cycle (‘pre-,’ ‘during,’ and ‘post-conflict’). This presents a tension between international environmental law (‘IEL’), traditionally considered ‘peacetime’ law, and international humanitarian law (‘IHL’), traditionally deemed *lex specialis* during conflict. This traditional dichotomy has been broken down by the International Court of Justice’s Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*² in 1996 where the Court recognized that IHL does not operate to the exclusion of all other rules and principles of law during armed conflict. Specifically, the Court stated that human rights law and IEL continue to apply during armed conflicts and that ‘[existing international law relating to the protection of the environment] indicates important environmental factors that are to be properly taken into account in the context of the implementation of the principles and rules of law applicable to armed conflict.’³ While the Court was speaking specifically of the application of these bodies of law during

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¹ Carsten Stahn, “*Jus ad Bellum*,” “*Jus in bello*” . . . “*Jus Post Bellum*”?—Rethinking the Conception of the Law of Armed Conflict” (2007) 17 *European Journal of International Law* 921, 923.

² *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, Judgment of 8 July 1996, ICJ Reports, 226, para. 78. (‘ICJ, *Nuclear Weapons*’).

³ *ibid.* para. 33.

conflict, there is no reason not to extend such an approach to the interplay of these bodies of law post-conflict, or *jus post bellum*. As Stahn notes:

some of the problems arising in the period of transition from conflict to peace cannot be addressed by a simple application of the 'law of peace' or the 'laws of war', but require 'situation-specific' adjustments, such as organizing frameworks and principles which are specifically geared towards the management of situations of transition between conflict and peace.⁴

It is particularly important that the environment receive attention before, during, and after conflict because as our understanding of the environment and the interdependencies between humanity and nature grows, so does our capacity to wreak serious and irreversible harm to human and natural environments, not only in the short term, but for generations to come. The harms to the environment occurring in war have negative consequences which often continue to affect society long after the cessation of hostilities. Environmental harms committed during conflict cannot always be undone, but the environment must nonetheless remain at the forefront of post-conflict transitions because 'all human rights depend ... on a supportive environment'⁵ and '[p]oor [environmental] choices made early on [in the reconstruction process] may establish trajectories that will undermine the fragile foundations of peace.'⁶

This chapter focuses on an approach or tool for the management of this critical interplay between IEL and the *jus in bellum*, *jus in bello*, and *jus post bellum*. It focuses on the power of general principles of IEL, to inform the interpretation and application of IHL, in particular with regards to protections for the environment and human health. This can be done before conflict when new weapons are being developed, during conflict as military operations are being planned and executed, and post-conflict as transitions are made to a sustainable peace. The chapter begins with an in-depth examination of general principles of international law as a source of international law. It explores how they are identified and describes four critical functions they fulfil in international law. Next, the chapter focuses on two particularly useful principles of international environmental law: the general principle of intergenerational equity and the precautionary principle. It demonstrates how these principles bring greater understanding and guidance with regard to short- and long-term consequences of actions and an approach to dealing with threats to the environment in the face of scientific uncertainty. It concludes with an emphasis on the *jus post bellum* application of this approach, arguing that tools such as peace agreements and truth and reconciliation commissions need to turn their attention to such principles in the execution of their roles as tools of transition and reconstruction.

⁴ Stahn (n 1) 924.

⁵ John H. Knox, UNHRC, Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment twenty-second session, UN Doc. A/HRC/22/43, 24 December 2012, 7, para. 19.

⁶ David Jensen and Steve Lonergan, 'Natural Resources and Post-conflict Assessment, Remediation, Restoration, and Reconstruction: Lessons and Emerging issues' in David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (New York: Routledge, 2012), 411, 413.

4.2 The Power of Principles: General Principles of International Law

Article 38(1) of the Statute of the International Court of Justice ('ICJ')⁷ provides the sources of international law upon which the ICJ can rely to resolve cases before it. This article is also depended upon more broadly as demonstrative of the sources of international law. The inclusion of general principles as a source of international law under Article 38(1)(c) is not only a source distinct from conventional and customary law, under Article 38(1)(a) and (b), but it is also, importantly, distinct from the subsidiary sources of international law referred to in Article 38(1)(d).

There is no one authority which clearly and completely defines what is meant by the phrase 'general principles of law'.⁸ In fact, how to define and identify such principles has long been a matter of practical and academic disagreement and debate.⁹ For example, in the *Kupreškić* judgment, the International Criminal Tribunal for the Former Yugoslavia ('ICTY') refers to general principles from three different sources: 'general principles of international criminal law', 'general principles of criminal law common to the major legal systems of the world', and 'general principles of law consonant with the basic requirements of international justice'.¹⁰ The ICJ has also been vague, or avoided altogether, defining 'principles' or providing insight in how to identify them.¹¹ Despite this lack of agreement and clarity on general principles, there are, nonetheless, key elements and important concepts that can be drawn from the abundance of discourse in existence on the subject.

While the language of Article 38(1)(c) gives little indication as to where or how these principles should be defined or identified, scholars such as the late Oscar Schachter provide some basic characteristics of general principles.¹² Schachter highlights the 'generality and abstractness' of principles by contrasting them to the 'definiteness' of legal rules.¹³ He states that principles 'have a wide range of application' and naturally give way, when more than one principle applies to a situation, to a weighing and balancing to find the specific solution.¹⁴ According to Joseph Raz, '[p]rinciples, because they prescribe highly unspecified acts, tend to be more vague and less certain than rules'.¹⁵ This is, in fact, a benefit of principles because they allow for a broader range of application and 'leave room for varying interpretation'.¹⁶ This generality of principles of

⁷ Statute of the International Court of Justice, 26 June 1945, 59 Stat 1055, 33 UNTS 993, Art. 38(1).

⁸ M Cherif Bassiouni, 'A Functional Approach to "General Principles of International Law"' (1989–1990) 11 Michigan Journal of International Law 768, 769–817; Christopher A Ford, 'Judicial Discretion in International Jurisprudence: Article 38(1)(c) and "General Principles of Law"' (1994–1995) 5 Duke Journal of Comparative and International Law 35, 65; Sean D Murphy, *Principles of International Law* (St. Paul, MN: Thomson Reuters, 2012), 10; Gideon Boas, *Public International Law: Contemporary Principles and Practices* (Cheltenham, UK: Edward Elgar Publishing Limited, 2012), 108–9.

⁹ Bassiouni (n 8) 770–96; Ford (n 8) 65.

¹⁰ ICTY, *Prosecutor v. Kupreškić et al.*, Trial Chamber, Judgment (IT-95-16-T, 14 January 2000), [591].

¹¹ Bassiouni (n 8) 791–800.

¹² Oscar Schachter, *International Law in Theory and Practice* (Dordrecht, NLDS: Martinus Nijhoff Publishers, 1991).

¹³ *ibid.* 20. ¹⁴ *ibid.*

¹⁵ Joseph Raz, 'Legal Principles and the Limits of Law' (1971–1972) 81 Yale Law Journal 823, 841.

¹⁶ Schachter (n 12) 20.

international law allows room for adaptation to more specific contexts in different situations and different areas of law, as well as to develop more specific content in domestic legal systems.

Still, this leaves open the question of how to recognize a general principle and how much recognition from states is required for their existence. Once again, a certain amount of ambiguity is encountered because, as M. Cherif Bassiouni notes, ‘no quantitative or numerical test for States having such a “principle” has ever been established.’¹⁷ What is clear is that, while the principle must exist in multiple states, it ‘does not have to meet the test of “universal acceptance”’.¹⁸ The ‘universal acceptance’ requirement or test has been rejected by the ICJ in both the *South West Africa Cases*¹⁹ and the *North Sea Continental Shelf case*.²⁰

For Schachter, these principles are ones “intrinsic to the idea of law”, required by “the nature of human beings”, or necessitated by the structure of international society.²¹ Bassiouni suggests that general principles are ‘expressions of other unperfected sources of international law enumerated in the statutes of the PCIJ (Permanent Court of International Justice, the predecessor to the ICJ) and ICJ; namely, conventions, customs, writings of scholars, and decisions of the PCIJ and ICJ’.²² For Bassiouni, these unperfected sources, for instance, ‘when a custom is not evidenced by sufficient or consistent practice, or when States express *opinio juris* without any supportive practice ... singularly or cumulatively with others, [it] may possibly be considered to be expressions of a given principle’.²³

There are several different ways of identifying general principles as deriving from: (1) national legal systems of states; (2) the idea of law itself; and (3) the international legal system. Each of these are discussed in turn below. However, it is critical to note that it is not a matter that only one of these is the sole correct means for identifying general principles. Rather, general principles can, are, and have been identified from all three of these sources in both academic and judicial legal discourse.

4.2.1 Derived from national laws

One of the most commonly discussed interpretations of general principles posits that they originate from the domestic law of states. Sean Murphy states that ‘general principles’ ‘can mean principles that *exist in the national laws* of states worldwide’.²⁴ However, he goes on to note that the language found in Article 38(1)(c)—general principles of law recognized by civilized nations—‘does not actually refer to national law’.²⁵ Bassiouni also sees two avenues for identifying general principles, only the first

¹⁷ Bassiouni (n 8) 788.

¹⁸ *ibid.*

¹⁹ *South-West Africa Cases (Ethiopia v. South Africa; Liberia v. South Africa)*, Judgment of 18 July 1966 (Second Phase) ICJ Reports 6.

²⁰ *North Sea Continental Shelf Cases (Federal Republic of Germany v. Denmark; Federal Republic of Germany v. Netherlands)* Judgment of 20 February 1969, ICJ Reports 3. In his dissenting opinion, Judge Lachs stated that ‘to become binding, a rule or principle of international law need not pass the test of universal acceptance’.

²¹ Schachter (n 12) 49.

²² Bassiouni (n 8) 768.

²³ *ibid.*

²⁴ Murphy (n 8) 101.

²⁵ *ibid.*

of which is ‘expressions of national legal systems.’²⁶ The other, as already noted, is that they are ‘expressions of other unperfected sources of international law.’²⁷

Bassiouni asserts that there seems to be at least some consensus among scholars that principles ‘are found in the underlying or posited principles or postulates of national legal systems,’ but, critically, this sentence does not end there. It is followed by the words ‘or of international law.’²⁸ This addition by Bassiouni recognizes the problem of solely identifying general principles from national legal systems. In fact, Ford suggests that ‘[d]irect translation between domestic and international jurisprudence may well do violence to the real values and policies served by principles ostensibly accepted at both levels.’²⁹ It is not so much that general principles can never, or should never, be found in domestic legal systems, but rather that ‘they should not reflexively be borrowed “after a census of domestic systems”.’³⁰ Ultimately, the key is, as Murphy notes, the language of Article 38(1)(c), which requires recognition of the principles by nations, not that the source of the principles be the domestic laws of the nations themselves.³¹

4.2.2 Intrinsic to the idea of law

Another potential interpretation of general principles sees them as ‘principles *intrinsic to the idea of law*.’³² That is, these principles are inherent to the very conceptions of justice or fairness.³³ An example of this can be seen in the PCIJ’s judgment in the *River Meuse* case, wherein the Court justified its application of the principles of equity under general principles of law.³⁴ Such a use of the term ‘general principles’ can also be seen in the ICTY’s judgment of the *Kupreškić* case, in which the Tribunal refers to ‘general principles of law consonant with the basic requirements of international justice.’³⁵ As noted earlier, the Tribunal used the term ‘general principles’ in two additional ways, which indicates that, while principles may found in the very idea of law itself, they may also be drawn from other sources.

4.2.3 Derived from the international legal system

Finally, an interpretation of general principles suggests that they are derived from international law itself. As Boas states, they ‘may be derived directly from international legal relations and legal relations generally.’³⁶ By this, Boas is referring to the many interpretive principles employed by international courts, such as *lex specialis derogate legi generali* (special laws prevail over general laws). He is also referring to ‘[f]oundational principles of the international community—such as the sovereign equality of states.’³⁷ This understanding of general principles can also be seen in the *Kupreškić* case as the ICTY refers to ‘general principles of international criminal law.’³⁸ It is also inherent in Bassiouni’s definition of general principles as ‘expressions of other unperfected sources of international law.’³⁹ This approach is further evidenced by the fact that international

²⁶ Bassiouni (n 8) 768. ²⁷ *ibid.* ²⁸ *ibid.* 771 (emphasis added). ²⁹ Ford (n 8) 77.

³⁰ *ibid.* ³¹ Murphy (n 8) 101. ³² *ibid.* 102. ³³ *ibid.*

³⁴ *Diversion of Water from Meuse (Netherlands v Belgium)* PCIJ Reports, (Series A/B No. 70) 28 June 1937.

³⁵ *Kupreškić* (n 10) [591]. ³⁶ Boas (n 8) 107. ³⁷ *ibid.* ³⁸ *Kupreškić* (n 10) [591].

³⁹ Bassiouni (n 8) 768.

courts have drawn upon ‘State conduct, policies, practices, and pronouncements at the international level, which may be different from domestic legal principles’ to identify general principles of law.⁴⁰ This understanding of general principles also emphasizes the usefulness of principles in the articulation of norms by courts and the ‘values of the “legal community”’.⁴¹

4.3 The Role of General Principles in International Law

Just as there are many means of identifying general principles, there are also many functions that they serve in international law. There are four key functions general principles perform:

- (1) A **unification function**: general principles act as a counterforce against the fragmentation of international law;
- (2) A **gap-filling function**: where lacunae arise in international law, general principles can act to fill the gap;
- (3) An **interpretive function**: general principles aid in the interpretation of international law; and
- (4) A **development function**: general principles aid in the development of international law.⁴²

Like the different origins of general principles, general principles can perform different functions depending on the context in which they are employed, or they can perform multiple functions at the same time.

4.3.1 Unification function

Fragmentation in the international legal system, as defined by the International Law Commission (‘ILC’) in its study on the issue, is ‘the splitting up of the law into highly specialized “boxes” that claim relative autonomy from each other and from the general law.’⁴³ Fragmentation is the result of the creation of ‘such specialist systems as “trade law”, “human rights law”, “environmental law” ...— each possessing their own principles and institutions.’⁴⁴ Prost describes it as a process of expansion, densification, and diversification to a point at which ‘frames and margins are blurred, where legal spaces overlap and conflict with each other, [and] a network with a plurality of voices, lacking a master plan or blueprint’ is created.⁴⁵

⁴⁰ *ibid.* 788.

⁴¹ Ford (n 8) 37.

⁴² Note other scholars have grouped the functions of general principles into different categories. For example, Bassiouni (n 8) 775–6, identifies four functions which overlap and diverge from those I have chosen to use as identifiers. Bassiouni also has an interpretive category and a growth, or development, category. His other two categories are that of supplemental source of international law and modifier of convention and custom.

⁴³ ILC Study Group, ‘Fragmentation of International Law: Difficulties arising from the Diversification and Expansion of International Law’, Report of the Study Group of the International Law Commission finalized by Martti Koskenniemi, A/CN.4/L.682 and Corr.1, 13 April 2006, 13.

⁴⁴ *ibid.* 11.

⁴⁵ Mario Prost, *The Concept of Unity in Public International Law* (Portland OR: Hart Publishing, 2012), 4–7.

Splitting up areas of specialization is common practice in domestic systems. However, in the international legal system, ‘the conceptual-doctrinal consistency, the clear hierarchy of norms and the effective judicial hierarchy that was developed within the nation-states, is lacking.’⁴⁶ The big concern fragmentation presents is the ‘danger of conflicting and incompatible rules, principles, rule-systems and institutional practices.’⁴⁷ And the critical question it raises, as the ILC describes, is ‘[h]ow should the relationship between such [specialized] “boxes” be conceived?’⁴⁸ To understand how general principles can help address the concerns of fragmentation, it is useful to turn to the late Oscar Schachter’s analogy of the international legal system to a system of towns, villages, paths, and highways, as well as to look at the additional functions of general principles which are important for fulfilling the unification function.⁴⁹

Schachter’s analogy compares international law to a large terrain. On this terrain, or map, a specialized branch of law is represented by a village or town, wherein they focus on their own affairs. There are narrow paths that run between these towns and villages, but they are used infrequently. Instead, covering the entire map are ‘superhighways, the connecting links, which in the metaphor convey the general principles and concepts.’⁵⁰ Schachter then proceeds to elaborate on how the actors on this map relate to the different elements of the terrain. He says:

Those who travel on the highways are generally only dimly aware of the lively activities in the towns and villages. Those who remain only in the local communities immersed in their specialties tend to lose sight of the interconnections and coherence of the larger whole.⁵¹

Schachter goes on to emphasize the importance of the superhighways, of general principles, because international law ‘is much more than a congerie of separate legal régimes in particular fields. Just as facts become meaningful when they are linked to ideas and norms, so do ideas and norms gather strength as they become part of a coherent inter-related system.’⁵² For Schachter, it is these general principles that give the system unity. He states that ‘[w]e need to relate concepts to practice and thus give them content. We need to relate practices to concepts in order to give practice meaning and direction.’⁵³ Principles are therefore an essential part of international law without which there can be no meaning and direction for practice. Principles and concepts are the important links uniting the growing number of specialized fields of law. Since, according to Martti Koskenniemi, there ‘[is] no meta-regime’ in international law,⁵⁴ general principles and concepts can be used to increase our understanding and connect these different fields, as Schachter suggests.⁵⁵

I would suggest that these ‘boxes’, as the ILC report refers to them, or ‘towns’ and ‘villages’ as referred to by Schachter, are in reality merely ways of categorizing and

⁴⁶ Andreas Fischer-Lescano and Gunther Teubner, ‘Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law’ (2003–2004) 25 *Michigan Journal of International Law* 999, 1002.

⁴⁷ ILC Study (n 43) 14. ⁴⁸ *ibid.* ⁴⁹ Schachter (n 12) 1. ⁵⁰ *ibid.* ⁵¹ *ibid.*

⁵² *ibid.* ⁵³ *ibid.* 2.

⁵⁴ Martti Koskenniemi, ‘The Fate of Public International Law: Between Technique and Politics’ (2007) 70 *Modern Law Review* 1, 5.

⁵⁵ Schachter (n 12) 1–2.

simplifying the diverse and truly massive body of international law as a whole. It provides a language by which practitioners and academicians may label their work and facilitates the processing of international law. Labels (or boxes or villages) such as ‘international humanitarian law’, ‘international human rights law’, and ‘international environmental law’ create more manageable, bite-sized portions, if you will, of international law. However, in trying to make international law more easily digested, it seems that the ephemeral boundaries between these boxes have erroneously been transformed into actual mental barriers which inhibit the ability of some to see the inherent and necessary links between these so-called boxes which are, in reality, all part of one massive body of international law. Perhaps, to break down these mental barriers requires a re-emphasizing of the three other functions general principles fulfil as they link the content of boxes.

4.3.2 Gap-filling function

General principles ‘perform a gap-filling function where there is no customary or treaty law on the issue, or where a principle is required to decide which hierarchically equal norm should prevail in the event of a clash.’⁵⁶ In doing so, general principles ‘prevent decision-makers from either pronouncing a *non liquet* (failure to decide) or, worse, deciding the issue according to their personal whim.’⁵⁷ This is one of the most common functions of general principles, second only perhaps to the interpretive function.

Since gaps in positive international law do exist, there is need for something to fill these gaps, and general principles are the logical choice for that job. In fact, Bassiouni and Ford both state that this is the very reason why general principles were included as a source of international law in the PCIJ Statute and subsequently the ICJ Statute.⁵⁸ This gap-filling function is ultimately articulated by the ICJ in the *Right of Passage* case, in which Judge Fernandes, in his dissenting opinion, stated that ‘[i]t frequently happens that a decision given on the basis of a particular or general convention or of a custom requires recourse to the general principles ... A court will have recourse to those principles to fill gaps in the conventional rules, or to interpret them.’⁵⁹

4.3.3 Interpretive function

The interpretive function is the most commonly employed use of general principles. As Raz notes, this function is ‘of the utmost importance since it is a crucial device for ensuring coherence of purpose among various laws bearing on the same subject.’⁶⁰ For instance, during armed conflict when a military operation or the use of a particular weapon system may simultaneously trigger concerns for the protection of the environment as a civilian object while also posing potential threats to the human rights

⁵⁶ Boas (n 8) 47.

⁵⁷ *ibid.* 106.

⁵⁸ Bassiouni (n 8) 791; Ford (n 3) 63.

⁵⁹ *Right of Passage Over Indian Territory (Portugal v. India)*, Judgment of 12 April 1960, ICJ Reports 6 (Judge Fernandes dissenting), [45]. Principles discussed by the Court in this case include the principle of interpretation of legal rules, the principle of sovereignty, the doctrine of implied powers in general power, and the principle of a right of access to enclaved property.

⁶⁰ Raz (n 15) 840.

of civilians to health, a healthy environment, and so on. In such a situation, I suggest general principles of international law, such as those from international environmental law discussed in this chapter, must guide the interpretation and application of norms of international humanitarian law. These principles inform the content of rule application in their interpretive function.

Some general principles are specifically interpretive in nature, such as the principle which dictates that special laws prevail over general ones (*lex specialis derogate legi generali*).⁶¹ Others, such as the general principle of respect for human dignity, identified by the ICTY in the *Furundžija* case, was employed by that court to help interpret international laws relating to rape.⁶² This use of general principles in *Furundžija* exemplifies Bassiouni's assertion that '[t]hey are useful for interpreting words not susceptible to an ordinary or common meaning interpretation.'⁶³

Equally important when considering the interpretation of international law is the Vienna Convention on the Law of Treaties ('VCLT').⁶⁴ Article 31(3) of the VCLT requires subsequent agreements, practices, and rules of international law to be taken into account when interpreting a treaty.⁶⁵ The aim is to ensure that provisions are interpreted 'so as to see the rules in view of some comprehensible and coherent objective, to prioritize concerns that are more important at the cost of less important objectives.'⁶⁶ It is important to note that, though the provision 'refers to rules of international law in general, the words cover all the sources of international law, including custom, general principles, and, where applicable, other treaties.'⁶⁷ While, at first glance, there may seem to be confusion by the use of the term 'rules', in the following sentence the ILC clarifies that this is inclusive of custom and general principles, not merely rules founded in conventions.⁶⁸

Within a fragmented international legal system consisting of so many specialized institutions, law must not be employed in isolation 'only as an instrument for attaining regime-objectives.'⁶⁹ Rather, 'law is also about protecting rights and enforcing obligations, above all rights and obligations that have a backing in something like a general, public interest.'⁷⁰ The ILC emphasizes that '[w]ithout the principle of "systemic integration" it would be impossible to give expression to and to keep alive, any sense of common good of humankind, not reducible to the good of any particular institution or "regime".'⁷¹ If ever there is a time and a place where the common good of humankind is at stake and in need of protection, it is in periods of armed conflict. It is particularly during these periods that general principles must be held onto and held up. The interpretation, and often by association the unification, functions of general principles are crucial to the exercise of international law and the preservation of the coherence of international law.

⁶¹ Boas (n 8) 107.

⁶² ICTY, *Prosecutor v. Anto Furundžija*, Trial Chamber, Judgment (IT-95-17/1-T, 10 December 1998), para. 183.

⁶³ Bassiouni (n 8) 800.

⁶⁴ Vienna Convention on the Law of Treaties, 23 May 1969, UNTS, Vol. 1155, 331.

⁶⁵ *ibid.* Art. 31(3). ⁶⁶ ILC Study (n 43) 211. ⁶⁷ *ibid.* 215. ⁶⁸ *ibid.*

⁶⁹ *ibid.* 244. ⁷⁰ *ibid.* ⁷¹ *ibid.* 244.

4.3.4 Development function

The final function of general principles is the development function, or as Bassiouni refers to it, the 'growth function'.⁷² Essentially, general principles play a role in the development of international law. Bassiouni, citing James Brierly, describes the function as 'an authoritative recognition of a dynamic element in international law and of the creative function of the courts which administer it'.⁷³ This function of general principles serves to provide a certain amount of dynamism in the operation of international law.

The development function provides for the possibility of existing general principles to form the basis for creating new rules of international law.⁷⁴ Bassiouni goes so far as to say that the 'development of new norms of conventional and customary law required the existence of "General Principles"'.⁷⁵

The ICTY's use of general principles in *Furundžija*, discussed above, is not only an example of the interpretive function of general principles but also an example of its development function. The Tribunal used the general principle of human dignity not only to interpret existing customary law on rape but also to develop the definition of rape in international law.⁷⁶ In doing so, the Tribunal concluded that forced oral penetration did constitute rape.⁷⁷ The use of general principles, here, allowed for continued development of international law.

4.4 International Environmental Law

Treaty rules, customary norms, general principles, and subsidiary sources of international law related to the protection of the environment can be located in the specialized box of international environmental law ('IEL'). The protection of the environment touches on a myriad of areas because there is little to no action that does not have an effect, to one degree or another, on some aspect of the environment.⁷⁸ Furthermore, '[e]nvironmental problems present a moving target' because 'not only does scientific understanding develop, [but] environmental problems themselves change as human behaviour and technology change'.⁷⁹ The broad, all-encompassing, transitory, scientifically uncertain, long-lasting, and potentially irreversible nature of environmental problems requires IEL to continue to adapt, adopt, and create tools to meet the needs of the environment and humanity.

While there may be a box for IEL, this area of international law can by no means be seen in isolation from other areas of international law. It would be foolish to try to separate it from areas like international trade and development, international human rights, and international humanitarian law, to name but a few interconnected fields. Economic

⁷² Bassiouni (n 8) 777. ⁷³ *ibid.* 777 (citing JL Brierly, *The Law of Nations* (6d 1963) at 63).

⁷⁴ Raz (n 15) 841. ⁷⁵ Bassiouni (n 8) 778. ⁷⁶ *Furundžija* (n 62).

⁷⁷ *ibid.* [182], [184].

⁷⁸ Jaye Ellis and Stepan Wood, 'International Environmental Law' in Benjamin J Richardson and Stepan Wood (eds.), *Environmental Law for Sustainability* (Portland, OR: Hart Publishing, 2006) 343, 380; Daniel Bodansky, Jutta Brunnée, and Ellen Hey, 'International Environmental Law: Mapping the Field' in Daniel Bodansky, Jutta Brunnée, and Ellen Hey (eds.), *The Oxford Handbook of International Environmental Law* (Oxford: Oxford University Press, 2007) 1, 6.

⁷⁹ Bodansky *et al.* (n 78) 7–8.

development based on the trade of natural resources or even the manufacture of products in factories affects the environment. The environment and human health cannot be separated and numerous, if not all, human rights depend on a healthy, sustainable environment if they are to be realized. In armed conflict, the environment is present during all military operations, even in instances where there may be no civilians present. Therefore, it is not only the environment that is omnipresent, but also environmental considerations within international law.

The legal tools of IEL include both binding treaties⁸⁰ and non-binding declarations and resolutions.⁸¹ Tools of IEL include instruments produced by states⁸² as well as those produced by experts.⁸³ IEL, however, lacks ‘an integrated UN special agency that could serve as an “umbrella organization” for coordinating environmental policies, integrating legislation, and monitoring implementation.’⁸⁴ Given this lack of umbrella organization, Dupuy suggests that ‘general customary rules and general principles may act, in part at least, as compensation for the institutional deficiencies of the system.’⁸⁵ General principles can, and do, operate across these imagined boundaries between specialized areas of international law with or without an umbrella organization. Principles of IEL include the principle of preventive action, cooperation, sustainable development, inter-generational equity, the precautionary principle, the polluter-pays principle, and the principle of common but differentiated responsibility.⁸⁶

In 2013, the topic of ‘Protection of the environment in relation to armed conflict’ was added to the work of the ILC. The Commission appointed Marie Jacobsson as Special Rapporteur. The principles of sustainable development, prevention, precaution, polluter pays, and due diligence, were noted and discussed by the Special Rapporteur in her Preliminary Report to the Committee in 2014.⁸⁷ These principles were discussed as ‘candidates for continuing application during armed conflict’, however, the ‘extent to which they may be applicable [was] not addressed.’⁸⁸ Debate on the Second Report of

⁸⁰ See, for example, Convention on Biological Diversity (Biodiversity Convention), 6 May 1992, 1760 UNTS 79; 31 ILM 818.

⁸¹ See, for example, Rio Declaration on Environment and Development, (A/CONF.151/26, Vol. I), 12 August 1992.

⁸² These include binding treaties, as well as many non-binding instruments such as the Rio Declaration, *ibid.*

⁸³ For example, reports put out by the experts groups of the United Nations Environment Programme (‘UNEP’) or produced by the International Law Association (‘ILA’) or International Law Commission (‘ILC’).

⁸⁴ Pierre-Marie Dupuy, ‘Formation of Customary International Law and General Principles’ in Bodansky, Brunnée, and Hey (n 78) 463. Note: the UNEP does not fulfil this role primarily because it is a UN programme with limited legal personality and controlled by the UN General Assembly, as opposed to a UN agency which are autonomous intergovernmental agencies created through an independent legal instrument. For further discussion on the differences between UN agencies and UN programmes see UNEP, ‘United Nations Specialised Agencies versus United Nations Programmes’, 7 June 2010, at < <https://www.scribd.com/document/212017488/UN-Specialised-Agencies-vs-UN-Programmes>.> accessed 31 May 2017.

⁸⁵ UNEP (n 84) *ibid.*

⁸⁶ See Philippe Sands and Jacqueline Peel, with Adriana Fabra and Ruth MacKenzie (eds.), *Principles of International Environmental Law* (Cambridge: Cambridge University Press, 3rd edn, 2012), 200–36.

⁸⁷ Marie G. Jacobsson, Special Rapporteur, Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A/CN.4/674 (30 May 2014) paras. 125–56 (‘ILC Preliminary Report’).

⁸⁸ *ibid.* para. 117.

the Special Rapporteur in 2015, prompted suggestions from some ILC members who ‘stressed the need to methodically examine rules and principles of international environmental law to consider their continued applicability during armed conflict and their relationship with that legal regime.’⁸⁹ These suggestions were positively received by the Special Rapporteur who was in full agreement and stated, ‘that the question of what other rules may apply during an armed conflict, including rules and principles of international environmental law; was at the core of the topic...’⁹⁰ Such an examination is (as of early 2017) still a work in progress. A draft principle provisionally accepted by the ILC in 2015 notes that the ‘environment shall be respected and protected in accordance with applicable international law and, in particular, the law of armed conflict.’⁹¹ This further supports the consideration of principles of IEL, as ‘applicable international law’, in the context of environmental protection in the application of IHL.

I now turn to a more in-depth examination of two general principles associated with IEL—intergenerational equity and the precautionary principle—with interpretive, gap-filling, developmental powers which should be applied across all fields of international law, in particular IHL.

4.4.1 Intergenerational equity

The first general principle I examine is the principle of intergenerational equity, also known as the Future Generations principle. This principle focuses on the need of each generation to preserve the planet’s natural and cultural heritage for future generations, balancing present needs with the responsibility to pass on the planet to subsequent generations in as good, or better, condition as it was received from prior generations.⁹² At the core of the concept is a strong temporal element with the idea that ‘our actions today pose long-term risks to the health of our planet and to our cultural resource base for which the present generation will be unable to compensate future generations.’⁹³ Actors must consider both short- and long-term consequences of their actions within the context of protection of both natural and cultural environments. The rights of current generations must be exercised in a manner that will ensure they pass on to subsequent generations a world whose cultural and natural environment is in as good, or better, condition as when they themselves received it from preceding generations.⁹⁴ As both beneficiaries, from prior generations, and trustees, on behalf of future generations, of these environments we, the current generation, must examine our actions in light of their immediate effects as well as how these actions will affect these resources over time and spanning generations.

⁸⁹ Report of the International Law Commission on the work of its sixty-seventh session, 4 May–5 June and 7 July–7 August 2015, A/70/10, 2015, chap. IX, paras. 130–70, para. 141 (‘Report of the ILC 2015’).

⁹⁰ *ibid.* para. 165. ⁹¹ *ibid.* 105 fn 378, Draft principle II-1 (1).

⁹² Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Dobbs Ferry, NY: Transnational Publishers Inc, 1989).

⁹³ *ibid.* 5.

⁹⁴ Edith Brown Weiss, ‘Intergenerational Equity: A Legal Framework For Global Environmental Change’ in Edith Brown Weiss (ed.), *Environmental Change and International Law: New Challenges and Dimensions* (Tokyo: United Nations University Press, 1992).

4.4.2 The history and evolution of intergenerational equity

Having established a basic understanding of the meaning and content of the concept of intergenerational equity, I turn to the history of the principle in IEL. Quite interestingly, ‘there is no society that has not, in some way, applied the principle of current generations being responsible to future generations’ in some form or another.⁹⁵ As Edith Brown Weiss notes, the concept of intergenerational equity, with the ‘fundamental thesis that we have obligations to conserve the planet for future generations and rights to have access to its benefits’, can be found in the ‘diverse legal traditions of the international community’.⁹⁶ Intergenerational equity can be found in ‘the common law and civil law traditions, in Islamic law, in African customary law, and in Asian nontheistic traditions.’⁹⁷ These broad roots are useful in efforts to promote and strengthen the concept in modern international law.

The principle of intergenerational equity first appeared in international treaty law in the 1946 International Whaling Convention⁹⁸ and it has appeared with increasing frequency since that time. References to intergenerational equity can be seen in a wide range of conventions addressing everything from the protection of flora and fauna;⁹⁹ to natural resources;¹⁰⁰ to the environment more generally.¹⁰¹

The 1987 Brundtland Report, issued by the United Nations and written by the World Commission on Environment and Development (‘WCED’), notably developed the idea of sustainable development, stating ‘Humanity has the ability to make development sustainable to ensure that it *meets the needs of the present without compromising the ability of future generations to meet their own needs*.’¹⁰² Crucially, the report places intergenerational equity at the epicentre of how it defines sustainable development and the key to ongoing environmental protection. While sustainable development has become more nuanced since 1987, intergenerational equity remains one of its key components.¹⁰³

The principle of intergenerational equity has also appeared in cases and advisory opinions of the ICJ. One such instance is the ICJ’s Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*¹⁰⁴ in 1996. In its opinion, the ICJ noted that, ‘the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, *including generations unborn*’.¹⁰⁵

The increasing reliance and use of intergenerational equity in international law since 1946 demonstrates an increased awareness about human impact on the environment not only for current generations but also for continuing impacts on future generations.

⁹⁵ Edward W Ploman, ‘Foreword’ in Weiss (n 92) xxvii. ⁹⁶ Weiss (n 92) 18. ⁹⁷ *ibid.*

⁹⁸ International Protocol for the Regulation of Whaling, 2 December 1946, 161 UNTS 72, 62 Stat 1716, Can TS 1946 No 54.

⁹⁹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, 3 March 1973, 993 UNTS 243, 12 ILM 1085 (CITES), preamble.

¹⁰⁰ 1985 Agreement on the Conservation of Nature and Natural Resources (ASEAN Convention), 9 July 1985, at ECOLEX <<http://www.ecolex.org>> accessed 31 May 2017, preamble.

¹⁰¹ 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD), adopted by the UN General Assembly, Res 31/72, 10 December 1976.

¹⁰² World Commission on Environment and Development, *Our Common Future* [Brundtland report] (Oxford: Oxford University Press, 1987), 8 (emphasis added).

¹⁰³ See Sands *et al.* (n 86) 206–17.

¹⁰⁴ *Nuclear Weapons* (n 2) 226 at para. 78.

¹⁰⁵ *ibid.* (emphasis added).

4.4.3 The current legal status of intergenerational equity

While the growth of the presence of, and reliance on, intergenerational equity in international environmental law suggests an ongoing strengthening of its status in international law, it is unlikely that it has achieved customary law status. As Judge Weeramantry notes in his dissenting opinion in the ICJ's 1995 *Nuclear Tests Case Order*, intergenerational equity is 'an important and rapidly developing principle of contemporary environmental law'.¹⁰⁶ The more recent work of Sébastien Jodoin and Yolanda Saito suggests that the status continues along the lines noted by Judge Weeramantry, as they write that, while not customary international law, intergenerational equity 'undoubtedly forms an important value and concern of the international community'.¹⁰⁷ The inclusion of intergenerational equity in the preambles of so many international conventions is important because it provides an overarching objective or guide for the substantive obligations to be carried out under those conventions. As such, it appears that intergenerational equity is a strongly established principle of international environmental law.

The principle of intergenerational equity may have arisen in the field of environmental law, but it has the potential to inform other areas of law such as international human rights law and humanitarian law. The benefits and importance of considering the long-term effects and repercussions of decisions made in the present are manifold. It is not merely useful when dealing with the protection and preservation of our planet's natural and cultural heritage, but it is also beneficial for other aspects of our well-being, such as health, education, and development. Employing intergenerational equity to guide the interpretation and application IHL is critical to ensuring that decisions made in the heat of battle do not inhibit long-term goals of sustainable peace and reconstruction, the effects of which matter intensely not only in the present, but for future generations.

4.5 The Precautionary Principle

I turn now to the second general principle I wish to examine in greater depth: the precautionary principle. The precautionary principle asserts that, even in the face of scientific uncertainty, actions which present the potential for significant harm to the environment must be abstained from. The precautionary principle is also often considered part of, or an essential feature of, sustainable development.¹⁰⁸

¹⁰⁶ *Request for an Examination of the Situation in Accordance with Para 63 of the Court's Judgement of 20 December 1974 in the Nuclear Tests Case (New Zealand v. France)*, Order of 22 September 1995, [1995] ICJ Rep 288 (dissenting opinion of Judge Weeramantry, 317) 341.

¹⁰⁷ Sébastien Jodoin and Yolanda Saito, 'Crimes Against Future Generations: Harnessing the Potential of Individual Criminal Accountability for Global Sustainability' (2011–2012) 7 *McGill International Journal of Sustainable Development Law and Policy* 115, 132.

¹⁰⁸ See Bodansky *et al.* (n 78) 14; Rajendra Ramlogan, *Sustainable Development: Towards a Judicial Interpretation* (Leiden, NLDS: Martinus Nijhoff Publishers, 2011), 99; Rio Declaration (n 81).

4.5.1 The emergence and development of the precautionary principle in international environmental law

The precautionary principle began to emerge in IEL instruments in the mid-1980s, such as the 1985 Vienna Convention for the Protection of the Ozone Layer,¹⁰⁹ though earlier instances of the principle can be seen in national legal systems.¹¹⁰ The articulation of the precautionary principle in Principle 15 of the Rio Declaration, though a non-binding instrument, has come to be a definition of great importance. Principle 15 of the Rio Declaration states:

In order to protect the environment, the Precautionary approach shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.¹¹¹

This definition has since been said to reflect the core, or essence, of the principle.¹¹² It is also said to be the ‘most cited and conclusive definition of the principle in effect at the international level’.¹¹³ The importance of the Principle 15 definition is also emphasized by the fact that, ‘[s]ince the 1992 Rio Conference, [the precautionary principle] has been taken up in the majority of bilateral and multilateral international treaties relating to environmental protection’.¹¹⁴

In all, since its emergence in the 1980s, the precautionary principle is now included in most environmental protection treaties.¹¹⁵ In total, there are ‘some 60 multilateral treaties, covering a wide array of environmental issues ranging from air pollution to waste management’¹¹⁶ in existence currently, and this number seems likely to continue rising.

4.5.2 Defining the precautionary principle

The precautionary principle has rapidly emerged as an important principle in IEL. It endeavours to respond to the lesson of history: ‘[t]oo often, our experience in matters relating to the environment indicates that when we are certain we are impotent—it is too late to repair the damage.’¹¹⁷ Therefore, rather than wait until there is scientific certainty and, most likely the damage has already occurred, the precautionary principle ‘assert[s] that potential long-term, adverse, unintended consequences should be

¹⁰⁹ 1985 Vienna Convention for the Protection of the Ozone Layer, 22 March 1985, Vienna, Austria, 1513 UNTS 293/[1988] ATS 26/26 ILM 1529 (1987).

¹¹⁰ See Sands *et al.* (n 86) 217–18. ¹¹¹ Rio Declaration (n 81).

¹¹² Sands *et al.* (n 86) 218; Arie Trouwborst, *Precautionary Rights and Duties of States* (Leiden, NLDS: Martinus Nijhoff Publishers, 2006), 32.

¹¹³ Joakim Zander, *The Application of the Precautionary Principle in Practice: Comparative Dimensions* (Cambridge: Cambridge University Press, 2010), 72.

¹¹⁴ Nicolas de Sadeleer, ‘The Principles Of Prevention And Precaution In International Law: Two Heads Of The Same Coin?’ in Malgosia Fitzmaurice, David M. Ong, and Panos Merkouris (eds.), *Research Handbook on International Environmental Law* (Cheltenham, UK: Edward Elgar Publishing, 2010), 182, 187.

¹¹⁵ *ibid.* 183. ¹¹⁶ *ibid.* 187.

¹¹⁷ James Cameron, ‘The Precautionary Principle: Core Meaning, Constitutional Framework and Procedures for Implementation’ in Ronnie Harding and Elizabeth Fisher (eds.), *Perspectives on the Precautionary Principle* (Sydney: The Federation Press, 1999), 2.

considered in advance rather than addressed after the fact.’¹¹⁸ This means acting in a precautionary manner under conditions of scientific uncertainty.

However, the principle is often criticized for being ‘vague and undefined’.¹¹⁹ There are at least twelve different definitions of the principle in international instruments.¹²⁰ Nonetheless, these varying definitions do have certain essential elements of the principle and its objectives in common: the precautionary principle seeks to protect the environment from serious damage, even where scientific uncertainty exists as to the causal link between the action and the damage. Common to these different articulations and classifications of key elements of the precautionary principle are a threat of harm to the environment and related uncertainty.

Before turning to a more in-depth examination of these key elements, however, an important note must be made with regards to the terminology used in labelling the principle. Some instruments will refer to it as the ‘precautionary principle’, while others use the term ‘precautionary approach’. According to some scholars, a ‘precautionary approach’ is softer and less legalistic than a ‘precautionary principle’.¹²¹ This is a view in which ‘precautionary approach’ is seen as not legally binding, as compared to a legal principle.¹²² There seems to be a geographic preference between the labels, with the European Community being more closely associated with the term ‘precautionary principle’, while the United States seems to have a preference for the term ‘precautionary approach’.¹²³ Ultimately, it seems the difference is no more than a ‘semantic squabble’, with numerous scholars and international instruments seeming to use the terms interchangeably.¹²⁴ For example, while Principle 15 of the Rio Declaration uses ‘precautionary approach’, the Programme for Further Implementation of Agenda 21, adopted by the UN General Assembly in 1997, in referring to Principle 15 of the Rio Declaration refers to the ‘precautionary principle’.¹²⁵ There seems to be no tangible differences in reality between ‘precautionary approach’ and ‘precautionary principle’.¹²⁶

¹¹⁸ Peter J Balint, Ronald E Stewart, Anand Desai, and Lawrence C Walters (eds.), *Wicked Environmental Problems: Managing Uncertainty and Conflict* (Washington, DC: Island Press, 2011), 66.

¹¹⁹ Trouwborst (n 112) 6.

¹²⁰ Nicolas de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (Oxford: Oxford University Press, 2002), 97.

¹²¹ *ibid.* 98; Zander (n 113) 4, 29.

¹²² De Sadeleer (n 114) 186.

¹²³ Sands *et al.* (n 86) 218. These differing opinions on the terminology, approach vs. principle can best be seen in the WTO *Beef Hormones* case. This case saw a dispute between the United States and Canada against the European Union over the use of artificial beef hormones. The European Union used in its argument the precautionary principle, while the United States and Canada countered stating that the precautionary approach was an approach and not a legal principle. *EC Measures Concerning Meat and Meat Products (Hormones) (Canada and United States v European Community)*, 16 January 1998, AB-1997-4, WTO Doc WT/DS26/AB/R and WT/DS48/AB/R.

¹²⁴ See, De Sadeleer (n 114) 187; Trouwborst (n 112) 11.

¹²⁵ Programme for Further Implementation of Agenda 21, 19 September 1997, UN General Assembly, A/RES/S-19/2, [14]: ‘4. Progress has been made in incorporating the principles contained in the Rio Declaration on Environment and Development—including the principle of common but differentiated responsibilities, ... the precautionary principle ...’

¹²⁶ Agenda 21 (n 125); Rio Declaration (n 81); Trouwborst (n 112) 12.

4.5.3 Threat of harm

The threat of harm to the environment is without doubt one of the key elements of the precautionary principle. Since all interactions with the environment produce some sort of effect or potential change on the environment, it is important to distinguish between acceptable and unacceptable environmental change. According to Arie Trouwborst, '[e]nvironmental change ... qualifies as harm only when it is negative', which, in the context of the precautionary principle, includes 'the impairment of values of nature to humans and the impairment of the intrinsic value of nature.'¹²⁷ Furthermore, generally only anthropogenic—that is, human-caused or -produced, threats—are considered.¹²⁸ Modern examples include deforestation, air pollution, and hunting species to the point of extinction. The threshold terms associated with the level of environmental harm frequently used in the precautionary principle are 'serious or irreversible damage.'¹²⁹

Two key indicators of the seriousness of harm are geographic dispersion, that is, how large an area the harm is going to affect, and the duration or persistence of the harm over time:¹³⁰ the inference is that the larger the area affected and the more long-term or persistent the harm, the more serious the harm. The fact that the harm is also irreversible will also add to its seriousness, 'since irreversible damage is by definition serious.'¹³¹ However, while irreversibility of harm bolsters a finding of seriousness, serious harm is not always irreversible.¹³² For example, the damage from oil spills at sea, such as those seen in the 1990–1 Gulf War, is largely reversible, but oil spills nonetheless 'fall within the scope of the precautionary principle owing to their seriousness.'¹³³ Meanwhile, irreversibility is still an indication of the gravity of the potential harm, as well as incorporating a specific temporal element into the harm threshold.¹³⁴

Finally, for the threat of environmental harm to trigger the precautionary principle there must be more than a 'theoretical possibility of environmental damage.'¹³⁵ There must be 'at least a minimal requirement of proof' otherwise 'the remotest possibilities would be eligible as a basis for precautionary action.'¹³⁶ From this point, the question then becomes a threshold question, not about the threat of harm, but about the degree of scientific uncertainty which triggers the precautionary principle.

4.5.4 Uncertainty and risk

The sheer complexity of the environment, its many elements, many ecosystems, and the interconnectedness of them all, makes scientific certainty in the environmental realm a challenge, to say the least. Isolating causes and effects becomes difficult and this difficulty is only increased when effects may not be fully known or realized in the short term. Scientific uncertainty is, of course, not unique to the environmental realm either. It can often be seen in IHL, for example, with regards to the effects or failure rates of

¹²⁷ Trouwborst (n 112) 133.

¹²⁸ Per Sandin, 'Dimensions of the Precautionary Principle' (1999) 5(5) *Human and Ecological Risk Assessment* 889, 891.

¹²⁹ See, for example, Ramlogan (n 108) 99.

¹³⁰ Trouwborst (n 112) 56.

¹³¹ De Sadeleer (n 120) 165.

¹³² *ibid.*

¹³³ *ibid.*

¹³⁴ Trouwborst (n 112) 58.

¹³⁵ *ibid.*

¹³⁶ *ibid.*

certain weapons. To understand scientific uncertainty in the context of the precautionary principle, it is crucial to first understand uncertainty and risk in science.

Certainty and uncertainty have slightly different meanings in the scientific context than in ordinary day-to-day life. In science, 'certainty is generally considered to lie in the realm of 95%'¹³⁷ and not 100 per cent, since 100 per cent certainty is deemed virtually impossible. A scientist will find something certain if the probability of occurrence or accuracy of the finding is 95 per cent or higher. Therefore, uncertainty in the scientific community exists between 0 and 95 per cent.¹³⁸ In terms of risks, there are certain risks and uncertain risks. Certain risks are those where there is scientific certainty as to the link between cause and effect, while uncertain risks are those for which the 'occurrence of such risks remains controversial at a scientific level, but it is not unreasonable to anticipate their occurrence on the basis of certain data, even if those data have not yet been fully validated.'¹³⁹ Uncertainty here is 'a situation in which the hazard and harm is known, but it is impossible to assign probabilities to its realisation.'¹⁴⁰ Uncertain risks are the focus of the precautionary principle, whereas certain risks, since they are known, fall under a principle of prevention.¹⁴¹

As science and technology continue to progress, it is possible for new knowledge and capabilities to resolve past uncertainties, thereby initiating a shift from precautionary to preventive measures.¹⁴² In the meantime, scientific uncertainty, when combined with a 'serious or irreversible' threat to the environment, will trigger the precautionary principle. The threshold terminology generally associated with scientific uncertainty in the precautionary principle is 'reasonable grounds for concern.'¹⁴³ This refers to the likelihood of the threat occurring or 'how (scientifically) plausible a threat must be to trigger precaution.'¹⁴⁴ If there are reasonable grounds for believing the threat may materialize, then precautionary action is required. It is suggested that this threshold falls 'somewhere between the *possibility* and the *probability* of harm coming about.'¹⁴⁵

4.5.5 The burden of proof

No understanding of the precautionary principle would be complete without an examination of the burden of proof that attaches to the principle. In the context of the precautionary principle, the burden of proof is often described as a 'reverse onus' or a 'shifting burden of proof'.¹⁴⁶ Traditionally, the burden of proof lies with the opponent

¹³⁷ Nancy J. Myers, 'Precautionary Procedures: Tools of Analysis and Intention' in Nancy J. Myers and Carolyn Raffensperger (eds.), *Precautionary Tools for Reshaping Environmental Policy* (Cambridge MA: MIT Press, 2006), 29, 41.

¹³⁸ Zander (n 113) 15. ¹³⁹ De Sadeleer (n 120) 158–9. ¹⁴⁰ Zander (n 113) 14.

¹⁴¹ *ibid.* 15. ¹⁴² Cameron (n 117) 55.

¹⁴³ Trouwborst (n 112) 116; De Sadeleer (n 120) 160.

¹⁴⁴ Trouwborst (n 112); Sandin (n 128) 893.

¹⁴⁵ Trouwborst (n 112) 117 (referencing E.J. Molenaar, *Coastal State Jurisdiction over Vessel-Source Pollution* (The Hague: Kluwer Law International, 1998), 45).

¹⁴⁶ Sands *et al.* (n 86) 222; De Sadeleer (n 120) 203; Balint *et al.* (n 118) 66; Cameron (n 117) 46–7; Trouwborst (n 112) 193; Timothy O'Riordan and James Cameron. 'The History and Contemporary Significance of the Precautionary Principle' in Timothy O'Riordan and James Cameron (eds.), *Interpreting the Precautionary Principle* (London: Earthscan Publications Ltd, 1994), 12, 16; Romeo F. Quijano, 'Elements of the Precautionary Principle' in Joel A. Tickner (ed.), *Precaution, Environmental Science and Preventive Public Policy* (Washington, DC: Island Press, 2003), 21, 23; Stephen Dovers, 'Precautionary Policy Assessment

of the proposed activity, who must provide sufficient evidence of guilt, harm, or risk of harm, depending on the context and standard of proof in question.¹⁴⁷ In criminal justice, the accused is innocent until proven guilty and has no obligation to provide evidence against him/herself.¹⁴⁸ Even in the environmental context, '[t]raditional legal standards ... have tended to privilege parties accused of degrading the environment; until "proven wrong" such parties can continue the activity in question.'¹⁴⁹

In contrast, under the precautionary principle, the burden is shifted to the proponent of action, thereby 'placing the burdens and responsibilities for safety and understanding on producers and not putting the burden of proof of harm on the potential victims.'¹⁵⁰ In doing so, the burden shifts to 'the party or entity that will benefit from the activity' and, even more importantly, 'on the party best able to generate the information needed to make the decision.'¹⁵¹ The burden lies with the entity looking to change the status quo, wherein the status quo is the current less polluted world prior to the introduction of the newly proposed risks.¹⁵²

Such a shift in the burden of proof would seem very appropriate, perhaps even a matter of common sense, in situations where the precautionary principle is in operation. First, the environment and individuals likely to be the victims are rarely in the position to mount an objection prior to the risky activities having taken place. Furthermore, the shifting burden is arguably necessary to align with the objectives and intentions of the precautionary principle which 'posits a presumption in favour of protection of the environment and public health.'¹⁵³ Trouwborst equates the presumption of innocence in criminal law with a presumption of harmfulness under the precautionary principle.¹⁵⁴ Therefore, where threat of harm and scientific uncertainty have triggered the precautionary principle, the maxim should be 'harmful until proven harmless.'¹⁵⁵

Evidence suggest that, in practice, states often apply this shifted burden, but even more frequently states have used and created definitions of the precautionary principle which are silent with regard to the burden of proof to be applied.¹⁵⁶ In such cases, it is unclear whether the traditional burden of proof is automatic and assumed. A strong argument for the precautionary style burden's logic and trueness to the objectives and aims of the principle itself can be made to suggest it is inherent in the invocation of the principle even where it is not explicitly stated.¹⁵⁷

for Sustainability' in Elizabeth Fisher, Judith Jones, and René von Schomberg (eds.), *Implementing the Precautionary Principle: Perspectives and Prospects* (Cheltenham UK: Edward Elgar Publishing, 2006), 88, 92. Minna Pyhälä, Anne Christine Brusendorff, and Hanna Paulomäki, 'The Precautionary Principle' in Malgosia Fitzmaurice, David M. Ong, and Panos Merkouris (eds.), *Research Handbook on International Environmental Law* (Cheltenham UK: Edward Elgar Publishing, 2010), 203, 213.

¹⁴⁷ Sands *et al.* (n 86) 222.

¹⁴⁸ For example, section 6 of the Canadian *Criminal Code*, RSC 1985, C-46.

¹⁴⁹ Cameron (n 117) 46. ¹⁵⁰ Quijano (n 146) 23.

¹⁵¹ Jonathan B. Wiener, 'Precaution' in Daniel Bodansky, Jutta Brunnée, and Ellen Hey (eds.), *The Oxford Handbook of International Environmental Law* (Oxford: Oxford University Press, 2007) 597, 606.

¹⁵² Cameron (n 117) 47. ¹⁵³ De Sadeleer (n 114) 203. ¹⁵⁴ Trouwborst (n 112) 200.

¹⁵⁵ *ibid.* ¹⁵⁶ *ibid.* 223.

¹⁵⁷ Such an implied burden of proof where definitions are silent has been claimed in the 1996 FAO 'Precautionary Approach to Capture Fisheries and Species Introductions' FAO Technical Guidelines for Responsible Fisheries 2, at <<http://www.fao.org/docrep/003/w3592e/w3592e00.htm>> accessed 31 May 2017; as well as in the Pakistani Supreme Court case *Shehla Zia v WAPDA*, PLD, 1994 Supreme Court 693.

4.5.6 The legal status of the precautionary principle

The status of the precautionary principle as a general principle of international law is largely accepted.¹⁵⁸ Those who deny it has achieved this status primarily attribute it to the fact that the principle is subject to so many varying interpretations, that there are 'no clear rules of application', and that the term itself is 'ambiguous and undefined'.¹⁵⁹ In contrast, proponents of the principle note that the more general nature of the principle is essential because in order 'to be effective it must be general in character but capable of devolving to the particular'.¹⁶⁰ In practice, the principle has demonstrated this capacity through its application to both specific areas of IEL, such as ozone depletion, as well as to more general concepts, as in the case of environmental protection and development.¹⁶¹ Furthermore, they note that it is 'characteristic of *general* principles with a wide scope of application [... to have] various elements ... open to interpretation'.¹⁶²

The principle has 'received widespread support by the international community'¹⁶³ and also forms 'an essential part of all municipal (domestic) systems for protecting health, safety and the environment'.¹⁶⁴ Cameron notes that '[i]t has also achieved near universal recognition as a fundamental element in the creation of new environmental policy instruments'¹⁶⁵ which suggests that the principle's acceptance is continuing to increase. It appears there is a great deal of evidence to support not only widespread practice by many states,¹⁶⁶ but also recognition by many national courts that the precautionary principle has achieved international legal status.¹⁶⁷

The decisions of international courts do little to support or denounce the status of the precautionary principle as a general principle. The precautionary principle was raised before the ICJ in the *Nuclear Test* case.¹⁶⁸ The majority did not address it in its judgment; however, Ad Hoc Judge Palmer and Judge Weeramantry each addressed the principle in their dissenting opinions. Ad Hoc Judge Palmer stated that the principle 'm[ight] now be a principle of customary international law',¹⁶⁹ while Judge Weeramantry said the principle 'was gaining increasing support as part of the international law of the environment'.¹⁷⁰ In the 2010 *Pulp Mills* case before the ICJ, both parties discussed the precautionary principle in their submissions, but the majority judgment did not deal with the principle.¹⁷¹ Judge Trinidad, in his separate opinion, discussed the precautionary principle at length. He noted that both parties to the dispute seemed to have accepted the principle and only disagreed over whether it applied in the particular circumstances of the case.¹⁷² Finally, he noted that '[t]he fact that the Court's Judgment silenced on them does not mean that the principles of prevention and of precaution do not exist. They do exist and apply, and are ... of the utmost importance as part of the

¹⁵⁸ See, for example, De Sadeleer (n 114) 183; Cameron (n 117) 30; Trouwborst (n 112) 6.

¹⁵⁹ Dupuy (n 84) 462; Zander (n 113) 29–31; Dovers (n 146) 89. ¹⁶⁰ Cameron (n 117) 47.

¹⁶¹ *ibid.* ¹⁶² Trouwborst (n 112) 160. ¹⁶³ Sands *et al.* (n 86) 221.

¹⁶⁴ Daniel Barstow Magraw and Lisa D. Hawke, 'Sustainable Development' in Bodansky, Brunnée, and Hey (n 151) 632.

¹⁶⁵ Cameron (n 117) 30. ¹⁶⁶ Ramlogan (n 108) 86–98. ¹⁶⁷ *ibid.*

¹⁶⁸ *Nuclear Tests Case Order* (n 106). ¹⁶⁹ *ibid.* (dissenting opinion of Ad Hoc Judge Palmer).

¹⁷⁰ *ibid.* (dissenting opinion of Judge Weeramantry).

¹⁷¹ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Provisional Measures, Order of 13 July 2006, ICJ Reports 2006, 113 [164].

¹⁷² *ibid.* (Separate Opinion of Judge Trinidad).

jus necessarium. We can hardly speak of International Environmental Law nowadays without those general principles.¹⁷³

Ultimately, despite limited discussion of the principle by international courts, there appears to be strong support for concluding that the precautionary principle is a general principle of international law.

4.5.7 Health and the precautionary principle

Human health is often reliant on a healthy environment. Environmental degradation in the form of air pollution, water contamination, or health risks entering the food chain can have negative effects on human health. Health is one part of a broader definition of 'environment', such as was used in the 2005 *Iron Rhine* case decided by the Permanent Court of Arbitration. The Court defined 'environment' as including 'air, water, land, flora and fauna, natural ecosystems and sites, human health and safety, and climate'.¹⁷⁴ Furthermore, it is very difficult to separate one from the other since a healthy environment promotes good human health and, even more so, an unhealthy environment is likely to have negative health impacts on individuals.¹⁷⁵

Oftentimes, the threat to human health can be an important factor in the assessment of the severity of the threat of harm under the precautionary principle. This link between the environment and health is often even more evident in conflict zones where weapons can simultaneously threaten both the environment and human health, such in the case of depleted uranium weapons or unexploded munitions.

4.6 Precaution and Proportion: The Precautionary Principle Versus International Humanitarian Law

Precaution and proportionality are key components, not only of the precautionary principle but also under IHL. However, these concepts are not entirely interchangeable under the precautionary principle and IHL.

Proportionality arises under the precautionary principle when considering the course of action for addressing the threat of harm that has arisen.¹⁷⁶ Proportionality seeks to ensure that responses to threats of harm 'correspond to the perceived dimensions of the risk involved'.¹⁷⁷ In other words, '[t]he *more* significant or the *more* serious the expected environmental impact, the more rigorous preventive or abatement measures may, respectively must be'.¹⁷⁸ Should there be more than one option available and uncertainty or doubt as to which should be chosen, in keeping with the precautionary principle the option which errs on the side of protecting the environment should be selected.¹⁷⁹

Under IHL proportionality is the 'requirement to select the method or means of attack likely to cause the least collateral damage or incidental injury, all other things

¹⁷³ *ibid.*

¹⁷⁴ *Iron Rhine Railway (Belgium v Netherlands)* (2005) 27 RIAA 35 (Permanent Court of Arbitration), [58].

¹⁷⁵ Trouwborst (n 112) 16.

¹⁷⁶ *ibid.* 149–58; De Sadeleer (n 120) 155.

¹⁷⁷ Trouwborst (n 112) 150.

¹⁷⁸ *ibid.* (emphasis in original)

¹⁷⁹ *ibid.* 158.

being equal, relative to the military advantage obtained'.¹⁸⁰ Proportionality under the precautionary principle is similar to proportionality under IHL in that it serves to '[adjust] the means to the objective' and demands that 'a course of action is chosen that corresponds to the size of the risk involved'.¹⁸¹ Where it differs is in the objective that is sought. Under the precautionary principle, actors are seeking to balance the desired action, usually development, with environmental protection. In this process 'the precautionary principle posits a presumption in favour of protection of the environment and public health'.¹⁸² In IHL, the consideration of proportionality results in weighing and balancing military necessity and humanity with the benefit of the doubt generally given to military actors.¹⁸³ Critically, the draft principles on protection of the environment in relation to armed conflict provisionally accepted by the ILC in 2015 include recognition of the requirement to consider the environment in the application of the principle of proportionality in IHL.¹⁸⁴

Precaution also differs in its precise meaning. While precaution under IHL without question 'constitute[s] obligatory standards of conduct'¹⁸⁵ and is enshrined in customary international law,¹⁸⁶ the concept 'remains relatively abstract',¹⁸⁷ perhaps even more so than under the precautionary principle. Whereas the precautionary principle includes thresholds such as 'serious or irreversible harm' and 'reasonable grounds for concern', precaution in IHL is merely phrased as 'all feasible precautions'. This is worrisome because it largely leaves it to the military decision-maker to determine what the requirements for fulfilling this duty will be. It fails to provide a yardstick by which to gauge whether the duty has been fulfilled. General principles of international law, such as intergenerational equity and the precautionary principle, can and should be used to provide more of a yardstick in IHL.

Whereas scientific uncertainty triggers the precautionary principle, the duty to take precautions in IHL flows from the principle of distinction. The duty of precaution in IHL includes things such as a 'duty to verify the nature of the target',¹⁸⁸ an 'obligation to choose the military objective that involves the least danger to civilian lives and civilian objects',¹⁸⁹ and an 'obligation to give advance warning of an attack that may affect the civilian population'.¹⁹⁰ As ILC Special Rapporteur Marie Jacobsson has stated, 'If the environmental effects of a particular activity are known, then the measures taken

¹⁸⁰ Michael N Schmitt, 'The Principle of Discrimination in 21st Century Warfare' (1999) 2 *Yale Human Rights & Development Law Journal* 143, 150.

¹⁸¹ Trouwborst (n 112) 149–58. ¹⁸² De Sadeleer (n 120) 203.

¹⁸³ Richard A Falk, *Revitalizing International Law* (Ames, IA: Iowa State University Press, 1989), 168. This can also be inferred from the remark in Gary D Solis, *The Law of Armed Conflict: International Humanitarian Law in War* (Cambridge: Cambridge University Press, 2010) 263 which states 'Military necessity trumps the modest health risks to civilians [in the context of depleted uranium weapons]'. It can also be inferred from the decision of the ICTY Prosecutor, Carla Del Ponte, not to open a criminal investigation into NATO bombings in Kosovo, 'Prosecutor's Report on the NATO Bombing Campaign' 13 June 2000, The Hague, at <<http://www.icty.org/sid/7846>> accessed 31 May 2017.

¹⁸⁴ Report of the ILC 2015 (n 89) Draft principle II-2 and II-3.

¹⁸⁵ Jean-François Quéguiner, 'Precaution Under The Law Governing The Conduct Of Hostilities' (2006) 88(864) *International Review of the Red Cross* 793, 794.

¹⁸⁶ Jean-Marie Henckaerts and Louise Doswald-Beck, 'Rule 22. Principle of Precautions Against the Effects of Attacks' in *Customary International Law Vol I: Rules* (Cambridge: ICRC and Cambridge University Press, 2009).

¹⁸⁷ Quéguiner (n 185) 796.

¹⁸⁸ *ibid.* 797.

¹⁸⁹ *ibid.* 805.

¹⁹⁰ *ibid.* 806.

to avoid them are preventative only; if the effects are unknown, then the same measure can be labelled as precautionary.¹⁹¹ While Jacobsson notes this in the context of the environmental distinction between prevention and precaution, I believe that this distinction would be usefully applied in the IHL context. The nature of the obligations said to flow from precaution in IHL would seem to suggest it has more of a preventive than precautionary nature, as precaution is understood in the IEL context, since the IHL precaution provisions appear to target commonsense risks to civilians which do not attract a high degree of uncertainty. For instance, providing a warning in advance to clear an area of civilians or attacking at night when fewer civilians are out or in the area. If civilians are unaware of a pending attack they cannot take measures to protect themselves. Likewise, if an attack is conducted during the day there are likely to be more civilians in the streets, in office buildings, etc. Issuing a warning and/or attacking at night would simply seem to be commonsense preventive measures, rather than precautionary in the sense of the precautionary principle.

Meanwhile, the precautionary principle has thresholds which trigger action and is closely linked to science even if uncertainty plays a large role. Fundamentally, where precaution in IHL seems to demand certain actions/outcomes, '[a] fundamental feature of the precautionary principle is that it is not concerned with guaranteeing a particular outcome, but rather with the *process* by which a decision is made.'¹⁹²

While precaution and proportionality in IHL and under the precautionary principle both seek to protect entities from damage, under the precautionary principle they appear to provide better protection. Both seek to balance the size of the threat with the response to the harm, but under IHL the benefit of the doubt is often given to the military actor carrying out the risky activity. Meanwhile, under the precautionary principle the benefit of the doubt lies in favour of protecting the environment. Furthermore, the precautionary principle provides more substantive content and guidelines for assessing precaution (threat of serious or irreversible harm and scientific uncertainty) while under IHL a general and vague duty to take 'all feasible precautions' is given with little guidance as to the content of that duty. The precautionary principle provides more detailed and more protective standards than precaution and proportionality under IHL.

4.7 Principles of IEL in *Jus Post Bellum*

Ceasefire and peace agreements can provide a framework for *jus post bellum*.¹⁹³ Within these documents should be the norms which will provide the foundation for a sustainable peace. However, these agreements are limited by who gets to participate in the negotiations and by what these individuals and groups chose to prioritize. Serious humanitarian and security concerns often dominate discussions at the cost of consideration for the protection, rehabilitation, and remediation of the environment. If it is

¹⁹¹ ILC Preliminary Report (n 87) para. 137.

¹⁹² Elizabeth Fisher, 'Risk and Environmental Law: A Beginner's Guide' in Benjamin J. Richardson and Stepan Wood (eds.), *Environmental Law for Sustainability* (Portland, OR: Hart Publishing, 2006) 97, 118.

¹⁹³ See Jennifer S. Easterday, 'Peace Agreements as a Framework for *Jus Post Bellum*' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 379.

true that a healthy environment is essential for the realization of most if not all human rights, then it would seem an essential component for the foundation of a sustainable peace. Ensuring access to and the infrastructure for energy, clean water, and sanitation is an important building block in post-conflict reconstruction and can also contribute to the restoration of confidence in the government.¹⁹⁴

Easterday notes the silences in peace agreements which exclude the voices of marginalized groups such as women and indigenous groups,¹⁹⁵ but there can also be subject matter silences and the environment has been, at times, one such silence. For example, conflicts in Liberia (1999–2003) and Sierra Leone (1991–2002) both had strong natural resource and environmental degradation elements, yet neither of the peace agreements ending these conflicts addressed environmental protection or remediation. While the Lomé Accord in Sierra Leone makes mention of natural resources, the management of these resources is discussed in the context of their exploitation, not their protection.¹⁹⁶ This suggests that, moving forward, a more concerted effort is required to place environmental protection and remediation on the agenda during peace negotiations.

There are, however, several examples of peace agreements which have included environmental protection and/or remediation. These include the 1992 Chapultepec Agreement,¹⁹⁷ the 1998 Northern Ireland Peace Agreement (the Good Friday Agreement),¹⁹⁸ and the 2003 Sun City Agreement.¹⁹⁹ Consequently, while consideration of environmental protection and remediation has not always featured in peace agreements, there is considerable evidence that ‘environmental considerations have become an accepted part of peace agreements.’²⁰⁰ ILC Special Rapporteur, Marie Jacobsson, has proposed the inclusion of a principle addressing peace agreements in the draft principles on the protection of the environment in relation to armed conflict.²⁰¹ While the language of the provision merely encourages (as opposed to requiring) parties to a conflict to address ‘the restoration and protection of the environment damaged by the armed conflict in their peace agreements,’²⁰² it nonetheless represents a crucial acknowledgement of the importance of considering and addressing environmental protection and remediation in peace agreements.

¹⁹⁴ Mott MacDonald, ‘Provision of Infrastructure in Post Conflict Situations’ (2005) Department for International Development, London, UK, at <<http://www.comm-unity.de/blog/wp-content/uploads/2006/11/6484.pdf>> accessed 31 May 2017.

¹⁹⁵ Easterday (n 193) 406.

¹⁹⁶ Peace Agreement between the Government of Sierra Leone and the Revolutionary United Front of Sierra Leone, S/1999/777, annex, Art. VII, at <<http://peacemaker.un.org/sierraleone-lome-agreement99>> accessed 31 May 2017.

¹⁹⁷ Peace Agreement between the Government of El Salvador and the Frente Farabundo Martí para la Liberación Nacional (Chapultepec Agreement), done at Mexico City, 16 January 1992, A/46/864, annex, chap. II, at <<http://peacemaker.un.org/elsalvador-chapultepec92>> accessed 31 May 2017.

¹⁹⁸ The Northern Ireland Peace Agreement (Good Friday Agreement), done at Belfast, 10 April 1998, 20, at <<http://peacemaker.un.org/uk-ireland-good-friday98>> accessed 31 May 2017.

¹⁹⁹ Final Act of the Inter-Congolese Political Negotiations (Sun City Agreement), done at Sun City, 2 April 2003, at <<http://peacemaker.un.org/drc-suncity-agreement2003>> accessed 31 May 2017.

²⁰⁰ Marie G. Jacobsson, Special Rapporteur, Third Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A/CN.4/700, 3 June 2016, para. 160.

²⁰¹ *ibid.* The draft text for this provision reads: ‘Parties to a conflict are encouraged to settle matters relating to the restoration and protection of the environment damaged by the armed conflict in their peace agreements.’

²⁰² *ibid.*

In addition to peace agreements, Truth and Reconciliation Commissions ('TRC') are being increasingly employed as a mechanism for identifying and prioritizing areas of focus for countries during a transitional *jus post bellum* phase. TRC final reports outline the results of its fact-finding mission, and offer recommendations on reforms, reparations, and steps needed to address and redress wrongs that have been committed, thereby facilitating post-conflict transition and the construction of a sustainable peace.

Both Liberia and Sierra Leone had Truth and Reconciliation Commissions in the wake of their respective civil wars. The final reports of both commissions address natural resources and the environment. The Liberian TRC recommended the sustainable 'utilization and exploitation of [Liberia's] natural resources ... for the benefit of [the] current generation and in the interest of generations to come.'²⁰³ Furthermore, it advocates that the environmental impacts of resource exploitation be 'mitigated to the highest extent possible.'²⁰⁴ The Sierra Leone TRC devoted an entire chapter of its report to 'Mineral Resources, their Use and their Impact on the Conflict and the Country'. The TRC did note the negative environmental consequences of alluvial mining such as the destruction of land for agricultural purposes leading to food shortages, as well as deforestation and stagnant water (both undrinkable and a breeding ground for disease).²⁰⁵ Unfortunately, the TRC's commentary on this environmental degradation was not matched by recommendations on how to address the problem, instead recommendations focused only on improved governmental regulation of the industry.²⁰⁶ The TRC did, however, in a separate chapter, advocate for a Human Rights Commission which would be tasked with upholding fundamental human rights as well as protection of the environment.²⁰⁷ Even still, recommendations from TRCs are generally not binding on the actors they are addressed to, generally national governments and, consequently, are not necessarily the most effective tool for ensuring that action is taken.

While TRCs provide a platform for creating a framework for *jus post bellum*, their often long and drawn-out process may make them less efficient tools than the more immediate tool of peace agreements. However, presently, neither tool seems to be adequately (in the case of TRCs) or consistently (in the case of peace agreements) employed to address issues of environmental degradation and remediation essential to form the foundation for sustainable peace.

4.8 Conclusion

That the environment will be affected negatively by armed conflict is inevitable: armed conflict is inherently destructive and the environment is omnipresent and cannot be

²⁰³ Republic of Liberia Truth and Reconciliation Commission, Vol. II: Consolidated Final Report, 30 June 2009, 403 para. 20.7, at <http://trcofliberia.org/resources/reports/final/volume-two_layout-1.pdf> accessed 31 May 2017.

²⁰⁴ *ibid.*

²⁰⁵ Witness to Truth: Report of the Sierra Leone Truth and Reconciliation Commission, Vol. 3B, 2004, 51 para. 197, at <<http://www.sierra-leone.org/Other-Conflict/TRCVolume3B.pdf>> accessed 31 May 2017.

²⁰⁶ *ibid.* 1–55.

²⁰⁷ Witness to Truth: Report of the Sierra Leone Truth and Reconciliation Commission, Vol. 2, 2004, 136 para. 99 fn 32, at <<http://www.sierra-leone.org/Other-Conflict/TRCVolume2.pdf>> accessed 31 May 2017.

disassociated from military operations. Nonetheless, this does not mean that the environmental consequences of military operations may be ignored or that they do not demand consideration before, during, and post-conflicts. No area of international law, not even international humanitarian law, operates in a vacuum, unaffected by international law as a whole. General principles of international law serve to link the many areas of international law academics and practitioners label and divide into boxes. General principles may not have the strict and specific content and contours of rules found in treaties or customary law, but this is the very reason why they are such useful tools across the entire breadth of international law. Their generality and abstractness allow them to unify international law through interpretive guidance, filling gaps in the law, and allowing international law to continue to develop with the needs of the international community.

Whether a military decision-maker assessing the legality of a particular weapon or a delegate at the table of a peace negotiation, the environment must be a consideration. It is in these decision-making processes that decision-makers should be employing general principles of international law to guide their interpretation and application of rules of *jus in bellum*, *jus in bello*, and *jus post bellum*. This chapter has shown that principles of international environmental law, in particular intergenerational equity and the precautionary principle, can and should enrich IHL. Principles, such as intergenerational equity and the precautionary principle which provide thresholds and guidance as to how to proceed when dealing with decisions involving short- and long-term consequence as well as those affected by scientific uncertainty, can only improve the consideration afforded to the environment in armed conflict.

Ultimately, wars end. The legal requirements in IHL and, in international law more generally, to ensure the protection of humanity (inclusive of the environment) require that action before, during, and after war is guided by principles designed and equipped to minimize and prevent the longevity of harms associated with war. Principles of IEL provide necessary nuance to military decision-makers applying existing *jus in bello* protections for civilians and the environment, but this is not sufficient unto itself. Environmental destruction and degradation during conflict can and must be minimized, but it is next to impossible to eradicate it completely. As a result, it is critical that IEL principles continue to be at the forefront of decision-makers' minds in the transition to peace, the *jus post bellum*. While serious humanitarian and security concerns often dominate in peace negotiations, there must be equal recognition of the significant adverse impacts of environmental insecurity and the need for the ongoing application of principles of IEL. TRCs provide a mechanism for continuing attention to environmental remediation and protection and a platform for strong recommendations to governments on how to achieve this post-conflict. A lasting and sustainable peace and reconstruction may begin with adherence to and application of IHL protections for the environment and civilians during conflict, but it will be realized in the *jus post bellum*. Principles of IEL provide the best path to attaining this lasting and sustainable peace.

Using a Framework of Human Rights and Transitional Justice for Post-Conflict Environmental Protection and Remediation

*Karen Hulme**

5.1 Introduction

According to the United Nations Environment Programme ('UNEP') in its 2002 post-conflict report on Afghanistan, 'Nearly 25 years of armed conflict, and four years of extreme drought, have created widespread human suffering and environmental devastation across the country.'¹ Similarly, recent conflicts in Gaza, Lebanon, Iraq, Somalia, DRC, and Colombia, to name but a few, have left clear scars on the affected societies and their environments. As UNEP's post-conflict country reports frequently demonstrate, including the report on Afghanistan, armed conflict often entails extensive damage to key natural resources needed for human survival, such as drinking water installations and agricultural lands, crops, and other food sources. Frequently, however, exacerbating the environmental damage caused during armed conflict are structural inequalities in land tenure and long-term socio-economic injustices, including in accessing healthy natural resources. These historic grievances often provide key causal factors in sparking conflict and in perpetuating the cycle of conflict.

That there is a clear synergy between environmental protection and human rights, particularly economic, social, and cultural rights, is well established.² In 2009 the Office of the High Commissioner on Human Rights stated that 'while the universal human rights treaties do not refer to a specific right to a safe and healthy environment, the United Nations human rights treaty bodies all recognize the intrinsic link between the environment and the realization of a range of human rights, such as the right to life, to health, to food, to water, and to housing.'³ Yet, the relationship between human rights and environmental protection is an unexplored dimension for achieving post-conflict environmental protection and remediation. This contribution, therefore, is novel in framing post-conflict environmental remediation in terms of using human rights laws

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¹ UNEP, *Afghanistan: Post-Conflict Environmental Assessment* (UNEP, 2003), 14.

² General Assembly Resolution 45/94, 'Need to Ensure a Healthy Environment for the Well-being of Individuals', 14 December 1990. There is a burgeoning literature discussing the field of environmental human rights, see Anna Grear and Louis Kotze (eds.), *Research Handbook on Human Rights and the Environment* (Edward Elgar, Cheltenham 2015).

³ UNHRC, Report of the OHCHR on the Relationship Between Climate Change and Human Rights, UN Doc. A/HRC/10/61, 15 January 2009, para. 18.

and enforcement mechanisms, including to some degree the mechanisms of transitional justice. The undeniable value of human rights as a body of law in this context is that it affords a comprehensive set of binding, universal obligations with a generally well-developed system of international mechanisms for redress and as a check on state compliance. Environmental law, on the other hand, does not afford such methods of redress, remedy, or reparation.

The focus of this chapter, therefore, will be to test the value of a human rights framework as a tool for addressing environmental damage in the post-conflict context. Particular emphasis will be placed on survival rights, such as the rights to water, food, and health found within economic, social, and cultural rights ('ESC rights'), via the 1966 International Covenant on Economic, Social and Cultural Rights ('ICESCR'),⁴ and the emerging right to a healthy environment. A focus on post-conflict human rights mechanisms also has implications for the discipline of transitional justice, among others. While the chapter will focus largely on human rights mechanisms, there is also scope for enhanced consideration of environmental remediation and reparation within transitional justice approaches. Such transitional justice mechanisms have often struggled with the issue of incorporating ESC rights, particularly as regards historical environmental injustices and inequalities, including when these inequalities have been a causal factor in sparking the conflict. Nevertheless, it also has to be recognized that both human rights and transitional justice now function within a much broader post-conflict legal and political landscape, which includes peacebuilding and, arguably, the emerging field of *jus post bellum*. Section 5.2, therefore, will briefly analyse this landscape, situating the human rights framework within it and suggesting what values it might promote. Section 5.3 will analyse how human rights law already embraces protection for the environment via ESC rights and the right to a healthy environment. Finally, discussion of the value of the human rights framework for post-conflict environmental remediation will be situated in Section 5.4, identifying key issues for analysis throughout the section.

5.2 Post-Conflict Legal Frameworks

Human rights law sits among myriad other frameworks or mechanisms in the post-conflict domain, such as those of transitional justice, international criminal justice, and peacebuilding, as well as those centred on the liberal democratization agenda, and now the emerging notion of *jus post bellum*.⁵ International criminal law ('ICL') remains principally a criminal accountability tool for top-tier perpetrators of gross human rights violations or grave breaches of humanitarian law, while transitional justice is often able to achieve a measure of both accountability and reparation for a broader range of violations. This section will demonstrate where human rights fit within these various post-conflict mechanisms.

⁴ (1976) 993 UNTS 3.

⁵ See generally Carsten Stahn, 'Jus Post Bellum: Mapping the Discipline(s)' in Carsten Stahn and Jann K. Kleffner (eds.), *Jus Post Bellum: Towards a Law of Transition from Conflict to Peace* (The Hague: T.M.C. Asser Press, 2008).

Annun defined transitional justice as comprising ‘the full range of processes and mechanisms associated with a society’s attempts to come to terms with a legacy of large-scale past abuses, in order to ensure accountability, serve justice and achieve reconciliation.’⁶ Transitional justice has, therefore, moved beyond its original conception of confronting the ‘wrongdoings of repressive predecessor regimes,’⁷ including breaches of human rights and humanitarian law, to advancing nation-building via an alternative source of rule of law and the goal of preserving peace.⁸ Hannum suggests that the only component of transitional justice which is still truly ‘transitional’ relates to the fact that a transitional government is often in power.⁹ Otherwise states are merely protecting and enforcing human rights and instituting punishment for war crimes. Once one moves to the third component that he identifies, namely ensuring the rule of law, it is no longer only about human rights, he argues, but the creation of functioning and effective state bodies and legal system.¹⁰ Teitel refers to the growth of truth commissions, suggesting these to be the product of the broadening of the aims of transitional justice to include reconciliation and, again, the promotion of peace.¹¹ Others accuse proponents of this aspect of transitional justice of playing the role of ‘handmaiden’¹² to liberal peacebuilding, whereby transitions to Western-style market democracies are predicated on the over-simplistic basis that democracies are less likely to go to war.¹³ Emerging in this already busy field is the modern concept of *jus post bellum*, where there also appears to be a similar focus, at least by some, on the notion of achieving a sustainable and just peace.¹⁴ Yet, while the contemporary *jus post bellum* concept remains to be fully defined and its scope identified,¹⁵ Wählisch argues for a central role for human rights. Human rights, he proposes, ‘play a critical role as an indicator for *jus post bellum*,’¹⁶ suggesting that ‘their respect is essential for the completion of peacebuilding.’¹⁷ To this basis others add the key peacebuilding attributes of reparation, reconciliation, justice (transitional justice and ICL mechanisms), and, ultimately, and somewhat controversially, democracy.¹⁸ On the other hand, a narrower approach to the *jus post bellum* concept, however, refers more simply to the *jus post bellum* as offering merely a valuable ‘framework’¹⁹ for post-conflict reconstruction.²⁰ Clearly, whether a

⁶ Report of the Secretary-General, ‘The Rule of Law and Transitional Justice in Conflict and Post-conflict Societies’, S/2004/616, 23 August 2004, para. 8.

⁷ Ruti G. Teitel, ‘Transitional Justice Genealogy’ (2003) 16 *Harvard Human Rights Journal* 69, 69.

⁸ *ibid.* 76.

⁹ Hurst Hannum, ‘Human Rights in Conflict Resolution: The Role of the Office of the High Commissioner for Human Rights in UN Peacemaking and Peacebuilding’ (2006) 28 *Human Rights Quarterly* 1, 36.

¹⁰ *ibid.* 37. ¹¹ Teitel (n 7) 81.

¹² Lars Waldorf, ‘Anticipating the Past: Transitional Justice and Socio-Economic Wrongs’ (2012) 21 *Social & Legal Studies* 171, 173.

¹³ *ibid.*

¹⁴ Larry May, ‘Jus Post Bellum, Grotius and Meionexia’ in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 25.

¹⁵ See generally Stahn (n 5).

¹⁶ Martin Wählisch, ‘Conflict Termination from a Human Rights Perspective: State Transitions, Power-Sharing, and the Definition of the ‘Post’ in Stahn *et al.* (n 14) 321.

¹⁷ *ibid.* ¹⁸ May (n 14). ¹⁹ Stahn (n 5) 105.

²⁰ *ibid.* Indeed, Stahn suggests that humanitarian lawyers view *jus post bellum* primarily as a mechanism for post-conflict reconstruction.

narrow approach or a more comprehensive definition is ultimately adopted for the *jus post bellum* concept, both approaches or frameworks could include human rights (and, therefore, the remediation of environmental damage via reparation for human rights violations) at the core.

Arguably, all of the international mechanisms, processes, and frameworks for dealing with post-conflict societies place human rights at their core, whether they seek criminal accountability for violations of human rights, the creation of a lasting rule of law, or sustainable and just peace. However, as with the general bifurcation of human rights into civil and political rights²¹ on the one hand and economic, social, and cultural rights on the other, these post-conflict processes, mechanisms, and frameworks have also tended to emphasize one set of rights over the other, namely civil and political rights. Indeed, a major criticism of transitional justice in recent years has been due to its clear inattention to ESC rights.²² Laplante and Arbour, in particular, deplore the way in which socio-economic injustices are frequently ignored or are omitted from any resulting recommendations.²³ Sharp blames this omission on the tendency to focus only on the means of transitioning to a Western-style democracy rather than a transition to ‘positive peace.’²⁴ As distinguished from ‘negative peace’ or simply the absence of armed conflict, the notion of positive peace would, he suggests, require the ‘inclusion of mechanisms to specifically address all forms of ‘structural violence,’ including poverty, radical economic, social, civil, and political inequalities, and other forms of social injustice’²⁵—thus, arguably, including environmental inequalities and access to resources.

For all of the post-conflict, justice, and peacebuilding frameworks there remains the key question of when they start and when they end. Often such processes will have no clear starting point and an even less clear end point. Some post-conflict processes may have to be specifically negotiated, set up, and adapted for particular situations and states. This observation is especially pertinent for transitional justice mechanisms, which often take many years to negotiate and establish.²⁶ Human rights mechanisms, on the other hand, are different, as these should already have some measure of acceptability and presence within most states—and thus there is a clear advantage in using

²¹ Note the 1966 International Covenant on Civil and Political Rights (1976) 999 UNTS 171 (‘ICCPR’).

²² Shedrack C. Agbakwa, ‘A Path Least Taken: Economic and Social Rights and the Prospects of Conflict Prevention and Peacebuilding in Africa’ (2003) 47 *Journal of African Law* 38, 40.

²³ Lisa J. Laplante, ‘Transitional Justice and Peace Building: Diagnosing and Addressing the Socioeconomic Roots of Violence through a Human Rights Framework’ (2008) 2(3) *International Journal of Transitional Justice* 331, 333; Louise Arbour, ‘Economic and Social Justice for Societies in Transition’ (2007–2008) 40 *NYU Journal of International Law & Policy* 1, 4; but now see the inclusion of land redistribution in the 2016 Colombian Peace Agreement, in Nicole Summers, ‘Colombia’s Victims’ Law: Transitional Justice in a Time of Violent Conflict?’ (2012) 25 *Harvard Human Rights Journal* 219.

²⁴ Dustin N. Sharp, ‘Addressing Economic Violence in Times of Transition: Toward A Positive-Peace Paradigm For Transitional Justice’ (2012) 35 *Fordham International Law Journal* 780; Johan Galtung, ‘Violence, Peace, and Peace Research’ (1969) 6(3) *Journal of Peace Research* 167.

²⁵ Sharp (n 24) 807; see also Geoff Harris ‘The Costs of Armed Conflict in Developing Countries’ in Geoff Harris (ed.), *Recovery from Armed Conflict in Developing Countries: An Economic and Political Analysis* (London: Routledge, 1999), 23.

²⁶ Clara Sandoval, ‘Transitional Justice and Social Change’ (2014) 20 *SUR International Journal on Human Rights* 181.

human rights mechanisms, in principle, for post-conflict redress—but we must also recognize, of course, that these mechanisms may have been ineffective before the conflict.²⁷

There is a final point to note as regards human rights obligations and, what Orend terms, the ‘termination’ phase of conflict.²⁸ There is often no clear moment when an armed conflict ends. And, since it is clear that human rights obligations (including ESC rights) continue to remain applicable during armed conflict,²⁹ as well as during times of occupation,³⁰ human rights and its mechanisms, therefore, may have enhanced value during such a ‘legally-messy’ time. This aspect is especially pertinent as it could be argued that the continuing applicability of human rights during armed conflict aids in bridging the termination phase between conflict and peace. Consequently, human rights law undoubtedly provides a very valuable, if not unique, legal discipline for framing the current analysis.

5.3 Environmental Damage as a Human Rights Issue

It is clear that environmental damage is a human rights issue. It has long been recognized that environmental damage can have both direct and indirect impacts on the enjoyment of a wide range of human rights and, in some circumstances, damage to the environment can be a violation of human rights laws.

Since all human rights are universal, indivisible, interdependent, and interrelated,³¹ a healthy, functioning environment, therefore, is a necessary basis from which most other human rights are possible, including the human rights to development,³² food,³³

²⁷ Note the work of the UN Special Rapporteur on the promotion of truth, justice, reparation, and guarantees of non-recurrence, Pablo de Greiff, ‘Human Rights and Transitional Justice’, A/HRC/RES/33/19, 5 October 2016, at <<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/225/83/PDF/G1622583.pdf?OpenElement>> accessed 1 June 2017.

²⁸ Brian Orend, ‘Jus Post Bellum: A Just War Theory Perspective’ in Stahn and Kleffner (n 5) 34.

²⁹ General Assembly Resolution 2675 (XXV), Basic Principles for the Protection of Civilian Populations in Armed Conflict, 9 December 1970; *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, Judgment of 8 July 1996, ICJ Reports 226, para. 25; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 9 July 2004, ICJ Reports 136, para. 106; *Case Concerning Armed Activities on the Territory of the Congo (DRC v. Uganda)*, Judgment of 19 December 2005, ICJ Reports 168, para. 216. On the issue of extra-territoriality of human rights obligations see Human Rights Committee, General Comment No. 31: The Nature of the General Legal Obligation Imposed on State Parties to the [International] Covenant [on Civil and Political Rights], UN Doc. CCPR/C/21/Rev.1/Add.13, 26 May 2004, para. 10; CESCR, Concluding Observations, Israel, UN Doc. E/C.12/1/Add.90, 23 May 2003, para. 31; *Al-Skeini and Others v. the United Kingdom* App no 55721/07, (ECtHR, 7 July 2011), paras. 147–9; *Hassan v. the United Kingdom* App no 29750/09, (ECtHR, 16 September 2014), paras. 76 and 104. See Noam Lubell, ‘Human Rights Obligations in Military Occupation’ (2012) 94(885) *International Review of the Red Cross* 317, 322.

³⁰ ICJ, *Wall Opinion* (n 29) paras. 107–13; ICJ, *Armed Activities Case* (n 29) paras. 216–20.

³¹ 1993 Vienna Declaration and Programme of Action, Adopted by the World Conference on Human Rights, Vienna, 1993, 1993 32 ILM 1661, para. 5.

³² United Nations Declaration on the Right to Development, General Assembly Resolution 41/128, UN Doc. A/RES/41/128, 4 December 1986.

³³ Art. 11(1) ICESCR ‘right of everyone to an adequate standard of living ... including adequate food’; Art. 11(2) ICESCR ‘fundamental right of everyone to be free from hunger’.

water,³⁴ health,³⁵ and even the right to life³⁶ itself.³⁷ For example, in 2000, the Committee on Economic, Social and Cultural Rights ('CESCR') issued General Comment 14 on implementation of the right to health, recognizing that 'the right to health embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinates of health, such as food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment.'³⁸ Focusing more specifically on the relationship with a healthy environment, the Committee reiterated that 'The improvement of all aspects of environmental and industrial hygiene (art. 12.2 (b)) comprises, inter alia, ... the requirement to ensure an adequate supply of safe and potable water and basic sanitation; the prevention and reduction of the population's exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health.'³⁹ And, of course, the European Court of Human Rights, the African Commission on Human Rights, and the Inter-American Court of Human Rights have all declared that the right to life includes the notion of a healthy environment.⁴⁰ Domestic case law around the world is also adding to the burgeoning jurisprudence in this area.

Thus, key human rights, such as the rights to water, food, health, and life cannot be ensured in an environmental vacuum; these rights cannot be delivered without the protection of the quality of the soils and waters of this world or even the protection of biodiversity to ensure viable and healthy ecosystems. Notably, in its 2011 Discussion Paper entitled *Our Planet, Our Health, Our Future: Human Health and the Rio Conventions: Biological Diversity, Climate Change and Desertification*,⁴¹ the World Health Organization ('WHO') acknowledged the central role of biodiversity as the 'foundation for human health',⁴² commenting that 'biodiversity underpins the functioning of the ecosystems on which we depend for our food and fresh water; aids in regulating climate, floods and diseases; and provides recreational benefits and offers aesthetic and spiritual enrichment'.⁴³ The WHO Discussion Paper specifically references the

³⁴ Art. 11(1) ICESCR the right to water is generally read into the 'right of everyone to an adequate standard of living'.

³⁵ Art. 12 ICESCR 'right of everyone to the enjoyment of the highest attainable standard of physical and mental health'.

³⁶ Art. 6 ICCPR.

³⁷ See both para. 1 and Principle 1 of the 1972 Declaration of the United Nations Conference on the Human Environment (Stockholm) (1972) 26 YUN 319.

³⁸ Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights notably on the implementation of the right to health (Art 12), UN Doc. E/C.12/2000/4, 11 August 2000, para. 4.

³⁹ *ibid.* para. 15.

⁴⁰ *Oneryildiz v. Turkey* App no 48939/99 (ECtHR, 30 November 2004); Communication 155/96, *The Social and Economic Rights Action Centre (SERAC) and Another v. Nigeria* (AHLRLR 60, 27 October 2001); *Sudan Human Rights Organisation & Centre on Housing Rights and Evictions (COHRE) v. Sudan* (AHLRLR 153, 27 March 2009); *Case of the Yakye Axa Indigenous Community v. Paraguay* (Series C no. 125) (IACHR, 17 June 2005).

⁴¹ World Health Organization ('WHO') 2011, at <http://www.who.int/globalchange/publications/reports/health_riocventions.pdf> accessed 1 June 2017.

⁴² *ibid.* 2.

⁴³ *ibid.*

conclusion of the *2010 Global Biodiversity Outlook 3*,⁴⁴ that since the rate of biodiversity loss is not slowing down but is actually intensifying in some cases that this is ‘bringing us closer to a number of potential tipping points that would catastrophically reduce the capacity of ecosystems to provide these essential services.’⁴⁵ The WHO consequently endorsed the Aichi Biodiversity Targets⁴⁶ adopted under the Convention on Biological Diversity, especially Target 14, which refers to ecosystem services to human health and well-being with the objectives of promoting the integration of ecosystem management considerations into health policy and promoting ecosystem integrity in order to secure water and food security and protection from diseases.⁴⁷

While the environment has been recognized to form a central component of most, if not all, human rights, this notion of ‘greening’ or expanding existing human rights is only the starting point. There are two further strands to the notion of ‘environmental’ human rights, namely, procedural rights and the substantive right to a healthy environment recognized in certain regional human rights treaties. Procedural ‘environmental rights’ have developed to guarantee the three-fold aspects of (1) public participation in environmental decision-making, (2) the right of appropriate means of seeking redress, and (3) the right to environmental information. Like environmental protection regimes, procedural environmental rights also seek to ensure that through active and fair public participation in the decision-making process people can work towards a better quality of environment. The European Court of Human Rights has undertaken such an expansive reading of Article 8 cases involving environmental pollution.⁴⁸

Finally, there is the notion of a stand-alone human right to a healthy environment. Both the 1981 African Charter on Human and Peoples Rights⁴⁹ and the 1988 Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights⁵⁰ (Inter-American Convention regime) contain a provision protecting the right to environment,⁵¹ as do three-quarters of states via a constitutional right or duty to the environment.⁵² In the *Social and Economic Rights Action Centre (SERAC) v. Nigeria*⁵³ case in 2002 the African Commission delivered what is probably the best elucidation of what the right to environment entails, including for the state to take reasonable measures ‘to prevent pollution and ecological degradation, to promote conservation, and to secure ecologically sustainable development and use of natural resources.’⁵⁴ Reminding states of the centrality of the right to a healthy environment to all ESC rights and referencing the importance of procedural rights, such as

⁴⁴ Global Biodiversity Outlook 3, Montreal, Secretariat of the Convention on Biological Diversity, 2010, at <<https://www.cbd.int/gbo3/>> accessed 1 June 2017.

⁴⁵ *ibid.* 5, 71–81. See also Global Environment Outlook (GEO-5) (UNEP, 2012), 134–66.

⁴⁶ COP 10 Decision X/2, X/2. Strategic Plan for Biodiversity 2011–2020, at <<http://www.cbd.int/sp/targets/>> accessed 1 June 2017.

⁴⁷ WHO (n 41) 20.

⁴⁸ See *Guerra and Others v. Italy* App no. 116/1996/735/932 (ECtHR, 19 February 1998); Kate Cook, ‘Environmental Rights as Human Rights’ (2002) 2 European Human Rights Law Review 196.

⁴⁹ <<http://www.achpr.org/instruments/achpr/>> accessed 1 June 2017.

⁵⁰ <<https://www.cidh.oas.org/Basicos/English/basic5.Prot.Sn%20Salv.htm>> accessed 1 June 2017.

⁵¹ Art. 24 1981 African Charter, Art. 11 of the 1988 Protocol to the American Convention.

⁵² David R. Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights and the Environment* (Vancouver: UBC Press, 2012), 47.

⁵³ Communication 155/96 (n 40). ⁵⁴ *ibid.* para. 52.

environmental impact assessments for development projects, the Commission called for the comprehensive clean-up of lands and rivers damaged by Shell's oil operations in the Niger Delta.⁵⁵

Thus, states from all over the globe, the UN, and all the major regional human rights systems have recognized that ESC rights, in particular, but also the right to life, cannot be protected without a healthy environment. What states have produced, therefore, is a rich basis of environmental protection via human rights. It remains to be seen, however, what value such rights can offer in the post-conflict setting to help remediate war-time damage.

5.4 Environmental Damage as a Post-Conflict Human Rights Issue

In the context of armed conflict, and the aftermath of conflict, the link between environment and human rights is more pertinent than ever. Clearly, a community's normal food and water supplies might be cut off or damaged by the impact of warfare, livelihoods might be impeded by the military presence, and health may be affected by pollution from toxic substances released in a military attack or via weapons debris. There are many examples of drinking wells being deliberately poisoned during armed conflict, food crops systematically destroyed, livestock deliberately slaughtered, and villages razed to the ground in an effort to terrorize or displace the population.⁵⁶ For example, during the 2008 conflict in Gaza, Israel bombed water wells,⁵⁷ used armoured bulldozers to systematically destroy agricultural land, crops, and approximately 100,000 chickens,⁵⁸ and bombed a sewage plant causing the inundation of neighbouring farmland with approximately 200,000 cubic metres of raw sewage.⁵⁹ Oil pollution is also a common wartime occurrence. In Hussein's environmental assault in 1991, for example, 650 oil-wells were destroyed and the oil set alight causing thick plumes of oily black smoke to engulf the region.⁶⁰ In the 2006 conflict between Israel and Lebanon the bombing of the Jiyeh power plant and fuel storage tanks caused an oily slick in the Mediterranean Sea, choking marine life and destroying fishing resources as it stretched all along the 225 km Lebanese coastline, including the Palm Islands Nature Reserve

⁵⁵ Commission Findings, *ibid.*

⁵⁶ Initial prosecution submissions in the case of *Prosecutor v. Omar Hassan Ahmad Al Bashir* ('Omar Al Bashir') reference repeated destruction, polluting, and poisoning of communal wells by the Janjaweed and the Armed Forces 'so as to deprive the villagers of water needed for survival', see (International Criminal Court Pre-Trial Chamber I, *Decision on the Prosecution's Application for a Warrant of Arrest against Omar Hassan Ahmad Al Bashir*) (ICC-02/05-01/09, 4 March 2009); The Commission for Reception, Truth and Reconciliation in Timor-Leste found violations of the right to food in the systematic destruction of food crops, gardens and fields, and livestock by Indonesian armed forces during the armed conflict, see The Commission for Reception, Truth and Reconciliation in Timor-Leste, *Chega*, The Report of the Commission for Reception, Truth and Reconciliation in Timor-Leste (CAVR), (Commission for Reception, Truth and Reconciliation 31 October 2005), Part 7, Chapter 7.3: Forced Displacement and Famine, at <<http://www.cavr-timorleste.org/en/cheгаReport.htm>> accessed 1 June 2017, para. 506.2.

⁵⁷ Report of the United Nations Fact-Finding Mission on the Gaza Conflict ('Goldstone Report'), Human Rights Council, UN Doc. A/HRC/12/48, 25 September 2009, paras. 987–9.

⁵⁸ *ibid.* para. 943. ⁵⁹ *ibid.* paras. 962–74.

⁶⁰ Philip Elmer-Dewitt, 'A Man-Made Hell on Earth' *Time Magazine* (18 March 1992) 22, at 23.

and the cultural heritage site of Byblos.⁶¹ Yet, the impacts on the environment and the consequent impacts on human rights are far too numerous to catalogue.⁶² And, clearly, the environmental impacts of war are only one dimension to the bigger, on-going environmental assault taking place in many states, including the environmental neglect that often accompanies poverty and decades of environmental resource over-exploitation, pollution, and disease.

There are, therefore, likely to be a number of key environment-related issues facing the population in the final phases of conflict and in the immediate aftermath of armed conflict. These might be categorized as follows: (1) degraded or contaminated environmental resources, including pollution of waters for drinking water, bathing, and fishing; destruction of crops and pollution of agricultural areas, (2) depleted environmental resources, including number of livestock for farming, loss of timber for rebuilding and shelter; deforestation impacting on food sources or livelihoods, and, often, (3) poverty and other social inequalities, including access to land (some of these may be historical or resulting from the conflict), disease, and displacement. As regards the environment, the post-conflict period, therefore, can simply be summed up as one of clean-up, remediation, and restoration. Yet, the warring state(s) will frequently have many competing priorities and few resources with which to rebuild. How might a human rights framework, therefore, aid in the speedy realization of a healthier post-conflict environment?

The analysis, therefore, will focus on utilizing the human rights framework to address three key issues that cut across the range of environmental harms caused by warfare; namely (1) clean-up and environmental restoration, including explosive and toxic remnants of war, (2) depletion of natural resources, and (3) poverty and historical inequalities. First, however, we need to briefly map the human rights legal landscape, including the nature of human rights obligations under the ICESCR, to establish which of these mechanisms might be of more value in remediating environmental damage.

5.4.1 Addressing post-conflict environmental harm through human rights law

A. *Human rights mechanisms*

The issue of human rights obligations in times of crisis (including the post-conflict phase) has been the subject of focus throughout the full range of human rights mechanisms, including those created by the UN Charter and through multilateral treaties. Clearly, the simpler and quicker complaint process via domestic legal systems is often unavailable in the immediate aftermath of armed conflict, as governments are often faced with a period of instability and confusion and public bodies are, therefore, often slow to recover the intellectual and technical capacity to address violations. For many states there may even be international intervention to set the peacebuilding agenda, possibly including a formal criminal tribunal process or transitional justice mechanism.

⁶¹ UNEP, *Lebanon: Post-Conflict Environmental Assessment* (UNEP, 2007), 132–43.

⁶² Note the efforts of UNEP in its post-conflict assessments. There are more than twenty reports to date relating to post-conflict assessments.

Of the international mechanisms, probably the most obvious for seeking redress and reparation for violations are those of the specialized regional human rights treaty systems (such as the Inter-American, European, and African systems)—although, of course, not every state is covered by a regional treaty system, and these mechanisms can be both slow and expensive. Here adjudication can be legally binding through the formally constituted courts, and in each of these systems there is an expanding jurisprudence governing the human rights obligations of states related to armed conflict.⁶³

The monitoring bodies established under the two international covenants (the Human Rights Committee for the International Covenant on Civil and Political Rights and the CESCR for the covenant of the same name), although not able to render legally binding judgments, have created an invaluable, weighty body of jurisprudence of their own,⁶⁴ clearly with greater reach than the regional mechanisms. The Human Rights Committee ('HRC') has considered many communications stretching over decades involving violations taking place during conflict as well as in the aftermath of conflict, but, lamentably, its environmental jurisprudence remains extremely limited. With the very recent adoption of the individual communications procedure under the Optional Protocol to the ICESCR there is, as yet, no jurisprudence on matters related to conflict or post-conflict violations before the CESCR, but its clearer ESC rights focus may hold greater promise for environment-related complaints. The HRC and CESCR have certainly both been especially influential, however, through the two pivotal dimensions of issuing General Comments and Concluding Observations on state reports.

Through the reporting process the state party is required to explain to the monitoring bodies the measures being taken to comply with its human rights obligations. This process is generally much more rigorous than that which occurs under environmental treaties. Clearly, for a state emerging from armed conflict immediate compliance with its full range of human rights obligations might be problematic. Sudan, for example, following decades of conflict, reported to the CESCR in 2013 that it was severely hampered in meeting its human rights obligations under the covenant by a lack of financial resources and capacity.⁶⁵ Such situations are, clearly, most acute for poverty-stricken states caught in protracted armed conflict. While human rights bodies have certainly had to recognize the impact of such difficulties encountered by states, particularly in the achievement of ESC rights in the post-conflict phase, what they have absolutely not allowed is the complete avoidance of commitments. For example, in the Concluding Observations of the Committee on the Rights of the Child ('CRC') regarding Sri Lanka, the Committee recognized that the armed conflict and the challenges of reconstruction 'pose difficulties' to the full implementation of Convention obligations,⁶⁶ but nevertheless required that Sri Lanka take immediate action to ensure the state meets its minimum core obligations, notably that the state

⁶³ See *Hassan v. the United Kingdom* (n 29).

⁶⁴ See the view of the International Court of Justice in *Ahmadou Sadio Diallo (Republic of Guinea v Democratic Republic of the Congo)*, 19 June 2012, ICJ Reports 639, para. 66.

⁶⁵ Second periodic report of Sudan to the CESCR, submitted 27 July 2012, UN Doc. E/C.12/SDN/2, 18 September 2013, para. 275.

⁶⁶ Committee on the Rights of the Child, Concluding Observations: Sri Lanka, UN Doc. CRC/C/15/Add.207, 2 July 2003, para. 5.

prioritize the provision of drinking water and sanitation services in reconstruction activities,⁶⁷ and ‘*strengthen* ongoing efforts to prevent malnutrition, malaria and other mosquito-borne diseases.’⁶⁸ Similarly, in its Concluding Observations on the report by Guatemala in 2003, the CESCR recognized that the ‘consequences of the armed conflict have seriously affected the full enjoyment of economic, social and cultural rights,’⁶⁹ but did not fail to say that it remained concerned by the insufficient progress as regards the effective implementation of the Peace Agreements of 1996 (including the Global Agreement on Human Rights, the Agreement on Social and Economic Aspects and the Agrarian Situation between the Presidential Peace Commission of the Government of Guatemala and the Unidad Revolucionaria Nacional Guatemalteca),⁷⁰ which the CESCR believed had led to persistent serious problems, including a lack of agrarian reforms.⁷¹ And in the context of decades-long internal conflict, the Committee, in its Concluding Observations on the report by Colombia in 2010, reminded the state that it is ‘precisely in situations of crisis, that the Covenant requires the protection and promotion of all economic, social and cultural rights, in particular of the most marginalized and disadvantaged groups of the society, to the best of its ability under the prevailing adverse conditions.’⁷²

Redress for violations of rights or action to simply highlight a particular problem of human rights compliance can also be channelled through the UN Charter body mechanisms, with individual communications possible under the Special Procedures of the Human Rights Council, by writing directly to one of the thematic Special Rapporteurs, such as the Special Rapporteur on the Right to Food, or Water and Sanitation. Undoubtedly, the expertise of the Special Rapporteurs has greatly advanced the practical application of human rights, and the wealth of statements presented to the Human Rights Council and General Assembly at the global level have created a rich underpinning of the Charter provisions.

Undoubtedly, an invaluable mechanism in the context of environmental protection will be the Special Rapporteur on the issue of human rights obligations *related to* the enjoyment of a safe, clean, healthy, and sustainable environment,⁷³ created by the Human Rights Council in 2012 in recognition of the importance of the environment to human rights.⁷⁴ A final, noteworthy mechanism for possible environmental redress is that of the fact-finding missions of the Human Rights Council, which have so far investigated alleged human rights violations during the armed conflicts in Syria and Gaza, albeit not without controversy.⁷⁵

⁶⁷ *ibid.* para. 39.b (emphasis added).

⁶⁸ *ibid.* para. 39.c (emphasis added).

⁶⁹ CESCR, Concluding Observations: Guatemala, UN Doc. E/C.12/1/Add.93, 12 December 2003, para. 9.

⁷⁰ < <http://www.incore.ulst.ac.uk/services/cds/agreements/pdf/guat6.pdf> > accessed 1 June 2017.

⁷¹ *ibid.* para. 10.

⁷² CESCR, Concluding Observations: Colombia, UN Doc. E/C.12/COL/CO/5, 7 June 2010, para. 7.

⁷³ Human Rights and the Environment, UN Doc. A/HRC/RES/19/10, 19 April 2012, para. 2 (emphasis added).

⁷⁴ *ibid.* Preamble.

⁷⁵ Report of the Commission of Inquiry on the Gaza Conflict, UN Doc. A/HRC/29/52, 24 June 2015.

B. ESC rights and progressive realization

Before moving to consideration of how human rights obligations might be utilized in remedying post-conflict environmental damage, it is necessary to examine the key facets of the ESC rights most relevant for this purpose, notably the notions of ‘progressive realization’, minimum core obligations, and ‘maximum available resources’ (‘MAR’)—because these notions could serve to limit achievement of ESC rights in the post-conflict phase.

Economic, social, and cultural rights, such as the rights to water, food, health, and livelihood (via Art. 11, the right to an adequate standard of living) require full realization of the right by states but allow that realization to be achieved ‘progressively’, taking into account the financial and other resources available to states in that endeavour.⁷⁶ Clearly, this allowance for a progressive achievement of rights cannot be an excuse for complete non-compliance by states, but this notion has certainly led to foot-dragging by states over the years in achieving ESC rights. Consequently, the CESCR has been required to assume the role of judging whether state actions are ‘reasonable’ and, thus, in compliance.⁷⁷

Importantly, to temper the weak obligation of progressive realization of rights, the CESCR has also mandated ‘minimum core obligations’ for each ESC right, which are of immediate effect. For example, such immediate obligations include to accord the achievement of the right the highest priority⁷⁸ and to adopt and implement a national strategy and plan of action addressing the whole population.⁷⁹ Clearly, where the state fails to meet the minimum essential levels of the right the state will, *prima facie*, be in breach of human rights law, bearing the burden of proof that it lacks the capacity and resources to comply.⁸⁰ Here the state ‘must demonstrate that every effort has been made to use the ‘maximum available resources’, including via international assistance, that are at its disposal in an effort to satisfy, as a matter of priority, the minimum obligations.⁸¹ And the obligation is imposed regardless of the level of economic development⁸² and ‘even in times of severe resources constraints.’⁸³

The issue of resource constraints impacts on the fulfilment of ESC human rights obligations even in peacetime, thus what does MAR mean in the post-conflict phase?

⁷⁶ Art. 2(1) ICESCR. See generally Magdalena Sepulveda, *The Nature of the Obligations under the International Covenant on Economic, Social and Cultural Rights* (Oxford: Intersentia, 2003).

⁷⁷ Art. 8(4) Optional Protocol to the International Covenant on Economic, Social and Cultural Rights, UN Doc. A/63/435, 28 November 2008; C.N.869.2009; CESCR, An Evaluation of the Obligation to Take Steps to the ‘Maximum of Available Resources’ Under an Optional Protocol to the Covenant, UN Doc. E/C.12/2007/1, 21 September 2007, para. 8; see also Constitutional Court, South Africa, *Government of the Republic of South Africa and Others v. Grootboom and Others*, 2000 (11) BCLR 1169 (CC).

⁷⁸ Report of the Special Rapporteur on the human right to safe drinking water and sanitation, Catarina de Albuquerque, ‘Common Violations of the Human Rights to Water and Sanitation’, UN Doc. A/HRC/27/55, 30 June 2014, paras. 49–53; see also Matthew Craven, *The International Covenant on Economic, Social and Cultural Rights: A Perspective on its Development* (Oxford: Clarendon Press, 1995), 131.

⁷⁹ ECOSOC, General Comment No.15, ‘The Right to Water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights)’ (2002), UN Doc. E/C.12/2002/11, 20 January 2003, para. 37(f).

⁸⁰ de Albuquerque (n 78) para. 49.

⁸¹ General Comment No.3, ‘The Nature of States Parties’ Obligations (art. 2, para. 1, of the Covenant)’; 1 January 1991, UN Doc. E/1991/23 (SUPP), para. 10; Principle 26, Limburg Principles on the Implementation of Economic, Social and Cultural Rights (1987) 9 Human Rights Quarterly 124.

⁸² Principle 25, Limburg Principles (n 81).

⁸³ General Comment No. 3 (n 81) para. 12.

Skogly criticizes the overly narrow approach of many in viewing the ‘resources’ as largely financial or budgetary.⁸⁴ She argues for a more diverse, holistic approach including using natural environmental resources available in society, including both public and private resources. Clearly, however, the inclusion of natural resources within the concept could exacerbate and prolong environmental damage caused in conflict. In similar vein, Robertson recognized that the state must not diminish the natural resources available to people who depend on such resources to feed themselves.⁸⁵ There is, consequently, a clear argument to use the environment as a resource for rebuilding society and for development, in the implementation of ESC rights post-conflict, but this must be achieved in an environmentally sustainable way. Causing further damage to, and depletion of, natural resources in the aftermath of conflict may only serve to exacerbate any existing inequalities and slow down environmental recovery. Thus, in using a state’s natural resources, human rights and environmental protection in the post-conflict stage need to go hand-in-hand.

Thus, in sum, the state must take steps to achieve these rights, and such steps must be ‘deliberate, concrete, and targeted’⁸⁶ to meeting the obligations required by the right. We can use these human rights obligations requiring immediate effect, therefore, in the post-conflict phase to provide protection for the environment. Immediate obligations, therefore, could include the requirement that the state adopt a strategy for the realization of environmental rights,⁸⁷ which will necessitate a post-conflict environmental assessment to inform the state’s human rights obligations. Arguably, the minimum core obligations could be used to help states to prioritize among remediation and recovery programmes, as well as to leverage international assistance to help the state to meet its human rights obligations.

The following section will now analyse the value of using a human rights framework to address the range of environmental harms caused by warfare.

5.4.2 Clean-up and environmental restoration

Even beyond the most protracted, war-ravaged, battle-scarred states it is not difficult to see why populations surviving armed conflict struggle with basic survival needs. Examples of the destruction of water wells in the Occupied Palestinian Territories as well as the destruction of 100,000 chickens and the bull-dozing of olive groves, the use of chemical weapons in Syria, the cutting of pistachio trees in Afghanistan and forests in the DRC demonstrate that the impacts of conflict on the environment, and, consequently, on human sustenance and survival needs, is immense and exceedingly common during armed conflict.

There are, thus, likely to be significant impacts in the aftermath of conflict on the environment, and, therefore, on the enjoyment of ESC rights, through degradation to

⁸⁴ Sigrun Skogly, ‘The Requirement of Using the “Maximum of Available Resources” for Human Rights Realisation: A Question of Quality as Well as Quantity’ (2012) 12(3) Human Rights Law Review 393.

⁸⁵ Robert E. Robertson, ‘Measuring State Compliance with the Obligation to Devote the “Maximum Available Resources” to Realizing Economic, Social, and Cultural Rights’ (1994) 16 Human Rights Quarterly 693, 708.

⁸⁶ General Comment No. 3 (n 81) para. 2.

⁸⁷ de Albuquerque (n 78) para. 37.

ecosystem services (so-called ‘natural capital’) either caused directly as bomb damage, or as a side effect by contamination from damaged infrastructure, or explosive or toxic remnants of war. Some environmental damage will, clearly, be more urgent than others in terms of clean-up and restoration, such as explosive remnants of war impeding access to agricultural lands for vital food resources, or environmental contamination of drinking water wells or rivers which seriously endangers life and health. Consequently, this section will analyse examples of wartime environmental damage and suggest how we can use human rights legal mechanisms to provide vital assistance in their remedy.

A. *Water sources*

The CRC observed in war-ravaged Afghanistan in 2011 the ‘absolute poverty’ that one third of families and children were living in, with less than one quarter of families having access to safe drinking water, and less than one third access to sanitation facilities.⁸⁸ The Special Rapporteur on the Right to Food, Jean Ziegler, reported in 2002 that twenty-one groundwater wells and sixty-four irrigation networks were destroyed or blocked up by Israeli operations in the Occupied Palestinian Territories.⁸⁹ And in Afghanistan the water supplies were overwhelmed by wastewater infiltration and were heavily contaminated with *E. coli* and coliforms,⁹⁰ representing ‘a severe threat to public health.’⁹¹ Clearly, polluted wells, lakes, and rivers are both an environmental and a human rights concern. And, therefore, in using human rights advocacy and mechanisms we may achieve speedier post-conflict environmental clean-up by focusing on the impact of such degraded environments to human survival.

As the South African High Court case of *Mazibuko and Other v. City of Johannesburg and Others* recognized, the right to water is of paramount importance to fulfilling the right to life itself, stating simply that, ‘Water is life. Life without water is not life. One cannot speak of a dignified human existence if one is denied access to water. The right to water is the bedrock of most of the rights contained in the Bill of Rights.’⁹² This point was reiterated by the United Nations General Assembly in 2010 when states formally recognized a human right to water and sanitation by adopting Resolution 64/292, which states that water and sanitation are ‘essential for the full enjoyment of life and all human rights.’⁹³

In the context of the right to water, therefore, the minimum core obligations of immediate effect require the state to provide access to an essential level of safe, acceptable, physically accessible, and affordable water without discrimination.⁹⁴ Furthermore,

⁸⁸ UN Doc. CRC/C/AFG/CO/1, 8 April 2011, para. 57.

⁸⁹ Report by the Special Rapporteur on the right to food, UN Doc. E/CN.4/2002/58, 10 January 2002, para. 103

⁹⁰ UNEP, Afghanistan (n 1) 34. ⁹¹ *ibid.*

⁹² (06/13865) 30 April 2008, ZAGPHC 491, para. 124.

⁹³ General Assembly Resolution 64/292, The Human Right to Water and Sanitation, A/RES/64/292, 3 August 2010. Previously the right to water had been read into the right to an adequate standard of living, Art. 11 ICESCR.

⁹⁴ General Comment No.15 (n 79) 37(a–c). See generally Mara Tignino, ‘The Right to Water and Sanitation in Post-Conflict Legal Mechanisms: An Emerging Regime?’ in Erika Weinthal, Jessica Troell, and Mikiyasu Nakayama, *Water and Post-Conflict Peacebuilding* (Abingdon: Earthscan, 2014).

states must immediately respect the right to water by not engaging in discriminatory actions in the provision of access to water. Clearly, this latter aspect of the obligation to *respect* is also often a causal factor for conflict itself, and so in ensuring non-discrimination in water resource (re)distribution in the post-conflict phase states can alleviate future issues of contestation, and so avoid the cycle of conflict. Within the state's obligation to *respect* we can also require that the state refrain from actions that further damage water resources, such as causing further pollution (for example by dumping toxic waste into water resources), diversion or depletion of water resources.⁹⁵ Clearly, in order to ensure the minimum essential level of water supply for its people the state may also need to redistribute resources, being careful not to interfere with the rights of other users or states, including in the use of transboundary waters and aquifers. This dimension will be especially important to get right in regions experiencing water scarcity. Similarly, we can advocate that in ensuring minimum essential levels states should fix damaged or destroyed drinking water wells and pipes, such as those destroyed by Iraq in the 1991 Gulf Conflict,⁹⁶ and decontaminate polluted water resources, such as the rivers polluted in the 1999 Kosovo conflict.⁹⁷ In addition, it is recognized that the right to water may also be fulfilled by states allowing non-governmental organizations, inter-governmental organizations, and other states to help to repair or rebuild facilities—and in a post-conflict situation such assistance could clearly be built into the peacebuilding process.

In *fulfilling* the right to water, states are required to take immediate measures to prevent, treat, and control diseases linked to water.⁹⁸ And part of the right to water is the right to adequate sanitation, because inadequate sanitation is the primary cause of waterborne contamination and diseases.⁹⁹ In relation to the environment, therefore, the vital recognition that water must also be free from microorganisms, chemical substances, and radiological hazards that constitute health risks will again be a useful advocacy tool.¹⁰⁰ In post-conflict DRC, for example, spot checks on drinking water points by UNEP found that 92 per cent were contaminated with faecal-related bacteria, with the consequence that 'as little as three percent of the population' had access to safe water in some rural zones.¹⁰¹

As regards emergency situations, such as the onset of armed conflict, states are obliged to have plans already in place to ensure a rights-compliant response, including ensuring that the state can respond promptly, and as the highest priority, to continue to provide essential services to affected populations.¹⁰² It is imperative that environmental protection considerations are, thus, built into such plans to ensure that, 'Water and sanitation [are] provided in a way that respects the natural environment; finite resources [are] protected and overexploitation cannot occur.'¹⁰³ Ensuring environmental hygiene,

⁹⁵ de Albuquerque (n 78) para. 17.

⁹⁶ UNEP, *Desk Study on the Environment in Iraq* (UNEP, 2003), 28.

⁹⁷ CESCR, Concluding Observations: Afghanistan, UN Doc. E/C.12/AFG/CO/2-4, 7 June 2010, para. 35.

⁹⁸ General Comment No.15 (n 79) para. 37(i).

⁹⁹ *ibid.* para. 1; WHO, *The Global Water Supply and Sanitation Assessment 2000* (WHO, 2000), 1.

¹⁰⁰ General Comment No.15 (n 79) para. 12(b).

¹⁰¹ UNEP, *The Democratic Republic of the Congo: Post-Conflict Environmental Assessment, Synthesis for Policy Makers* (UNEP, 2011), 41.

¹⁰² de Albuquerque (n 78) para. 53.

¹⁰³ General Comment No. 15 (n 79) para. 28.

recognized as an aspect of the right to health under Article 12(2)(b) ICESCR, will also be valuable in requiring states to prevent threats to health from unsafe and toxic water conditions,¹⁰⁴ including from landmines and other weapons debris.¹⁰⁵

Water resources may also be a source of food and, thus, livelihood. Three hundred tons of fish, for example, were killed in a military strike on a fish farm in Lebanon¹⁰⁶ and the fishing industry, including artisanal fishermen, and other species are damaged every time a military attack causes an oil spill or chemical contamination of the marine environment. In advocating for compliance with the right to an adequate standard of living, therefore, we could require states in the aftermath of conflict to clean up and decontaminate polluted waters, thus helping local livelihoods and the environment to recover.

B. *Agriculture/food sources and land*

In this section we will see how in using the right to food, and health to some degree, we can aid agricultural areas in their post-conflict recovery, as well as reduce air, soil, and water pollution more generally.

In 2002, the Special Rapporteur on the right to food highlighted reports of the destruction of environmental resources, namely crops, agricultural land, rooftop water tanks, groundwater wells, irrigation networks, and livestock, by the military forces of Myanmar.¹⁰⁷ Restrictions on movement also served to deny access to food and water.¹⁰⁸ Such destructive actions increase the strain on already depleted and damaged environmental resources. Indeed, common post-conflict threats to agriculture and land used for food production are generally from bomb damage, chemical contamination, soil compaction, clearing land for 'security purposes', and plant/tree damage due to the presence of heavy vehicles and toxic and explosive remnants of war. In Lebanon and the Occupied Palestinian Territories, for example, recent conflicts have caused the destruction of hundreds of thousands of olive trees and thousands of acres of arable land¹⁰⁹—undoubtedly leading to reverberating impacts in the food web and agrobiodiversity loss. With approximately 90 per cent of the South Lebanese's population being reliant on agriculture for their livelihood,¹¹⁰ the presence of unexploded cluster bombs in agricultural areas is both a human rights and environmental issue.¹¹¹ Further ecological damage by heavy metal contamination may have been caused in the burning of olive trees—a staple crop in Lebanon—with white phosphorus.¹¹² Thus, emphasizing

¹⁰⁴ *ibid.* para. 8.

¹⁰⁵ CESCR, Concluding Observations: Bosnia and Herzegovina, UN Doc. E/C.12/BIH/CO/2, 16 December 2013, Committee recommendation at para. 30; CESCR, Concluding Observations: Angola, UN Doc. E/C.12/AGO/CO/3, 1 December 2008, para. 33.

¹⁰⁶ UNEP, *Lebanon* (n 61) 123.

¹⁰⁷ The Right to Food, Report submitted by the Special Rapporteur on the right to food, Jean Ziegler, UN Doc. E/CN.4/2003/54, 10 January 2003, para. 55.

¹⁰⁸ *ibid.* para. 56.

¹⁰⁹ Report by the Special Rapporteur on the right to food, UN Doc. E/CN.4/2002/58, 10 January 2002, para. 103; UNEP, *Desk Study on the Environment in the Occupied Palestinian Territories* (UNEP, 2003) 103.

¹¹⁰ UNEP, *Lebanon* (n 61) 155.

¹¹¹ Landmine Action, *Foreseeable Harm, the Use and Impact of Cluster Munitions in Lebanon: 2006* (Landmine Action, 2006) 26; UNEP, *Lebanon* (n 61) 149.

¹¹² UNEP, *Lebanon* (n 61) 153–4.

the human rights of farmers to their livelihoods will help recognize and remedy these environmental harms and will help provide for a speedier remediation of the environmental damage.

The African Commission stated that the right to food is 'inseparably linked to the dignity of human beings and is therefore essential for the enjoyment and fulfilment of such other rights as health, education ...'¹¹³ The right guarantees the availability of food in a 'quantity and quality sufficient to satisfy the dietary needs of individuals, *free from adverse substances*, and acceptable within a given culture'.¹¹⁴ Thus, similarly to the right to water, it guarantees access to food resources that are of sufficient quantity and quality. The minimum core obligations of the right to food require, first, that the state should not *destroy or contaminate* food sources, and by extension agricultural areas for growing food crops and water sources carrying fish stocks. Clearly, this is a common, albeit illegal, conflict tactic, but what is probably more likely to occur in the post-conflict phase, however, is the destruction or contamination of food sources by private companies, as much needed investment in post-conflict states often leads to an influx of companies undertaking natural resource extraction or assisting in large development projects. Emphasizing the state's obligation to *respect* and *protect* the rights to water, health, and food, therefore, human rights can be used to aid environmental protection in the post-conflict phase by requiring that such private parties do not contaminate or destroy access to food sources.¹¹⁵ We should also advocate that the state use such investment contracts or development permits to require companies to help it fulfil its human rights obligations, such as by attaching conditions to permits for the building of, or rehabilitation of water sources and environmental clean-up.

Similarly, in ensuring the rights to health and adequate standard of living states must take 'concrete and targeted steps' towards the full realization of the rights,¹¹⁶ which includes the adoption of legislative or other measures. Using human rights in a proactive way, one such measure could, therefore, demand the removal of environmental threats to human rights, such as requiring the prioritized clean-up of agricultural areas to ensure the health of food and farm workers, and the clean-up of rivers and lakes used for irrigation, fishing, and other aquaculture. Such an approach was adopted by the African Commission in relation to the conflict in Sudan. First, the African Commission held that the wartime destruction of livestock and farms as well as the poisoning of water sources, such as wells, exposed the victims to serious health risks, which amounted to a violation of the right to health under Article 16 of the African Charter.¹¹⁷ Secondly, the Commission made far-reaching recommendations in post-conflict Sudan, requiring the state to ensure the rehabilitation of the entire economic and social infrastructure in Darfur, including in relation to health, water, and agricultural services.¹¹⁸ Clearly, in a situation of such historic and conflict-based rights violations the state could also approach remediation through relevant post-conflict peacebuilding or transitional justice mechanisms.

¹¹³ *SERAC v. Nigeria* (n 40) para. 65.

¹¹⁴ General Comment No.12, UN Doc. E/C.12/1999/5, 12 May 1999, para. 8 (emphasis added).

¹¹⁵ See *SERAC v. Nigeria* (n 40) para. 65.

¹¹⁶ *Egyptian Initiative for Personal Rights and Interights v. Egypt II* (AHRLR 90, 1 March 2011), para. 264.

¹¹⁷ *COHRE v. Sudan* (n 40) para. 212. ¹¹⁸ *ibid.* para. 229.

C. *Environmental damage more generally*

Thus, the broad range of human rights, including the 'greened' human rights, could be used to require the clean-up of industrial sites where people work, agricultural land, rivers and forests where people forage or fish for food, the clean-up of water sources such as wells and monitoring of aquifers, and air pollution. The European Court of Human Rights, for example, has found violations of Article 8 regarding property rights based on the health impacts on residents from environmental pollution.¹¹⁹ Invaluably, the Court emphasized procedural rights, including requiring environmental impact assessments and information on environmental threats, which reflect core principles of environmental protection and remediation.¹²⁰ And this approach is also reflected in the Inter-American and African regional human rights systems.¹²¹ Damage to other environmental resources, such as forests and wetlands, and other areas of environmental significance might also be brought within an expanding human rights notion of right to environment—thus adding even greater scope for environmental protection. In this vein, the Special Rapporteur on the right to a healthy environment has included the protection of biodiversity and conservation within the emerging human right to environment.¹²² Fulfilment of the right to a healthy environment, or, indeed, transitional justice mechanisms, might also be used in a post-conflict setting to promote environmental justice, for example to prohibit the siting of vulnerable communities in polluted areas, to redistribute land, to remedy any existing environmental injustices and to promote peace.

D. *Toxic and hazardous remnants of war*

Uncleared landmines and unexploded cluster munitions are a typical hazard for post-conflict states, especially where the population is reliant on the environment for its livelihood, and, as such, these dangerous remnants are worthy of special consideration.¹²³

According to UNEP, in post-conflict Lebanon, 'the land scarcity resulting from cluster bomb contamination has the potential to generate a new socio-economic dynamic and set in train a cycle of poverty and environmental degradation'.¹²⁴ Thus, a common theme in states' reports and Concluding Observations following protracted armed conflict are the social and economic difficulties posed by the continued presence of

¹¹⁹ See *Guerra v. Italy* (n 48); *López Ostra v. Spain* App no. 16798/90 (ECtHR, 9 December 1994); *Taşkin and Others v. Turkey* App no. 46117/99 (ECtHR, 10 November 2004).

¹²⁰ Principles 10 and 17, 1992 UN Declaration on Environment and Development, UN Doc. A/CONF.151/26/REV.1; 1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, ECE/CEP/43.

¹²¹ *SERAC v. Nigeria* (n 40) para. 53; *Case of the Saramaka People v. Suriname* (Series C no. 185) (IACHR, 28 November 2007), at <http://www.corteidh.or.cr/docs/casos/articulos/seriec_172_ing.pdf> accessed 1 June 2017.

¹²² John H. Knox, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Preliminary Report, UN Doc. A/HRC/22/43, 24 December 2012, paras. 7–11.

¹²³ UNEP, *DRC* (n 101) 28; the use of cluster munitions in the Lebanon Conflict in 2006 was influential in their prohibition, see Handicap International, *Circle of Impact: The Fatal Footprint of Cluster Munitions on People and Communities* (Handicap International, 2007).

¹²⁴ UNEP, *Lebanon* (n 61) 155.

landmines or other explosive remnants of war, and the consequent need for states to clear them.¹²⁵ A number of reports, for example, highlight the difficulties posed by landmines in post-conflict states such as Sudan,¹²⁶ Myanmar,¹²⁷ Colombia,¹²⁸ Croatia,¹²⁹ Cambodia,¹³⁰ Bosnia Herzegovina,¹³¹ and Palestine.¹³² In his report on the situation of internally displaced persons in Croatia,¹³³ Special Representative Kälén also specifically recommended the removal of landmines from agricultural areas,¹³⁴ but also highlighted that the physical environment must also be rendered free from 'environmental damage such as the release of heavy metals and poisonous materials into the environment as a direct or indirect result of the armed conflict'.¹³⁵

The long-term environmental risks from toxic weapons were clearly most apparent from the use of nuclear and chemical weapons, including the use of Agent Orange in Vietnam. More recent battlefields have seen debris from other chemically toxic weapons, such as from depleted uranium munitions, chemical weapons, white phosphorous, and tungsten,¹³⁶ as well as other abandoned, contaminated military detritus. And others in the current volume have also discussed the particular environmental problems caused by using burn pits to destroy military waste, both during conflict and in the post-conflict phase.¹³⁷ Clearly, some health and environmental impacts from such dangerous debris may be immediate, but some impacts may take decades to manifest,¹³⁸ and, as Harris suggests, as a consequence, these impacts may well be missed in post-conflict assessments and peacebuilding.¹³⁹

As regards the particular problem of explosive remnants of war ('ERW'), in 1997 states adopted the Treaty on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction,¹⁴⁰ which imposes an absolute ban on the use as well as the stockpiling, production, and transfer of anti-personnel landmines.¹⁴¹ Similarly, in 2008 the Convention on Cluster Munitions¹⁴² ('CCM') imposed

¹²⁵ CESCR, *Bosnia* (n 105) Committee recommendation at para. 30; CESCR, Concluding Observations: Angola, E/C.12/AGO/CO/3, 1 December 2008, para. 33; see also Neryl Lewis, Geoff Harris, and Elisa dos Santos, 'The Demobilisation and Reintegration of Ex-Combatants' in Harris (n 25) 162.

¹²⁶ Report of the independent expert on the situation of human rights in the Sudan, Mohamed Chande Othman, UN Doc. A/HRC/18/40, 22 August 2011, para. 40.

¹²⁷ Progress report of the Special Rapporteur on the situation of human rights in Myanmar, Tomás Ojea Quintana, UN Doc. A/HRC/19/67, 7 March 2012, para. 59.

¹²⁸ CRC, Concluding Observations: Colombia, UN Doc. CRC/C/COL/CO/3, 8 June 2006.

¹²⁹ Report of the Representative of the Secretary-General on the human rights of internally displaced persons, Walter Kälén, Mission to Croatia, UN Doc. E/CN.4/2006/71/Add.3, 29 December 2005.

¹³⁰ CRC, Concluding Observations: Cambodia, UN Doc. CRC/C/15/Add.128, 28 June 2000.

¹³¹ CESCR, Concluding Observations: Bosnia and Herzegovina, UN Doc. E/C.12/BIH/CO/1, 24 January 2006.

¹³² Human Rights in Palestine and Other Occupied Arab Territories, Report of the United Nations Fact Finding Mission on the Gaza Conflict Conclusions and recommendations, UN Doc. A/HRC/12/48 (ADVANCE 2), 24 September 2009, para. 1975.e.

¹³³ Kälén (n 129). ¹³⁴ *ibid.* para. 50.b. ¹³⁵ *ibid.* para. 36.

¹³⁶ Fact Finding Mission on the Gaza Conflict (n 132) para. 1975.e.

¹³⁷ See, for example chapter 13 in this volume.

¹³⁸ Chad Briggs and Inka Weissbecker, 'Salting the Earth: Environmental Health Challenges in Post-Conflict Reconstruction' in David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (Abingdon: Earthscan, 2012), 112.

¹³⁹ Neryl Lewis, 'Social Recovery from Armed Conflict' in Harris (n 25) 98–101.

¹⁴⁰ (1997) 36 ILM 1507 ('APM Treaty'). ¹⁴¹ Art. 1 *ibid.*

¹⁴² <https://www.icrc.org/ihl/INTRO/620> accessed 1 June 2017.

an absolute ban on cluster munitions.¹⁴³ State parties are, furthermore, obliged to clear remnant-affected areas situated in their territory.¹⁴⁴ In the future, therefore, it is hoped that the extensive human rights problems posed by ERW in the post-conflict phase can be reduced, if not eliminated altogether. Under these treaties, mandatory and immediate obligations arise for detailed surveying, recording, and marking of cluster munition contaminated areas within a state party's jurisdiction and control.¹⁴⁵ There is also 'strong encouragement' for user states to transfer information about the type, number, and location of use of certain weapons,¹⁴⁶ as well as an obligation of international assistance (including financial) which should ease the job of weapons clearance. In Kosovo, for example, extensive information regarding location mappings, safety information, and technical assistance was provided by NATO, in part to help in the environmental clean-up,¹⁴⁷ but such information-sharing is rare.

These arms controls treaties are not, *prima facie*, human rights instruments, but the provisions for clearance obligations and victim assistance for those injured by such ERW definitely have an ESC rights dimension to them relating to social security, healthcare, gender, and disability rights. The demining and decontamination process, therefore, can arguably be used to fulfil human rights obligations and environmental protection, both directly, such as protecting the right to health, and indirectly, such as the notable example of Cambodia where the process for carrying out demining led the state to establish land titling for local populations.¹⁴⁸ Using the human rights framework we could add a more general obligation on states to routinely transfer information on the use and location of toxic and explosive remnants of war, thus, going beyond the existing limited provision for this obligation in specific treaties. And there may also be a role here for the human rights civil society to do more, particularly in terms of capacity building of local populations.

5.4.3 Natural resource depletion

In addition to the contamination of environmental resources, states are also likely to be faced with the depletion of natural resources following conflict, which will impact on livelihoods, food and water sources, health and, ultimately, on life itself. Using the human rights framework such depletion can be halted and post-conflict justice mechanisms could be used to remedy the environmental damage and compensate for any historical grievances.

The UNEP Afghanistan Report highlighted the deforestation, over decades of conflict, of pistachio trees, which had been used as a means of livelihood by much of the

¹⁴³ Note the definition of cluster munitions in Art. 2(2) CCM, *ibid*.

¹⁴⁴ Art. 10, 1996 Amended Protocol II on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices to the 1980 United Nations Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (1996) 35 ILM 1206; Art. 5 APM Treaty; Art. 4 CCM.

¹⁴⁵ Art. 4(2) CCM. ¹⁴⁶ Art. 4(4) CCM.

¹⁴⁷ Andrew Osborn, 'NATO Brings Out Big Guns to Kill Off Cancer Scare' *The Guardian* (11 January 2001) 16.

¹⁴⁸ Nao Shimoyachi-Yuzawa, 'Linking Demining to Post-Conflict Peacebuilding: A Case Study of Cambodia' in Jensen and Lonergan (n 138) 188.

population.¹⁴⁹ The principal causes of this loss were the cutting and stockpiling of wood for fuel by the population, as well as by the military for fuelwood and in clearing trees to prevent ambush by enemy forces.¹⁵⁰ And whether the resources have been depleted by the state itself or by rebel groups, by companies or individuals, including those taking advantage of the rule of law vacuum, by bomb damage or by refugees seeking food and shelter for their very survival, the depletion of natural resources can leave a very lasting scar on a post-conflict society. The distribution and use of natural resources, therefore, need to form key components in the post-conflict settlement, and, clearly, this implies distribution and access to such resources in a human-rights-compatible way. Showing the value of the human rights machinery there is clear condemnation by the CESCR of the DRC's continued illicit trade in timber resources and 'abusive exploitation of the country's forests',¹⁵¹ specifically making reference to the adverse impacts of such exploitation on the ecology and biodiversity, and the human rights of the local indigenous pygmies. The CESCR went so far as to strongly criticize the impunity for human rights violations and illegal exploitation of natural resources, including by foreign companies, suggesting that these factors constituted 'major obstacles' to the enjoyment of ESC rights within the DRC.¹⁵²

Indeed, environmental damage and resource exploitation, as well as the ESC rights negatively impacted, may actually increase after the conflict due to the temporary governance vacuum within a war-ravaged state, and an increasingly desperate population. Examples also include the exploitation of fishing resources in the exclusive economic zone or exclusive fishing zone of states engaged in conflict or its aftermath. And clearly, as in Darfur, the survival needs of the population and, especially, displaced persons often lead to the breakdown of normal, peacetime food networks and the consequent exploitation of bushmeat, such as occurred in the Virunga forest in the DRC, the clearance of forests for agriculture, and other impacts on the environment, such as trade in animal products, such as ivory. And this is where human rights can undoubtedly assist in the post-conflict phase. First, the state's obligations to respect and protect the right to food, and the broader right to an adequate standard of living, require the state not to diminish further vital agricultural and other natural resources for those who are dependent upon access to such sources. Secondly, recent practice shows an emphasis in human rights machinery on fusing environmental protection and human rights in the post-conflict, arguably peacebuilding, context. For example, the CESCR required the DRC to ensure human rights compliance by requiring that future forestry projects were both 'centred on advancing the rights of forest-dependent peoples' and 'conducted only after comprehensive studies are carried out, with the participation of the peoples concerned, to assess the social, spiritual, cultural and environmental impact on them of planned activities'.¹⁵³

The key, again, is arguably to ensure that natural resource distribution is included within peacebuilding or transitional justice processes, and to anchor such measures in

¹⁴⁹ UNEP, *Afghanistan* (n 1) 64–6.

¹⁵⁰ *ibid.*

¹⁵¹ UN Doc. E/C.12/COD/CO/4, 16 December 2009, para. 6 (emphasis added).

¹⁵² *ibid.*

¹⁵³ CESCR, Concluding Observations: Democratic Republic of the Congo, UN Doc. E/C.12/COD/CO/4, 16 December 2009, para. 14.

ESCR and environmental human rights, including in promoting better environmental education and participation in environmental decision-making through participatory rights, equity in natural resource distribution, particularly respecting the rights of indigenous peoples, and recognizing that the right to development must take place in a sustainable and fair way.

5.4.4 Poverty and historical inequalities

There is often an environmental dimension to the causal factors for conflict, as recognized by human rights organs, including by ad hoc fact-finding missions.¹⁵⁴ Common causes of conflict, in addition to poverty, gross disparities in wealth and resources of populations within a state, and unbalanced development policies,¹⁵⁵ are the factors of competition for land and water resources, desertification, and environmental degradation.¹⁵⁶ This section will, therefore, suggest how human rights can be used to address such historical inequalities and help prevent the return to conflict.

In Rwanda and Mali, as McCoy explains, ‘horizontal inequalities’ were major causal factors of conflict, particularly group inequalities in land ownership and access to resources.¹⁵⁷ Using transitional justice mechanisms, the Truth Commission in Kenya, for example, found that ‘historical grievances over land’ constituted the ‘single most important driver of conflicts and ethnic tension in Kenya’,¹⁵⁸ while ‘close to 50 percent of statements and memorandum received by the Commission related to or touched on claims over land’.¹⁵⁹ UN Secretary-General Kofi Annan has also recognized trans-boundary water resources, food insecurity, land concentration, and access to land-based resources as root causes of conflict, which are often coupled with poverty and social inequality, particularly, he says, in African and Latin American countries.¹⁶⁰ And, of course, due to future climate change impacts on natural resources it is likely that we will see greater land inequalities, water disputes, food insecurity, and resource-dependent livelihoods lost across the globe and so the resource-competition/conflict nexus is only going to increase in importance.

As stated by Secretary-General Kofi Annan, however, ‘conflict prevention and sustainable development are mutually reinforcing’.¹⁶¹ Thus, a key aspect of conflict prevention, particularly in the era of unpredictable climate change, must be in ensuring environmental human rights—including via robust and comprehensive transitional

¹⁵⁴ Report of the High-Level Mission on the situation of human rights in Darfur pursuant to Human Rights Council decision S-4/101, UN Doc. A/HRC/4/80, 9 March 2007.

¹⁵⁵ *ibid.* para. 54.

¹⁵⁶ *ibid.* para. 55. See also Report of the United Nations High Commissioner for Human Rights on the situation of human rights in Côte d’Ivoire, UN Doc. A/HRC/17/49, 14 June 2011, para. 52(1)(f).

¹⁵⁷ David McCoy, ‘Rectifying Horizontal Inequalities: Lessons from African Conflict’ (2008) 8(1) *African Journal on Conflict Resolution* 105.

¹⁵⁸ Report of the Truth, Justice and Reconciliation Commission, Kenya, *Final Report*, Vol. 1 (2013), para. vii; Paul Gready, ‘From Transitional to Transformative Justice: A New Agenda for Practice’ (2014) 8(3) *International Journal of Transitional Justice* 339.

¹⁵⁹ Truth Commission Report, Kenya (n 158) para. vii; Gready (n 158).

¹⁶⁰ Prevention of Armed Conflict: Report of the Secretary-General, UN Doc. A/55/985-S/2001/574 (7 June 2001), paras. 114–15.

¹⁶¹ *ibid.* para. 11.

justice mechanisms. In the post-conflict phase, therefore, rebuilding the state must first entail a thorough assessment of how the three dimensions of poverty, degraded environmental resources, and human rights violations have contributed to past tensions and abuses. Human rights can be a determinant of peace and sustainable development, and safeguarding a sustainable and just peace will necessarily involve states finding a way to ensure that human rights are factored into the peacebuilding process in a mutually supportive way with environmental protections. In this way, for example, emergency methods adopted to address environmental health problems would be connected to environmental protection and long-term development policies,¹⁶² and could help to stabilize communities through helping to mitigate any feelings of injustice related to prior unequal distribution of environmental resources.¹⁶³ And as part of this approach states should ensure that every organ created, developed, or reinstated following conflict is built on a firm recognition of human rights, including environmental rights.

While poverty is not mentioned in the ICESCR, the CESCR observes that poverty constitutes a denial of human rights,¹⁶⁴ and requires states in a position to do so to provide international assistance to others to help them to fulfil their core obligations and to ensure the eradication of poverty.¹⁶⁵ Thus, while post-conflict states may need to rebuild or remediate their entire economic and social infrastructure, including in relation to education, health, water, and agricultural services,¹⁶⁶ international assistance is an obligation under the covenant. Such funding could also, therefore, be used to provide training in environmental human rights and, thus, environmental conservation and remediation.¹⁶⁷ Peacebuilding agendas, including through transitional justice mechanisms, could include the creation (and funding) of such mechanisms, possibly at the local level, to resolve land, property, and resource disputes, and, possibly, even to provide compensation to land owners for damage caused to their lands.¹⁶⁸ In this way, states will be promoting the notion of local-based solutions, which should include and engender local support for reconstruction and clean-up efforts, including in an environmentally aware way.

5.5 Conclusions

It must be noted at the outset, of course, that there can be clear tensions and potential risks in using human rights, as suggested here, as a framework to achieve environmental protection. Specifically, human rights have previously been side-lined in the peacebuilding process, with states preferring the rule of law notion because it was seen as a less value-laden concept and, thus, less contentious.¹⁶⁹ There is also the possibility that

¹⁶² Briggs and Weissbecker (n 138) 129. ¹⁶³ *ibid.*

¹⁶⁴ CESCR, Statement on Poverty and the International Covenant on Economic, Social and Cultural Rights, UN Doc. E/C.12/2001/10, 10 May 2001, para. 1.

¹⁶⁵ *ibid.* paras. 16–17. ¹⁶⁶ *COHRE v. Sudan* (n 40) para. 229.

¹⁶⁷ Second periodic report of Sudan to the CESCR, submitted 27 July 2012, UN Doc. E/C.12/SDN/2, 18 September 2013.

¹⁶⁸ See CESCR, Concluding Observations: Sri Lanka, UN Doc. E/C.12/LKA/CO/2-4, 9 December 2010, para. 29.

¹⁶⁹ Balakrishnan Rajagopal, 'Invoking the Rule of Law in Post-Conflict Rebuilding: A Critical Examination' (2007–2008) 49 *William & Mary Law Review* 1345, 1357.

using human rights rhetoric might over-politicize the issue of environmental remediation. And so a human rights focus might arguably constrain pure environmental protection in the post-conflict era, and risk diverting some of the effort and resources away from pure environmental protection work and monitoring. There is a further risk that all environmental damage might be shoehorned into being only human rights issues, with potential loss of focus on those aspects of environmental damage that do not easily fit into the mould—possibly causing delay in the clean-up and remediation of the environment, decreasing the environmental expertise inputting into the decision-making processes, or forcing clean-up efforts to focus on human harms from environmental damage to the detriment of purely environmental concerns.

On the other hand, as this contribution has attempted to demonstrate, using a human rights framework to greater effect in the post-conflict period could enhance the existing level of environmental protection. Such strategic use of human rights mechanisms is not occurring at present among the environmental and environmental rights movements. With the expansion of ESC rights to incorporate environmental dimensions, and even what would traditionally be seen as pure environmental concerns at times, such a framework could provide strong legal obligations on states to undertake environmental clean-up and restoration—and strong mechanisms to review state actions and ensure environmental remediation. Looking beyond clean-up, considering ‘structural violence’ issues of environmental justice in the allocation and use of natural resources, in a combined human rights and environmental approach to peacebuilding, *jus post bellum* or transitional justice could offer the potential for long-term solutions, and, potentially, an end to what is often a cycle of conflict.

And so in using human rights we must be aware of their pros and cons in factoring their use into the post-conflict processes in a way that is mutually supportive of environmental protection and rights. Such mutually supportive rights-based environmental protection is an aspect that can be built into peacebuilding and transitional justice mechanisms, of course, with the idea of fostering a stable peace.

6

The Law of Pillage, Conflict Resources, and *Jus Post Bellum*

*Olivia Radics and Carl Bruch**

6.1 Introduction

The link between conflict and natural resources has been firmly established in recent decades. At least eighteen violent conflicts have been fuelled by natural resource exploitation since 1990,¹ and according to one study, between 1970 and 2008 from 29 per cent to 57 per cent of non-international armed conflicts ('NIAC') were related to high-value natural resources.² In addition to the number of resource-fuelled conflicts being on the rise, both the nature of conflicts and the source of financing have undergone transformation since the end of the Cold War: there are now substantially more NIACs than international wars, and the source of financing has shifted from support from Cold War powers for proxy wars to natural resource revenues in many conflict-affected situations.³ As the President of the UN Security Council noted in 2007: 'in specific armed conflict situations, the exploitation, trafficking, and illicit trade of natural resources

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¹ Donald K. Alton and Dinah L. Shelton, *Environment Protection and Human Rights* (New York: Cambridge University Press, 2011) 679; United Nations Environment Programme (UNEP), *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (Nairobi, Kenya: 2009).

² Siri Aas Rustad and Helga Malmin Binningsbø, 'Rapid Recurrence: Natural Resources, Armed Conflict and Peace' (2010) Working Paper, Center for the Study of Civil War, Peace Research Institute Oslo.

³ Daniëlla Dam-de Jong, 'From Engines for Conflict into Engines for Sustainable Development: The Potential of International Law to Address Predatory Exploitation of Natural Resources in Situations of Internal Armed Conflict' (2013) 82 *Nordic Journal of International Law* 155, 157; Larissa van den Herik and Daniëlla Dam-de Jong, 'Revitalizing the Antique War Crime of Pillage: The Potential and Pitfalls of Using International Criminal Law to Address Illegal Resource Exploitation During Armed Conflict' (2011) 15 *Criminal Law Forum* 237, 240. William A. Schabas observes a similar tendency: 'Economic tendencies may contribute significantly to the outbreak and perpetuation of war. It seems that in or post-Cold War context, civil wars are often little more than campaigns to acquire access to natural resources and markets, although somewhere in the distant past it may be possible to identify a role for ideological factors and political objectives.' William A. Schabas, 'War Economies, Economic Actors and International Criminal Law' as quoted in Joanna Kyriakakis, 'Justice after War: Economic Actors, Economic Crimes, and the Moral Imperative for Accountability after War' in Larry May and Andrew T Forcehimes (eds.), *Morality, Jus Post Bellum and International Law* (New York: Cambridge University Press, 2012) 113, at 121; Mark B. Taylor and Mark Davis, 'Taking the Gun Out of Extraction: UN Responses to the Role of Natural Resources in Conflicts' in Carl Bruch, Carroll Muffett, and Sandra S. Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (New York: Routledge, 2016).

have played a role in areas where they have contributed to the outbreak, escalation, or continuation of armed conflict.⁴

Furthermore, conflicts with the presence of lootable natural resources tend to be more prolonged and more destructive;⁵ and the longer that a conflict persists, the weaker the rule of law becomes, reducing the opportunities to establish durable peace.⁶ Accordingly, there are three principal pathways in which natural resources play a role in conflict: by contributing to the outbreak of conflict, by financing and thereby sustaining conflict, and by undermining peacemaking.⁷ Natural resources are also central to post-conflict peacebuilding.

The causation between natural resources and armed conflict is rarely clear or straightforward. Since Paul Collier and Anke Hoeffler identified greed and grievance as the primary motivations of NIACs,⁸ scholarship has developed a more nuanced conceptualization that recognizes the complex forces shaping the onset and sustainment of conflict.⁹ Nevertheless, it is worth noting that the plunder and pillage of natural resources is probably as old as conflict itself, no matter the intricacies of this linkage. As one commentator notes: ‘Traditionally, armies live off the land. Where there is nothing left to plunder, they wither and die, as Napoleon discovered at the gates of Moscow.’¹⁰

The pillage of natural resources—witnessed in conflicts in the Democratic Republic of the Congo (‘DRC’), Colombia, Cambodia, and elsewhere—can act not only as a means for financing the conflict,¹¹ but also put an enormous strain on the environment as a result of predatory exploitation practices, often leading to severe damage and the eventual depletion of resources.¹² This, in turn, can undermine long-term livelihoods, trigger further violence, and lock communities in a vicious cycle of destruction. This

⁴ UN Security Council, Statement by the President of the Security Council, S/PRST/2007/22, 25 June 2007. <http://www.un.org/en/ga/search/view_doc.asp?symbol=S/PRST/2007/22> accessed 5 June 2017.

⁵ Michael L. Ross, ‘Booty Futures’ 6 May 2005, at <<https://www.sscnet.ucla.edu/polisci/faculty/ross/papers/working/bootyfutures.pdf>> at 4, accessed 5 June 2017. For an opposing point of view, see Philippe Le Billon, who argues that under the right conditions, natural resource presence can make a conflict less destructive by giving one side a definitive advantage in Philippe Le Billon, ‘The Geopolitical Economy of ‘Resource Wars’ 9(1) *Geopolitics* 1, 12.

⁶ Emily E. Harwell, ‘Building Momentum and Constituencies for Peace: The Role of Natural Resources in Transitional Justice and Peacebuilding’ in Bruch, Muffett, and Nichols (n 3).

⁷ UNEP, *From Conflict to Peacebuilding* (UNEP, 2009), 8, at <http://postconflict.unep.ch/publications/pcdmb_policy_01.pdf> accessed 5 June 2017.

⁸ Paul Collier and Anke Hoeffler, ‘Greed and Grievance in Civil War 2’ (2000), World Bank Dev. Research Group, Policy Research Working Paper No. 2355.

⁹ See UNEP, *Conflict to Peacebuilding: The Role of Natural Resources and the Environment*, Consultation Draft, at 5, 6, 7, 8, 15, 10 (September 2008), noting that the relationship between natural resources, the environment, and conflict is multidimensional and complex, with three principle pathways: natural resources contributing to the outbreak of conflict; financing and sustaining conflict; and undermining peacemaking. Lujala and Rustad note three main avenues leading from natural resources to conflict: resource capture, resource-related grievances, and adverse effects on the economy and institutions. See also van den Herik and Dam-de Jong (n 3) 242; Päivi Lujala and Siri Aas Rustad, ‘High-Value Natural Resources: A Blessing or a Curse for Peace’ in Päivi Lujala and Siri Aas Rustad (eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding* (New York: Routledge, 2012), 7.

¹⁰ See Schabas (n 3).

¹¹ For a list of recent civil wars and the specific types of natural resources that fuelled them, see UNEP (n 7) 11.

¹² Dam-de Jong (n 3) at 156; James G. Stewart, ‘Corporate War Crimes: Prosecuting the Pillage of Natural Resources’ (2011) Open Society Justice Initiative 9.

has been taking place in Afghanistan, where the pressure of warfare, combined with the destruction of livelihoods, has resulted in mass displacement of rural people and to this day contributes to brewing tensions.¹³

Reigning in predatory natural resource exploitation both in conflict and in the immediate aftermath of conflict can be critical to maintaining stability and preventing a relapse to conflict. Furthermore, predatory natural resource exploitation often continues well after the signing of peace agreements; unbalanced resource contracts—negotiated during conflict or as a result of what Michael Ross calls ‘booty futures’¹⁴—can lead to the continuation of exploitative practices in the post-conflict period as well, rendering a long-lasting vision of peace illusory.

At the same time, while it is imperative to recognize the role of natural resources—particularly high-value natural resources—in fuelling and financing conflict, they also have a role in promoting peace.¹⁵ Revenue from natural resources often represents the backbone of the national economy of conflict-affected countries, and in the aftermath of conflict these revenues can be instrumental in financing reconstruction and development—if they are managed soundly.¹⁶

Recent years have seen a revival of usage for the ancient crime of pillage as a potential avenue to address conflict-related illegal natural resource exploitation. Yet, despite this revival in the sphere of international criminal law, pillage has so far not been used by any international criminal courts to prosecute illegal natural resource exploitation. Indeed, to date, the International Court of Justice has been the sole international tribunal that applied pillage directly to the exploitation of natural resources, in the *DRC v. Uganda* case.¹⁷ In addition to the dearth of pillage prosecutions, there is the concern about the potential scope of pillage prosecutions: corporate actors have had a well-documented role in the illegal exploitation of natural resources in a number of conflicts, yet the criminal liability of corporations remains contested in international criminal law. War crime trials—including pillage prosecutions—are essential for the *jus post bellum* legal framework and could be an important bridge towards lasting peace.

While the pillage of natural resources is in many ways an environmentally based crime—due to the predatory exploitation of natural resources and its effects on the environment—it may be best, as Michael Lundberg notes, to avoid prosecuting resource exploitation as an environmental crime, say under the International Criminal Court’s environmental war crime provision.¹⁸ While the environmental costs of such crimes

¹³ UNEP (n 7) 17.

¹⁴ Ross (n 5) 3, defining ‘booty futures’ as future exploitation rights to natural resources owned by governments that rebel groups are aiming to overthrow. Rebel groups sell these rights to outsiders, thereby raising money to fund their cause. See also van den Herik and Dam-de Jong’s argument that booty futures are covered by law prohibiting plunder: in the *IG Farben* judgment, the Nuremberg Tribunal found that ‘property’ covers all sorts of objects, including physical and intangible ones, thereby also covering rights attached to resources, see van den Herik and Dam-de Jong (n 3) 252.

¹⁵ Lujala and Rustad (n 9) 3; Emily E. Harwell and Phillippe Le Billon, ‘Natural Connections: Linking Transitional Justice and Development Through a Focus on Natural Resources’ (2009), at <<http://www.ictj.org/publication/natural-connections-linking-transitional-justice-and-development-through-focus-natural>> accessed 5 June 2017; Harwell (n 6).

¹⁶ Lujala and Rustad (n 15) 3. ¹⁷ van den Herik and Dam-de Jong (n 3) 269.

¹⁸ Michael A. Lundberg, ‘The Plunder of Natural Resources During War: A War Crime (?)’ (2008) 39 *Georgetown Journal of International Law* 495, 496, 502. A similar argument is made for Additional Protocol I to the Geneva Conventions’ similar provisions (Arts. 35(3) and 55). *ibid.* 502.

can be significant, there is doubt as to whether the threshold of ‘widespread, long-term and severe damage’ would be reached, and its potential scope is further restricted by military necessity.¹⁹ Furthermore, while resource plunder can often have serious environmental ramifications, it is a ‘fundamentally economic and property-based crime’,²⁰ where the aim is not environmental destruction *per se*, but resource capture.

This chapter argues that the primary focus of pillage as a war crime must necessarily be on the economic damage and loss it causes to a country and communities, while recognizing that part of this damage is the harm caused to the environment by predatory exploitation practices. This chapter explores natural resource pillage as a fundamentally economic crime, and places it in the larger panoply of economic crimes committed during conflict. In addition to examining the war crime of pillage and its relation to illegal natural resource exploitation in conflict, the chapter assesses the relevance and potential utility of the law of pillage to *jus post bellum*. The goal is not only to address the potential that prosecutions for pillage may have for curbing the role of natural resources in enabling and financing conflict; it is necessary to take a broader view of pillage in the context of *jus post bellum* to consider the role that prosecution of the crime of pillage may fulfil in post-conflict peacebuilding and restoration of natural resources, together with other avenues addressing illegal natural resource exploitation.

6.2 Background

6.2.1 Key terms: overlap and ambiguity

‘Pillage’, ‘spoliation’, ‘plunder’, and ‘looting’ have been used interchangeably in most international humanitarian law instruments, as well as international jurisprudence and popular parlance. Black’s Law Dictionary defines ‘pillage’ as ‘the forcible taking of private property by an invading or conquering army from the enemy’s subjects.’²¹ The origins of the word ‘looting’ come from the Sanskrit ‘lunt’ or to rob and the Hindi ‘lut’.²² The terms ‘pillage’ and ‘plunder’ were used interchangeably by commentators, such as Hugo Grotius, across centuries.²³ This interchangeability continued in the twentieth century: the English and French versions of the Statutes of the Nuremberg Tribunal used the terms ‘plunder’ and ‘pillage’ respectively, while referring to the same legal concept.²⁴ The statute and the judgments of the International Criminal Tribunal for

¹⁹ Rome Statute of the International Criminal Court, Art. 8(2)(b)(iv); Steve Freeland, *Addressing the Intentional Destruction of the Environment During Warfare Under the Rome Statute of the International Criminal Court* (Cambridge: Intersentia, 2012).

²⁰ Lundberg (n 18) 502.

²¹ See ICRC website, at <http://www.icrc.org/customary-ihl/eng/docs/v1_rul_rule52> accessed 5 June 2017. Pillage is not the same as ‘booty of war’, which is defined as a ‘State’s taking of public property by its organs and for its benefit’, whereby title to public movable property taken from the enemy is granted to the state that captured it upon seizure, and the original owners are only entitled to compensation. Pillaged or plundered property is not meant to give title to the captor and concerns both private and public property. See Oxford Public International Law (OPIL), ‘Pillage’ Encyclopedia Entry, August 2009, at <<http://opil.ouplaw.com>> accessed 5 June 2017.

²² Stuart P. Green, ‘Looting, Law and Lawlessness’ (2007) 81 *Tulane Law Review* 1129, 1137 citing John A. Simpson and Edmund S.C. Weiner (eds.), *The Oxford English Dictionary* (Oxford: Clarendon Press, 2nd edn, 1989), 21.

²³ Stewart (n 12) 15. ²⁴ *ibid.*

Yugoslavia (ICTY) similarly conflate plunder and pillage, and the ICTY specifically acknowledged the interchangeability of the terms ‘pillage’, ‘plunder’, and ‘spoliation’ as applied to the unlawful appropriation of property in armed conflict.²⁵ ‘Looting’ has emerged as yet another synonym,²⁶ and has appeared in the US Uniform Code for Military Justice, as well as a number of ICTY judgments.²⁷ In the course of post-Second World War Nuremberg prosecutions,²⁸ ‘spoliation’ was used interchangeably with ‘plunder’ and was defined as ‘the widespread and systematised acts of dispossession and acquisition of property in violation of the rights of the owners which took place in territories under the belligerent occupation or control of Nazi Germany’.²⁹

The International Court of Justice (ICJ), in the *Armed Activities Case* between the DRC and Uganda, used the terms ‘plundering’, ‘looting’, and ‘exploitation’, when finding Uganda ‘internationally responsible for acts of looting, plundering and exploitation of the DRC’s natural resources committed by members of the UPDF in the territory of the DRC’.³⁰ The Court also used the term ‘pillage’.³¹ The ICJ did not make a legal distinction among these four terms, leading to both ‘some doctrinal uncertainty about the precise scope and meaning of each’, but also maintaining consistency with ICTY jurisprudence.³² The decision on the ICJ’s part to refrain from establishing a legal distinction between the terms pillage, plunder, and looting, allowed it to ‘look more broadly at patterns of misappropriation’.³³

6.2.2 Evolution of norms against pillage

Historically, pillage was a right of the victors in the context of war and the immediate aftermath of war.³⁴ From antiquity into the Middle Ages, while regarded by many as criminal, pillage bore the imprimatur of legitimacy as spoils of war, applicable during conflict but not for instance in the case of civil disasters.³⁵ Pillage fulfilled a double function in medieval times: it served as a weapon against the enemy—by way of

²⁵ *ibid.* 16. As Stewart observes, the ICTY Statute’s interpretation of plunder may in fact be broader and encompass pillage, which also included an element of violence not present in plunder. The notion that pillage is perpetrated with an element of violence is also present in the definition of pillage provided by the Oxford English Dictionary, according to which pillage is generally defined as ‘to rob or steal with violence, especially in Wartime’. Oxford English Dictionary (n 22), cited in OPIL (n 21).

²⁶ Stewart (n 12) 17. While looting is generally considered synonymous with pillage, it also appears to extend to disasters, riots, and other, non-conflict contexts. See also Green (n 23), 1140–1.

²⁷ Stewart (n 12) 17, referring to the *Prosecutor v. Simic*, Case No. IT-95-9-T, Judgment, para. 98.

²⁸ Stewart (n 12) 16.

²⁹ See ICRC, Customary International Humanitarian Law Database, Rule 52, at <http://www.icrc.org/customary-ihl/eng/docs/v2_rul_rule52> accessed 5 June 2017, quoting the *Krauch case (IG Farben Trial)*. For a nuanced distinction regarding spoliation, see Robert Dufresne, ‘Reflections and Extrapolation of the ICJ’s Approach to Illegal Resource Exploitation in the Armed Activities Case’ (2008) 40 *NYU Journal of International Law and Politics* 171, 192.

³⁰ *Case Concerning Armed Activities on the Territory of the Congo (DRC v. Uganda)*, Judgment of 19 December 2005, ICJ Reports 168 (‘*Armed Activities Case*’), para. 243; see also Dufresne (n 29) 185.

³¹ ICJ, *Armed Activities Case* (n 30) para. 245.

³² As noted above, in the *Delalić* case, the ICTY made an explicit decision to use plunder and pillage interchangeably. See also Dufresne (n 29) 186.

³³ *ibid.* 187. ³⁴ Green (n 22) 1137.

³⁵ *ibid.* 1137, making reference to Roman law provisions. The Old Testament allows looting in the context of war, but if done for personal gain, it was punishable by death. See Joshua 11:14 and Joshua 7:1–26.

destroying the enemy's property—and it provided for the maintenance of the army on foreign land through provisioning and in lieu of payment to soldiers, while reinforcing its control over the countryside.³⁶ In the seventeenth century, Grotius's writings largely consider pillage and plunder of enemy property as acceptable under the laws of war, calling it 'equivalent for a debt' or 'for reasonable punishment' but only for an enemy and not for third parties.³⁷

A slow change began occurring, starting from the seventeenth century, when philosophers such as John Locke began to challenge the right of victors to spoils of war.³⁸ The definitive shift, however, came in the nineteenth century, when the 1863 Lieber Code prohibited pillage: 'all pillage or sacking, even after taking a place by main force ... are prohibited under the penalty of death, or such other severe punishment as may seem adequate for the gravity of the offense.'³⁹ The Hague Regulations of 1899 and 1907 also prohibit pillage, as do the Hague Conventions IX and X.⁴⁰

The devastations and systematic plundering of property⁴¹ of the Second World War reinforced the need to reaffirm the prohibition against pillage in international law. Thus, prohibitions against pillage appear in the Charter of the International Military Tribunal (Nuremberg),⁴² the Fourth Geneva Convention,⁴³ and Additional Protocol II to the Geneva Conventions (under Fundamental Guarantees).⁴⁴ As of 2015, similar prohibitions appear in forty-eight national military manuals, the national legislation of ninety-two countries, and the case law of twelve countries.⁴⁵ Furthermore, the prohibition against pillage is now accepted as a rule of customary international law.⁴⁶

³⁶ Tuba Inal, *Looting and Rape in Wartime: Law and Change in International Relations* (Philadelphia: University of Pennsylvania Press, 2013), 28. Regarding the connection between pillage and rape in wartime, while women were considered 'booty' for soldiers much along the lines of property, rape in war was rejected and found unacceptable much sooner than pillage. In modern times, the occurrence of rape and pillage is still often synchronous. See Holly Dranginis, 'Interrupting the Silence: Addressing Congo's Sexual Violence Crisis within the Great Lakes Regional Peace Process' The Enough Project (20 March 2014), 8, 10, at <http://www.enoughproject.org/files/InterruptingtheSilence_AddressingCongosSexualViolenceCrisiswithintheGreatLakesRegionalPeaceProcess.pdf> accessed 5 June 2017.

³⁷ Inal (n 36) 28–9.

³⁸ Salome Kiwara-Wilson, 'Restituting Colonial Plunder: The Case for the Benin Bronzes and Ivories' (2013) 23 *DePaul Journal of Art, Technology and Intellectual Property Law* 375, 388.

³⁹ Lieber Code (1863), Art. 44. This shift in the nineteenth century from pillage being accepted to being a prohibited act is also manifest in several arbitral awards from that era. See OPII (n 21).

⁴⁰ Hague Regulations (1899), Arts. 28, 47; Hague Regulations (1907), Arts. 28, 47. In addition to prohibiting pillage, Art. 21 of Hague Convention X (1907) provides that parties 'undertake to enact or to propose to their legislatures ... the measures necessary for checking in time of war individual acts of pillage.' See <http://www.icrc.org/customary-ihl/eng/docs/v2_rul_rule52> accessed 6 June 2017.

⁴¹ OPII (n 21).

⁴² Art. 6(b) of the 1945 IMT Charter (Nuremberg) includes 'plunder of public or private property' in its list of war crimes, for which there must be individual responsibility.

⁴³ Geneva Convention IV (1949), Art. 33.

⁴⁴ Additional Protocol II to the Geneva Conventions (1977), Art. 4(2)(g).

⁴⁵ For the full list of military manuals and countries, see <http://www.icrc.org/customary-ihl/eng/docs/v2_rul_rule52 and http://www.icrc.org/customary-ihl/eng/docs/v1_rul_rule52#refFn_82_9> accessed 5 June 2017.

⁴⁶ Stewart (n 12) 14.

Yet another revival of the crime of pillage came with the establishment of the International Criminal Court ('ICC') as well as special courts, such as the Special Court for Sierra Leone ('SCSL'),⁴⁷ the Iraqi Special Court,⁴⁸ the International Criminal Tribunal for Rwanda ('ICTR'),⁴⁹ and the ICTY.⁵⁰ Codification of the crime of pillage is of particular significance in the context of the SCSL and ICTR statutes, as both tribunals' statutes apply to non-international armed conflict.⁵¹ It does not come as a surprise then that pillage as a war crime is prohibited under these special tribunals' statutes, since all of these conflicts witnessed widespread pillaging and exploitation of private and public property.

The Rome Statute establishing the ICC prohibits 'pillaging a town or place, even when taken by assault'⁵² under Article 8(2)(b)(xvi) and (e)(v), thereby making pillage a war crime in both international and non-international armed conflict.⁵³ The Rome Statute contains three other important war crime provisions relevant to the protection of property in wartime. These are Article 8(2)(a)(iv) on the extensive destruction and appropriation of property, and Article 8(2)(b)(xiii) and (e)(xii) on the destruction and seizure of enemy property.⁵⁴ All three of these provisions criminalize different forms of unjust takings of property.⁵⁵

6.2.3 Towards a standard definition of pillage

Despite the progressive development in the criminalization of pillage in international law, a firm definition of the crime did not, and many would argue still does not, exist until the late twentieth century, when the ICC Elements of Crime specified the required elements for the war crime of pillage—at least for purposes of prosecution under the ICC Statute.⁵⁶ Until that time, pillage was mostly defined as appropriation of property without the consent of the owner, usually subject to the exceptions contained in the Hague Regulations.⁵⁷ Traditionally the prohibition against pillage covered the taking of both private and public property; and with respect to natural resources, the prohibitions protected both extracted natural resources as well as the rights to such resources, such as concessions.⁵⁸

⁴⁷ Statute of the Special Court for Sierra Leone (2002), Art. 3(f).

⁴⁸ Iraqi Special Tribunal Statute, Art. 2(b)(17). 10 December 2003.

⁴⁹ Statute of the International Criminal Tribunal for Rwanda, Art. 4(f).

⁵⁰ Statute of the International Criminal Tribunal for Yugoslavia, Art. 3(e).

⁵¹ Stewart (n 12) 13.

⁵² The language of this provision is closely aligned with Art. 28 of the Hague Regulations, see Rome Statute Art. 8(2)(b)(xvi) and 8(2)(e)(v). The language referring to 'a town or place, even when taken by assault' holds no legal relevance in modern international criminal law, and is not present in the SCSL Statute or the ICTR Statute. See Stewart (n 12) 13. The ICC Pre-Trial Chamber held in the *Bemba* case that the reference to a town or place may be understood to imply a certain scale requirement. See van den Herik and Dam-de Jong (n 3) 261.

⁵³ ICC Statute, Arts. 8(2)(b)(xvi) and 8(2)(e)(v).

⁵⁴ ICC Statute, Arts. 8(2)(a)(iv), 8(2)(b)(xiii), and 8(2)(e)(xii).

⁵⁵ For a fuller discussion of Arts. 8(2)(a)(iv), 8(2)(b)(xiii), and 8(2)(e)(xii), see van den Herik and Dam-de Jong (n 3) 257–61.

⁵⁶ The ICC Elements of Crimes—according to Art. 9(1) of the ICC Statute—are non-binding definitions adopted by consensus vote to assist the Court in its interpretation and application of Arts. 6, 7, and 8. ICC, Elements of Crimes, UN Doc. PCNICC/2000/1/Add.2, 2 November 2000; Stewart (n 12) 19.

⁵⁷ Stewart (n 12) 21.

⁵⁸ Dam-de Jong (n 3) 164.

The ICC Elements of Crime finally gave firmer contours to the crime of pillage. They also unnecessarily restricted the application of the crime, as discussed below. According to the ICC Elements of Crimes, the elements of pillage are:

- (1) The perpetrator appropriated certain property.
- (2) The perpetrator intended to deprive the owner of the property and to appropriate it for private or personal use.
- (3) The appropriation was without the consent of the owner.
- (4) The conduct took place in the context of and was associated with an international armed conflict or an armed conflict not of an international character.
- (5) The perpetrator was aware of factual circumstances that established the existence of an armed conflict.⁵⁹

The legal construct advanced by the ICC Elements of Crime covers a range of actors (combatants and civilians) and types of property (private and public).⁶⁰ Regarding the first element of appropriation of property, even acquiring control legally may be prohibited.⁶¹ Examples from post-Second World War cases include instances where the accused purchased illegally requisitioned property at an auction and where representatives of a firm were convicted for pillage arising out of the commerce in illegally seized scrap metal.⁶² James Stewart identifies at least twenty-six pillage cases involved the legal appropriation of stolen property during the Second World War.⁶³ Importantly, pillage under this construct covers both organized, systemic pillage and individual acts of pillage committed without consent of military authorities.⁶⁴ These aspects provide for an adequately general scope for the provision, while other aspects in the Elements are more restrictive.

One particularly problematic aspect of the Elements is the overly restrictive requirement that the taking of property be for private or personal use (the last clause of the second element). This condition can lead to a restrictive application of the prohibition, especially on occasions when it is challenging to disentangle the symbiotic relationship that often exists between exploitation activities that are done in furtherance of an armed conflict—either by government or rebel groups—or for strictly personal gain

⁵⁹ ICC, Elements of Crimes (n 56), Art. 8(2)(e)(v). James Stewart's book on *Corporate War Crimes* contains a thorough discussion of the elements of the crime, therefore this chapter refrains from examining each element in detail. See James G. Stewart, *Prosecuting the Pillage of Natural Resources*, Open Society Justice Initiative Publication (New York, 2011), <<https://www.opensocietyfoundations.org/sites/default/files/pillage-manual-2nd-edition-2011.pdf>> accessed 5 June 2017.

⁶⁰ van den Herik and Dam-de Jong (n 3) 262.

⁶¹ Michael A. McGregor, 'Ending Corporate Impunity: How to Really Curb the Pillaging of Natural Resources' (2009) 42 *Case Western Reserve Journal of International Law* 469, 478, citing to the *I.G. Farben Trial*, in which defendants were found guilty of spoliation of Polish companies even though they purchased the stocks to the companies legally since the action took place in the context of conflict and the purchases were done under duress, thus without consent (*The I.G. Farben Trial, Trial of Carl Krauch and Twenty-two Others*, US Military Tribunal, Nuremberg, 14 August 1947–29 July 1948, Law Reports of the Trials of War Criminals, Vol. X, 1–68) (*I.G. Farben Trial*).

⁶² *I.G. Farben Trial* 35. The element of consent is important: in the industrialist trials after the Second World War, the US Military Tribunal found that despite the seemingly legal acquisitions of Polish factories, these acts constituted pillage as the owners had no choice but to sell their property under duress.

⁶³ *ibid.* 36. ⁶⁴ van den Herik and Dam-de Jong (n 3) 262.

and enrichment.⁶⁵ The wording is a departure from both Second World War judgments as well as the approach of present day international criminal courts.⁶⁶ The SCSL in fact declared in the *Brima* case that this ‘requirement of “private or personal use” is unduly restrictive and ought not to be an element of the crime of pillage.’⁶⁷ Applying this requirement of private or personal use to the instances of pillage and plunder of natural resources, in some cases could still mean a successful pillage prosecution before the ICC. For instance in the DRC–Uganda conflict, since members of the Ugandan army—as well as Ugandan third parties—were exploiting the DRC’s natural resources for their own personal benefit, the ‘personal use’ criterion would still be applicable.⁶⁸ However, in many other situations of natural resource exploitation, particularly when revenue from the exploitation is used to finance armed activities—that is, exploiting a conflict resource—this restrictive interpretation of pillage could mean that illegal resource exploitation would go unaddressed, at least by the ICC if it could not be shown that the exploitation is for personal gain.⁶⁹ Such failure to address conflict resources could have serious implications for the continuing conflict.

International criminal tribunals have yet to apply the war crime of pillage to the illegal exploitation of natural resources.⁷⁰ Instead of addressing systemic natural resource plunder, most pillage prosecutions to date by international criminal tribunals have been confined to the appropriation of the personal property of civilians, mostly perpetrated in the course of raids on villages.⁷¹ Thus, none of these tribunals have adjudicated pillage as it applies to natural resource exploitation to fund conflict. Based on the ICC Elements of Crime’s limitation regarding personal or private gain, it seems that natural resource exploitation to finance rebellions would not fall under the purview of Article 8(2)(b)(xvi), while illegal natural resource exploitation for the purposes of personal enrichment could.⁷² This means that one of the most important nexuses between conflict and natural resources—the financing of conflict through illegal or illicit natural resource exploitation—would be unaddressed by the war crime of pillage in the ICC.⁷³

6.3 The Law of Pillage and *Jus Post Bellum*

How does the law of pillage fit into the *jus post bellum* framework? The classical, binary distinction between war and peace that has been prevalent historically is disappearing.⁷⁴

⁶⁵ *ibid.* 263. ⁶⁶ Stewart (n 12) 20.

⁶⁷ *The Prosecutor v. Alex Tamba Brima, Brima Bazzy Kamara and Santigie Borbor Kanu (the AFRC Accused)*, Judgment (SCSL-04-16-T, 20 June 2007), para. 754; see also Stewart (n 12) 20.

⁶⁸ Dam-de Jong (n 3) 165.

⁶⁹ *ibid.* 165. Dam-de Jong also notes that with regards to rebel groups, the definition of what constitutes public purpose may be more difficult and may be subject to an evaluation of the nature of the fight (i.e. whether it is motivated by ideology or self-interest), making it difficult to judge the applicability of the crime of pillage.

⁷⁰ *ibid.* 165, referencing the ICRC Customary International Humanitarian Law Database, Rule 52, at <http://www.icrc.org/customary-ihl/eng/docs/v2_rul_rule52> accessed June 2017.

⁷¹ Dam-de Jong (n 3) 165; van den Herik and Dam-de Jong (n 3) 266–9.

⁷² Dam-de Jong (n 3) 166. ⁷³ *ibid.*

⁷⁴ *ibid.* 334; Carsten Stahn, ‘Jus Post Bellum: Mapping the Discipline(s)’ (2008) 23 *American University International Law Review* 311, 322 (‘Jus Post Bellum’), noting also that ‘A conflict can no longer be temporally defined simply by looking at the date of signature of the relevant peace treaty, nor will the conclusion of a peace treaty mean the end of hostilities.’ See also Carsten Stahn, ‘“Jus ad bellum”, “Jus in bello” ... “Jus

Just as there is often no clear line between the cessation of hostilities and the post-conflict period,⁷⁵ historic concepts of peacetime and wartime law—divided further into *jus ad bellum* and *jus in bello*—share an inability to provide an adequate framework for all stages of conflict, particularly for the transitory, legally grey period between hot conflict and stable peace that is prevalent.⁷⁶

It is posited that the *jus ad bellum/jus in bello* division reflects the traditional—and now less and less relevant—distinction between war and peace, by suggesting that ‘each of these two bodies of law contains its own specific and exclusive system of rules which comes into play in circumstances when the traditional rules of the “law of peace” cease to be of adequate guidance.’⁷⁷ However, just as the traditional view that the presence of a state of war means that peacetime rules cease to apply is no longer tenable in its absolutist form,⁷⁸ so is the *jus ad bellum/jus in bello* division similarly inadequate to capture all stages of conflict, particularly the transition from conflict to peace.⁷⁹ Regarding the consequences of this inadequacy of the current framework, Brian Orend observed: ‘the lack of rules regulating postwar conduct on the part of states creates serious problems of legal vacuum, political insecurity and profound injustice.’⁸⁰ It is this lacuna of the legal landscape that *jus post bellum* intends to address.⁸¹

This section explores four aspects of the role of pillage in the emerging body of *jus post bellum*: temporal considerations, relationship to the law of occupation, scope of actors to whom pillage would apply, and legal and practical implications of approaching pillage as an economic war crime.

6.3.1 Temporal considerations: when is pillage a war crime?

One gap in the traditional framework is the temporal scope of application of the norms of international humanitarian law: how far do these norms extend in time?⁸² In the context of pillage as a war crime, the question arises: when does pillage have to be perpetrated in order to fall within the scope of international humanitarian law and international criminal law? Are there temporal boundaries to the war crime of pillage? In many instances, the answer would be clear: while the armed conflict lasts, and perhaps to a limited extent following the end of hostilities as long as military operations continue.⁸³ There must be a nexus between the crime and the armed conflict; for

post Bellum”’—Rethinking the Conception of the Law of Armed Force’ (2007) 17 *European Journal of International Law* 921, 923 (‘Rethinking the Conception of the Law of Armed Force’).

⁷⁵ See Stahn, ‘Rethinking the Conception of the Law of Armed Force’ (n 74) 926. ⁷⁶ *ibid.* 927.

⁷⁷ *ibid.* 924.

⁷⁸ ILC, Draft Articles on the Effects of Armed Conflicts on Treaties, with Commentaries (2011).

⁷⁹ Stahn, ‘Rethinking the Conception of the Law of Armed Force’ (n 74) 926.

⁸⁰ Brian Orend, *War and International Justice: A Kantian Perspective* (Waterloo, ON, Wilfrid Laurier University Press, 2000), 222, as quoted in Richard P. Dimeglio, ‘The Evolution of the Just War Tradition’ (2005) 186 *Military Law Review* 116, 131.

⁸¹ David E. Kellogg, ‘Jus Post Bellum: The Importance of War Crimes Trials’ (2002) 32 *Parameters* 87, 91; Stahn, ‘Rethinking the Conception of the Law of Armed Force’ (n 74) 924, 926.

⁸² Stahn, ‘Rethinking the Conception of the Law of Armed Force’ (n 74) 927.

⁸³ *ibid.* 928. For a discussion the legal requirements for a finding of an international armed conflict based on Art. 2 of the Geneva Conventions of 1949 and for a non-international armed conflict based on Common Art. 3 of the Geneva Conventions of 1949 and Art. 1 of Additional Protocol II, please see the ICRC, Opinion

pillage, this is expressly provided for by the ICC Elements of Crimes, which requires that ‘the conduct took place in the context and was associated with an international armed conflict or an armed conflict not of an international character.’⁸⁴ Moreover, the ICTY Appeals Chamber has identified a number of factors indicative of the nexus: the fact that the perpetrator is a combatant; the fact that the victim is a non-combatant; the fact that the victim is a member of the opposing party; the fact that the act may be said to serve the ultimate goal of military campaign; and the fact that the crime is committed as part of, or in the context of, the perpetrator’s official duties.⁸⁵

However, the nature of conflicts has changed: too often, a ceasefire or peace agreement is not an end to hostilities, and there is no clear dividing line where armed conflict turns into peace. John P. Quinn, writing of the operations of the US naval forces, notes that these operations ‘can be said to operate at all times at some point along a continuum that ranges from peace through MOOTW (military operations other than war) to war.’⁸⁶ The question is where along this continuum from conflict to peace is pillage still a war crime. This becomes all the more challenging to answer as the nature of modern conflicts becomes more complex and varied.⁸⁷ With conflicts lasting longer or oscillating between peace and outbreaks of violence, combined with the involvement of numerous actors with diverse agendas and at times shifting loyalties and affiliations, it is often challenging to fix a point in time when the conflict terminates and the laws of war no longer apply.⁸⁸ When hostilities have ceased in theory—as a result of a ceasefire or peace agreement—but acts of extreme violence and gravity persist, the question as to which legal framework applies may arise.

The Iraqi conflict is a case in point. Adam Roberts in his discussion of the Iraqi occupation post-June 2004 raised the question: ‘When the occupation ends, and assuming that the violent opposition continues, will the Geneva Conventions and other rules of war still apply to the actions of coalition and Iraqi personnel?’⁸⁹ His answer—specifically in the case of Iraq after 28 June 2004—is that the ongoing hostilities were ‘of sufficient gravity as to make it implausible to suggest that the situation of armed conflict is definitely over,’ noting also that ‘the situation does not conform exactly to recognized definitions of either international or civil war, or of military occupation.’⁹⁰ In conclusion, Roberts found that the laws of war should still apply to post-occupation

Paper, March 2008, ‘How is the Term “Armed Conflict” Defined in International Humanitarian Law?’, at <<https://www.icrc.org/eng/assets/files/other/opinion-paper-armed-conflict.pdf>> accessed 5 June 2017.

⁸⁴ See ICC, Elements of Crimes (n 56).

⁸⁵ See van den Herik and Dam-de Jong (n 3) 256, referencing the ICTY Appeals Chamber’s decision in the *Kunarac* case. ICTY, Appeal Judgment, *The Prosecutor v. Dragoljub Kunarac and Others*, Case No. IT-96-23-A, Appeals Chamber, 12 June 2002, paras. 57–9.

⁸⁶ John P. Quinn, Richard T. Evans, and Michael J. Boock, ‘United States Navy Development of Operational-Environmental Doctrine’ in Jay E. Austin and Carl E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (New York: Cambridge University Press, 2000), 156, 163.

⁸⁷ *ibid.* As Adam Roberts noted regarding the conflict in Iraq after 2004: ‘Numerous acts of the opposition forces have involved violations of fundamental rules of international law, including the laws of war: for example, attackers appearing as civilians, attacks on civilians and civilian objects, attacks on ICRC and UN personnel, and the taking and killing of hostages. It is undoubtedly true that such attacks form a pattern of conflict significantly different from what is envisaged in the laws of war.’ Adam Roberts, ‘The End of Occupation: Iraq 2004’ (2005) 54 *International and Comparative Law Quarterly* 27, 34.

⁸⁸ *ibid.*

⁸⁹ *ibid.* 34–5.

⁹⁰ *ibid.* 46.

Iraq based on an examination of the factual scenario ‘it is the reality, not the label, that counts.’⁹¹

In light of this, it is quite plausible that even following the conclusion of a peace agreement, acts of pillage may take place that would give rise to responsibility and liability under the laws of war and international criminal law. Whether this is the case would require an examination of the factual context of the violations to determine whether the laws of war were still to be applied or whether peacetime law should be applicable.

6.3.2 Natural resource exploitation and the law of occupation

Occupation is another point on the war-to-peace continuum that bears relevance for *jus post bellum* and the law of pillage.⁹² While there has been some contention that the law of occupation has become obsolete, situations of formal occupations or situations akin to occupations have once again resurfaced.⁹³ Many of the recent occupations involved resource-rich countries, such as Iraq or the Democratic Republic of the Congo. The question then arises: do occupying powers need to be concerned about being held responsible for pillage? Natural resource exploitation in occupied territories by the occupant is an issue that arises in the context of almost every occupation, particularly those of resource-rich countries or in situations of long-term occupations.

Regarding the exploitation of natural resources by a belligerent occupant,⁹⁴ some of the most important questions are: Is a belligerent occupant allowed to exploit the natural resources of the occupied territory? Under what circumstances may a belligerent occupant use non-renewable natural resources? For what purposes can the yields of natural resource exploitation be used?

The Hague Regulations of 1907 are the principal governing body of law regarding belligerent occupation; since they are considered customary international law, they are binding even on nations that have not ratified the Regulations.⁹⁵ While it has been

⁹¹ *ibid.* 47.

⁹² See Quinn *et al.* (n 86). According to the ICRC Handbook on International Rules Governing Military Operations, ‘occupied territory’ is territory that is actually placed under the authority of adverse foreign armed forces. The occupation extends only to the territory where such authority has been established and can be exercised. ICRC, Handbook on International Rules Governing Military Operations, 7 March 2014, 98, at <<http://www.icrc.org/eng/resources/documents/publication/p0431.htm>> accessed 5 June 2017.

⁹³ Dufresne (n 29) 197.

⁹⁴ It is worth noting that the general principle of law *ex injuria jus non oritur*, according to which legal rights should not be able to arise from an illegal act, does not apply in the context of occupation law, and as Edward Cummings points out, this has been so since the Nuremberg Trials where in *U.S. v. List (The Hostages Trial)*, the US Military Tribunal held that ‘international law makes no distinction between a lawful and an unlawful occupant in dealing with the respective duties of occupant and population in occupied territory ... Whether the invasion was lawful or criminal is not an important factor in the consideration of this subject.’ See Edward R. Cummings, ‘Oil Resources in Occupied Arab Territories Under the Law of Belligerent Occupation’ (1974) 9 *Journal of International Law and Economics* 533, 550.

⁹⁵ Brice M. Claggett and O. Thomas Johnson Jr., ‘May Israel As A Belligerent Occupant Lawfully Exploit Previously Unexploited Oil Resources of the Gulf of Suez’ (1978) 72 *American Journal of International Law* 558, 560. Additional protection is provided by Art. 147 of the Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War, as well as Arts. 46–56 of the Hague Regulations: Art. 53 prohibits the destruction of both private and public property for any reason other than military necessity, Art. 52 forbids the seizing of immovable property, Art. 46 forbids confiscation of private property, and Art. 47 forbids pillage.

contested in the past, notably in the Israeli occupation of The Gulf of Suez and Sinai, it is now firmly established that the Regulations remain relevant even after the conclusion of actual fighting over the occupied territory.⁹⁶ During the Nuremberg Trials, the US Military Tribunal held in the *Krupp* case that: 'The Articles of the Hague Regulations ... are clear and unequivocal. Their essence is: if, as a result of war action, a belligerent occupies a territory of the adversary, he does not, thereby, acquire the right to dispose of property in that territory, except according to the strict rules laid down in the Regulations.'⁹⁷

Articles 53(1) and 55 of The Hague Regulations deal with occupied state property, distinguishing between movable and immovable property, while Article 46 regulates the occupant's powers regarding private property.⁹⁸ Article 53(1) is applicable to all movable property belonging to the state and allows for anything that may be used for military occupations to be possessed by the occupant,⁹⁹ while Article 55 regulates the occupation of real estate, providing that 'the occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country.'¹⁰⁰

The Hague Regulations apply to natural resources, and particularly to resources such as oil and gas, which are both non-renewable and high-value (and thus could be instrumental in financing conflict). Different regimes apply to already-extracted resources and to resources that are still in the ground: oil and gas, once extracted, become movable property, as confirmed by a leading Second World War case,¹⁰¹ and fall under Article 53(1); prior to extraction, however, they fall under Article 55's purview.¹⁰² Article 55, however, only makes mention of real estate and forests, and remains silent on the use of other resources, such as gas, oils, or minerals. Article 55 itself sets up a system of usufruct, a concept originating in Roman law and defined in the Institutes of Justinian as 'the right of using and enjoying the property of other people, without detriment to the substance of the property.'¹⁰³ This concept entails an obligation to preserve

⁹⁶ Claggett and Johnson (n 95) 561. For a different view, see Allan Gerson, who argues that new wells, and even exploration of new oil fields enhances the value of the real estate. Allan Gerson, 'Off-Shore Oil Exploration by a Belligerent Occupant: The Gulf of Suez Dispute' (1978) 71 *American Journal of International Law* 725.

⁹⁷ *In re Krupp and Others*, US Military Tribunal, Nuremberg, Judgment of 30 June 1948, 15 AD 620, Case No. 214, 622.

⁹⁸ *ibid.* 562. Art. 46 of the Hague Regulations: 'Family honour and rights, the lives of persons, and private property, as well as religious convictions and practice, must be respected. Private property cannot be confiscated.'

⁹⁹ Hague Regulations of 1907, Art. 53(1).

¹⁰⁰ Hague Regulations of 1907, Art. 55.

¹⁰¹ *N.V. de Bataafsche Petroleum Maatschaap v. The War Damage Commission*, 23 ILR 810 (Court of Appeal, Singapore 1956), as referenced in Cummings (n 94) 557. The Court found that crude oil in the ground, even if the oil production commenced prior to occupation, was immovable property. Cummings notes that some civil law jurisdictions handle minerals to be extracted from mines (and presumably oil too) as movable property. Cummings (n 94) 573. Guano, coal, and minerals have been treated as movable property once extracted from rock, but not before. See Yutaka Arai-Takahashi, *The Law Of Occupation: Continuity And Change Of International Humanitarian Law, And Its Interaction With International Human Rights Law* (Leiden: Martin Nijhoff Publishers, 2009), 211.

¹⁰² Claggett and Johnson (n 95) 562–3.

¹⁰³ *ibid.* 567–8. It is worth noting, as Claggett and Johnson do, that Romans had a fundamental misconception about the nature of minerals: they thought them to be inexhaustible, and thus the usufruct concept was modified to allow for opening of new mines, not only exploiting the ones opened by the original owners.

the capital of the property and to avoid deteriorating the position of the owner with regards to the capital, while allowing for the use and collection of the ‘fruits’ of the property by the occupant power.¹⁰⁴ Could this usufruct regime be applicable to non-renewable resources, such as oil and gas, where exploitation necessarily consumes the capital?¹⁰⁵ Scholars argue that Article 55’s list of resources is non-exhaustive, and in fact does apply to non-renewable resources.¹⁰⁶ It is also important to note that while under Article 53 of the Hague Regulations, certain movable property that would qualify as munitions of war may be seized, even if belonging to private individuals, crude oil has been considered not to be a form of war munitions and therefore arguably would not fall under this exception.¹⁰⁷

The decision to expand the ambit of Article 55 to non-renewables poses some practical questions: Would an occupying power be allowed to open new oil wells or would it be restricted to use wells that had been in use prior to occupation? Would the occupant be allowed to grant new concessions? Would the occupied country be allowed to do so? If so, who in the occupied country would decide, and how?

Regarding non-renewable resources, such as oil, arguments have been made that exploitation may be a way to preserve the possibility to exploit the resource after the end of occupation.¹⁰⁸ These arguments have largely been refuted.¹⁰⁹ The consensus seems to be that under Article 55’s usufruct regime, the occupying power would not be allowed to open new wells in occupied territory.¹¹⁰ This issue arose in the case of Israeli efforts to drill new wells in the occupied Sinai Peninsula and the Gulf of Suez in the 1970s.¹¹¹ Commentators argued that such extraction would be an ‘impermissible taking of the capital of property protected by Article 55 whether or not the oil taken is newly discovered’.¹¹² In addition, while old mines or wells may be used by an occupying power, there is a strong suggestion that such usage should not exceed the average levels of exploitation that took place prior to occupation and mines that were not in use prior to occupation should not be exploited at all.¹¹³ Along these lines, an occupying power would not be able to grant concessions to unexploited oil or gas reserves.¹¹⁴ In the case of the Iraqi occupation, commentators have noted that an occupying power should not engage in granting oil concessions to private companies, thereby quasi-privatizing the resource, and should also avoid engaging in the state-owned oil production and distribution industry.¹¹⁵ In summary, an occupying power would have limited authority

¹⁰⁴ *ibid.* 568; Dufresne (n 29) 200. For more on the regime of usufruct and its various interpretations, see Cummings (n 94) 559–66.

¹⁰⁵ Dufresne (n 29) 200.

¹⁰⁶ See, for example, Jean D’Aspremont, ‘Towards an International Law of Brigandage: Interpretative Engineering for the Regulation of Natural Resources Exploitation’ (2013) 3 *Asian Journal Of International Law* 1, 4–5.

¹⁰⁷ Arai-Takahashi (n 101) 213.

¹⁰⁸ D’Aspremont (n 106) 5.

¹⁰⁹ *ibid.*

¹¹⁰ Claggett and Johnson (n 95) 575.

¹¹¹ Harold Dichter, ‘The Legal Status of Israel’s Water Policies in the Occupied Territories’ (1994) 35 *Harvard International Law Journal* 565, 590; Cummings (n 94) 533.

¹¹² Claggett and Johnson (n 95) 575.

¹¹³ *ibid.* 575; D’Aspremont (n 106) 5. For a more detailed discussion of the rates of exploitation, see R. Dobie Langenkamp and Rex J. Zedalis, ‘What Happens to the Iraqi Oil?: Thoughts on Some Significant, Unexamined International Legal Questions Regarding Occupation of Oil Fields’ (2003) 14 *European Journal of International Law* 417, 425–30; Arai-Takahashi (n 101) 210.

¹¹⁴ D’Aspremont (n 106) 5.

¹¹⁵ Arai-Takahashi (n 101) 214.

to utilize immovable resources of an occupied country under a usufruct regime, could not overexploit those resources, and would need to maintain their long-term value.¹¹⁶

An occupied country has the ability to grant natural resource concessions while the territory is being held by the occupant. The legality of such concessions arose in the case of the Amoco concessions granted by Egypt for oil in the Gulf of Suez.¹¹⁷ Commentators noted that, ‘a displaced sovereign may take action affecting occupied territory as long as such action does not conflict with the right of the occupant.’¹¹⁸ Since Israel was not allowed to open new wells in the Gulf of Suez under the usufruct regime, Article 55 prohibited Israel from exploiting the oil there, and therefore its rights as an occupying power would not be harmed by Egypt’s granting of concessions.

Another concern is what rights, if any, would rebel groups have to natural resources that are located in their territory. With respect to these groups’ exploitation of natural resources, including non-renewable resources, in territories under their control, it is arguable that the same principles should be applicable that are in place for occupying powers, despite the fact that only foreign armies who establish an occupation can apply the Hague Regulation exceptions.¹¹⁹

International law limits the purposes for which an occupying power may use the natural resources of an occupied territory: ‘1) to meet the occupant’s own security needs in the occupied territory; 2) to defray the expenses involved in the belligerent occupation; and 3) to protect the interest and well-being of inhabitants.’¹²⁰ Regarding expenses of the belligerent occupation, the Nuremberg judgments—both in the *Major War Criminals Trial* and later in the *Flick Case*—give some guidance on this: ‘an occupant may only take so much property, whether publicly or privately owned, as is necessary to meet the costs of the occupation,’¹²¹ as the “economy of an occupied country can only be required to bear the expenses of the occupation.”¹²² While it was not defined what constitutes costs or expenses in this regard, it was also clear that expenses could not include costs for the occupying power to wage war against the occupied: ‘Just as the inhabitants of the occupied territory must not be forced to help the enemy in waging the war against their own country or their own country’s allies, so must the economic assets of the occupied territory not be used in such a manner.’¹²³ In the *N. V. de Bataafsche Petroleum Maatschappij v. The War Damage Commission* case, the Singapore court ruled that the Japanese seizure of oil resources in the East Indies would be contrary to the law of occupation partly because the seizure was not aimed at meeting the requirements of the occupation army, but instead to supply the military and civilian needs of the occupying force, and as such it constituted plunder.¹²⁴

Modern commentators essentially say the same thing: ‘The benefits obtained from a belligerent occupant’s working of immovable state property, such as oil reserves, can be

¹¹⁶ Claggett and Johnson (n 95) 577. ¹¹⁷ *ibid.* 579. ¹¹⁸ *ibid.* 579.

¹¹⁹ Stewart (n 12) 61. ¹²⁰ Dufresne (n 29) 203.

¹²¹ For analysis, see Claggett and Johnson (n 95) 580; Langekamp and Zedalis (n 113) 430–1.

¹²² Claggett and Johnson (95) 580; Langenkamp and Zedalis (n 113) 430, both quoting the Trial of the Major War Criminals before the International Military Tribunal, vol. I, at 230, 6 Fed. Rules Dec. (1947) 69, at 120.

¹²³ Claggett & Johnson (n 95) 582.

¹²⁴ *N. V. de Bataafsche Petroleum Maatschappij v. The War Damage Commission* (n 101). For analysis, see Arai-Takahashi (n 101) 212.

applied only to defraying the “expenses of the occupation”, and that concept does not extend to the overall costs of the military operation.¹²⁵ This seems to be reinforced by the fact that the Hague Regulations’ relevant provisions regarding the requisitioning of movable private property, for instance, also require a close tie to occupation activities.¹²⁶ The notion that proceeds from the working of occupied state-owned immovable property should only be used to defray the costs of occupation was echoed in a 1943 resolution coming out of the London International Law Conference, which states that an occupant had no right to dispose of property—be it private or public—for any purpose other than the maintenance of public order and safety in the occupied territory.¹²⁷ This understanding gains particular relevance for high-value natural resources, where revenue from such resources could then be used to maintain the preparedness of the military of the occupying power. Similarly, any revenue use for the occupant’s own personal enrichment would be unlawful.¹²⁸

Revenues from the operation of immovable state property, such as non-renewable resources, under the usufruct regime could be used only for the benefit of the population of the occupied territory, besides the expenses of the occupation itself.¹²⁹ The ICJ’s judgment in the *Armed Activities Case* did not clarify whether exploitation carried out for the benefit of the local population would be lawful or not, but it did state that ‘Uganda’s argument that any exploitation of natural resources in the DRC was carried out for the benefit of the local population, as permitted under humanitarian law, is not supported by reliable evidence.’¹³⁰ The Court did hold that Uganda was under an obligation based on the duty of vigilance—which the Court specifically tied to Uganda’s status as an occupying power—to take adequate measures to prevent its nationals or groups under its control to engage in illegal natural resource exploitation on the occupied territories of the DRC.¹³¹ Thus, an occupying power is under a duty to prevent not only ‘official’ looting, but also private acts of looting.¹³² The ICJ’s Namibia Advisory Opinion also suggests that as long as the use is for the benefit of the local population, the exploitation is lawful, even despite the unlawfulness of the occupation itself.¹³³ James Stewart also notes that cautiously allowing for the proceeds from the sale of non-renewable resources to be used for humanitarian needs of the population is necessary since in many conflict zones, large parts of the populace may be dependent for their survival on the sale of such proceeds.¹³⁴

In closing, it is also important to briefly refer to the principle of permanent sovereignty over natural resources and how that applies to natural resource exploitation in occupied territories: while the ICJ in the *Armed Activities Case* has found that the principle—while a part of customary international law—did not apply to the specific situation of looting, pillage, and the exploitation of certain natural resources committed

¹²⁵ Langenkamp and Zedalis (n 113) 430. ¹²⁶ *ibid.* 430. ¹²⁷ *ibid.* 431.

¹²⁸ *ibid.* 434. ¹²⁹ D’Aspremont (n 106) 6.

¹³⁰ *ibid.*, quoting the *Armed Activities Case* (n 30) para. 249. ¹³¹ Dufresne (n 29) 196.

¹³² *ibid.* 197.

¹³³ *ibid.* 203, referencing *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276 (1970)*, Advisory Opinion, 21 June 1971, ICJ 16, at 56–7.

¹³⁴ Stewart (n 12) 60.

by the occupying power.¹³⁵ Nevertheless, some commentators still argue that permanent sovereignty may still be relevant.¹³⁶

6.3.3 Who?—corporate liability for pillage

Corporate accountability, both in terms of holding corporations themselves and holding corporate officers and managers criminally responsible before international criminal tribunals has been one of the most contested legal areas of recent years. As the role of corporate actors in some of the worst resource conflicts of the past decades has been revealed and documented, the issue has received heightened attention both in policy and academic circles.

Historically, the liability of individual corporate officers is well established. Several corporate officers and managers were held liable in Second World War related cases. As James Stewart observes, aside from the more usual references to the industrialist cases—such as *Flick*, *Farben*, and *Krupp*—there were a number of less well-known examples of individual corporate liability in the Nuremberg cases.¹³⁷ Since the Nuremberg Trials, however, corporate actors became largely invisible in war crimes tribunals. Recently, however, the role that corporations play in some of the worst resource conflicts and particularly the way this role is being documented and publicized, the notion of ‘commercial responsibility of pillaging’ is gaining strength.¹³⁸

A. Corporate accountability before the ICC

While the ICC can prosecute heads of state, political and military leaders, and corporate officers and managers, corporations are not subject to liability before it. There were several arguments raised both for and against including corporations within the personal jurisdiction of the Court when drafting the Rome Statute.¹³⁹ Some argued that including corporations under the Court’s jurisdiction would facilitate compensation for victims—a valid point, considering the meagre activity of the Victim’s Trust Fund to date.¹⁴⁰ Others argued that since not all national systems recognize the criminal liability of corporations, their exclusion is warranted to ensure fairness.¹⁴¹ Evidentiary challenges in pursuing legal entities were also raised as an objection.¹⁴² In the end, only natural persons were included within the Court’s jurisdiction.¹⁴³

B. Liability of corporate officers and managers before the ICC

In both civil and common law systems, the individual criminal liability of representatives of the corporation is well established.¹⁴⁴ Furthermore, corporate

¹³⁵ *Armed Activities Case* (n 30) para. 244. ¹³⁶ Dufresne (n 29) 213–16.

¹³⁷ James G. Stewart, *Corporate War Crimes Begin*, *Opinio Juris*, 14 November 2013, at <<http://opinio-juris.org/2013/11/14/corporate-war-crimes-begin/>> accessed 5 June 2017.

¹³⁸ *ibid.*

¹³⁹ Julia Graff, ‘Corporate War Criminals and the International Criminal Court: Blood and Profits in the Democratic Republic of Congo’ (2004) 11 *Human Rights Brief* 23, 23.

¹⁴⁰ *ibid.* 23.

¹⁴¹ *ibid.*

¹⁴² *ibid.*

¹⁴³ Rome Statute, Art. 25(1).

¹⁴⁴ Stewart (n 12) 76.

he either knew or consciously disregarded information which clearly indicated that the subordinates were committing or were about to commit such crimes; the crimes concerned activities that were within his or her effective responsibility and control; and the superior failed to take all necessary and reasonable measures within his or her power to prevent or repress their commission or to submit the matter to the competent authorities.¹⁵⁴ The *mens rea* requirement under Article 28(b)—‘knew or consciously disregarded’—is much more stringent than under Article 28(a).¹⁵⁵ In addition, a superior–subordinate relationship must also be established, based on either *de jure* or *de facto* control.¹⁵⁶ An example of a corporate officer being held liable for a war crime under the theory of command responsibility is *Prosecutor v. Musema*, where the ICTR held liable the director of a tea factory for genocide and crimes against community because he failed to prevent his employees from committing acts of genocide while under his effective control.¹⁵⁷

ii. Accomplice liability

Under Article 25(3) of the Rome Statute, an individual can be held liable for a crime under the Court’s jurisdiction if he or she:

- (a) commits such a crime, whether as an individual, jointly with another or through another person, regardless of whether that other person is criminally responsible;
- (b) [o]rders, solicits or induces the commission of such a crime which in fact occurs or is attempted;
- (c) [f]or the purpose of facilitating the commission of such a crime, aids, abets or otherwise assists in its commission or its attempted commission, including providing the means for its commission;
- (d) [i]n any other way contributes to the commission or attempted commission of such a crime by a group of persons acting with a common purpose. . . .¹⁵⁸

The contribution can be made either ‘with the aim of furthering the criminal activity or criminal purpose of the group’ or in the knowledge of the intention of the group to commit the crime.¹⁵⁹

Article 25 may provide a less stringent standard for individual corporate liability. Examples of such liability include for example the *Zyklon B* case, in which a German businessman and supplier of poison gas and equipment was convicted of a war crime as an aider-and-abettor for selling the gas and equipment to Nazi concentration camps.¹⁶⁰ A more recent example would be Charles Taylor’s case before the SCSL, who was held liable as an aider and abettor for eleven counts of war crimes, including pillage, for his role in the Sierra Leone conflict.¹⁶¹

¹⁵⁴ Rome Statute, Art. 28(b). ¹⁵⁵ Graff (n 139) 25. ¹⁵⁶ *ibid.*

¹⁵⁷ *ibid.* *Prosecutor v. Musema*, Trial Chamber I, Judgment and Sentence (ICTR-96-13-A, Judgment, 16 November 2001).

¹⁵⁸ Rome Statute, Art. 25(3). ¹⁵⁹ Rome Statute, Art. 25(3)(d)(i)(ii).

¹⁶⁰ *Trial of Bruno Tesch and Two Others (the Zyklon B case)*, British Military Court, Hamburg, 8 March 1946, Law Report of Trials of War Criminals 93. For analysis, see Graff (n 139) 25.

¹⁶¹ *Prosecutor v. Charles Ghankay Taylor* Judgment Summary (SCSL-03-1-T, Special Court for Sierra Leone, 26 April 2012).

C. Liability of corporations for war crimes

Many argue that beyond holding corporate representatives individually liable for war crimes, the criminal liability of the legal entity itself is necessary, especially in the context of natural resource exploitation.¹⁶² While individual criminal responsibility is important to create disincentives, by pursuing the corporate entity itself, the possible measure of reparations is greater, since in case of a conviction, assets of the company itself could be forfeited.¹⁶³ The Rome Statute does not grant the ICC jurisdiction over legal entities and many argue that corporate accountability for war crimes—for now, at least—is much more imaginable before domestic courts than in international forums. Efforts in that direction can be seen in domestic courts. In 2013, one of the leading gold refineries in the world, Argor-Heraeus, became the subject of a domestic criminal investigation in Switzerland for pillaging Congolese natural resources.¹⁶⁴ While the prosecutor ultimately decided not to prosecute the company,¹⁶⁵ it signals that in the absence of prosecution of corporate entities by international courts, domestic courts are increasingly willing to act. Importantly, this case focuses on the acquisition of pillaged gold rather than on the violation of embargoes, which has often been the case in regional and national prosecutions.¹⁶⁶ Another case that merits attention is the lawsuit in France against Dalhoff, Larsen, and Horneman, a French timber company, for handling and profiting from goods obtained in an illegal manner, the company allegedly having continued to purchase Liberian timber despite evidence that the timber was harvested illegally and in an environmentally destructive manner and that the arms purchased from the proceeds from the timber violated UN embargoes.¹⁶⁷

6.3.4 The law of pillage and economic crimes

While the number of conflicts may arguably be declining, there is a growing number of recurrent and persistent conflicts—conflicts where lasting resolution seems elusive.¹⁶⁸ Accordingly, a modern *jus post bellum* must necessarily be ‘focused on the sustainability

¹⁶² Stewart (n 12) 82. ¹⁶³ *ibid.*

¹⁶⁴ Tom Miles and Emma Farge, ‘Switzerland Opens Probe into Gold Refiner Argor for Congo Dealings’, Reuters, 4 November 2013, at <<http://www.reuters.com/article/2013/11/04/congo-gold-idUSL5N0IP29K20131104>> accessed 5 June 2017.

¹⁶⁵ James G. Stewart, ‘The Argor Heraeus Decision on Corporate Pillage of Gold’, 19 October 2015, at <<http://jamesgstewart.com/the-argor-heraeus-decision-on-corporate-pillage-of-gold/>> accessed 5 June 2017.

¹⁶⁶ Anne-Cecile Vialle, Carl Bruch, Reinhold Gallmetzer, and Akiva Fishman, ‘Peace through Justice? International Tribunals and Accountability for Wartime Environmental Damage’ in Bruch, Muffett, and Nichols, *Governance, Natural Resources, and Post-Conflict Peacebuilding* (n 3).

¹⁶⁷ Global Witness, *Bankrolling Brutality*, 2010, at <http://www.globalwitness.org/sites/default/files/import/bankrolling_brutality_hi.pdf> accessed 5 June 2017.

¹⁶⁸ See Human Security Report 2012, at 164, 170–1, noting that ‘60 percent of the conflict terminations between 2000 and 2004 were followed by renewed violence in less than five years’. See also, *ibid.* 171. Full report at <<http://hsrgroup.org/docs/Publications/HSR2012/2012HumanSecurityReport-FullText-LowRes.pdf>> accessed 5 June 2017. According to a World Bank Development Report from 2011, the majority of the conflicts currently active are recurrences of violence. In fact, the report finds that ‘every civil war that began since 2003 was in a country that had a previous civil war’. World Bank Development Report 2011, at <http://siteresources.worldbank.org/INTWDRS/Resources/WDR2011_Full_Text.pdf> accessed as quoted in Human Security Report 171.

representatives can be held liable for war crimes, including pillage, in the same way that civilians can be prosecuted for violations of the laws of war—a notion that has gained confirmation both through codification and practice.¹⁴⁵ Corporate officers were held liable in a number of Nuremberg cases, such as the *IG Farben, Flick*, or *Krupp* cases.¹⁴⁶ There are also more recent cases. In the 2000s, Dutch businessmen were found guilty of war crimes in Dutch courts.¹⁴⁷ The ICTR has held accountable members of a commercial radio station for incitement to genocide and the owner of a tea factory of genocide for failing to prevent or punish acts of genocide perpetrated by his employees.¹⁴⁸

Individual corporate liability on the part of officers and managers of the company—in the absence of direct participation in the atrocities—is conceivable under two theories: command responsibility and accomplice liability.¹⁴⁹

i. Command responsibility

Under command responsibility, a person may be individually criminally responsible for failing to supervise properly and control the conduct of others who are acting under his or her effective authority and control.¹⁵⁰ While command responsibility appeared in the statutes of both the ICTY and the ICTR, the Rome Statute is different in its treatment of the subject since—unlike the other two statutes—it distinguishes between military commanders and civilian superiors under Article 28.¹⁵¹ Article 28(a) governs military commanders and Article 28(b) governs civilian superiors.¹⁵² Corporate officers would fall under Article 28(b) as civilian superiors. Under Article 28(a), a military commander would face criminal liability if he or she knew or should have known of a subordinate's crimes under his effective command and control and failed to take all necessary and reasonable measures within his or her power to prevent or repress their commission or to submit the matter to competent authorities.¹⁵³ Under Article 28(b), a civilian superior can be held criminally responsible for crimes under the Court's jurisdiction committed by subordinates under his or her effective authority and control, if

¹⁴⁵ *ibid.* *Trial of Alois and Anna Bommer and their Daughters*, Permanent Military Tribunal, Metz, 19 February 1947, 9 Law Report of Trials of War Criminals 64. The Geneva Conventions of 1949 and Additional Protocol II acknowledge civilian liability for violating the laws of war, binding rebel groups. Prior to that, the Nuremberg Tribunal confirmed the binding power of international law over individuals. A number of cases in the wake of the Second World War held civilians accountable for war crimes, such as murder. See, for example, *Trial of Erich Heyer and Six Others (Essen Lynching case)*, British Military Court for the Trial of War Criminals, Essen, 22 December 1945, 1 Law Reports of Trials of War Criminals 88–92 (.). On pillage, see the *Bommer* case, in which members of a German family were found guilty of pillage for retaining illegally acquired property from a deported civilian's farm, *Trial of Alois and Anna Bommer and their Daughters*, Permanent Military Tribunal, Metz, 19 February 1947, 9 Law Report of Trials of War Criminals. For analysis, see Stewart (n 12) 76–7.

¹⁴⁶ For an analysis of these cases, see Stewart (n 12) 77.

¹⁴⁷ *ibid.*, referencing *Prosecutor v. Van Anraat*, Netherlands, LJN: BA6734, Gerechtshof's-Gravenhage, 2200050906-2 (9 May 2007); *Prosecutor v. Kouwenhoven*, Netherlands, LJN: AY5160, Rechtbank's-Gravenhage, 09/750001-05 (28 July 2006).

¹⁴⁸ Stewart (n 12) 77, referencing *Prosecutor v. Barayagwiza et al.*, Trial Chamber I, Judgment and Sentence (ICTR-99-52-T, 3 December 2003); *Prosecutor v. Musema*, Trial Chamber I, Judgment and Sentence (ICTR-96-13-A, 16 November 2001).

¹⁴⁹ Graff (n 139) 25.

¹⁵⁰ *ibid.* 25.

¹⁵¹ *ibid.*

¹⁵² Rome Statute, Art. 28(a), (b).

¹⁵³ Rome Statute, Art. 28(a).

of peace, rather than on simply brokering an end to violence.¹⁶⁹ There is now a recognized obligation not only to focus on the termination of violence, but also on peace-making and rebuilding.¹⁷⁰ A comprehensive framework for peacebuilding must make a credible attempt to address the root causes of conflict, and must look beyond the objective of merely ending violence by applying a more holistic and comprehensive approach to peacebuilding.¹⁷¹

However, economic crimes—and in fact, violations of economic, social, and cultural rights in general—have been largely marginalized in the context of peacebuilding, despite well-recognized connections between violations of economic, social, and cultural rights and violations of civil and political rights. International criminal law is still far from addressing these violations in an integrated and interdependent manner.¹⁷² This is unfortunate, particularly considering the very real risk that without scrutinizing and responding to the economic, social, and cultural rights violations that often lie at the root causes of conflict, there can be no lasting, sustainable, and just peace.¹⁷³ This is just as true of war crimes violating economic, social, and cultural rights as of crimes of violence against a person. In addition, by failing to acknowledge the reality of economic crimes and address them, the justice system fails to acknowledge the mutually reinforcing relationship between economic crimes and violations of civil and political rights, as well as the way economic crimes and human rights violations can mutually reinforce impunity as proceeds of previous or ongoing economic crimes are used to

¹⁶⁹ Stahn, 'Jus Post Bellum' (n 74) 335.

¹⁷⁰ Stahn, 'Rethinking the Conception of the Law of Armed Force' (n 74) 930, making reference to the International Commission on Intervention and State Sovereignty's report, 'The Responsibility to Protect'.

¹⁷¹ Stahn, 'Jus Post Bellum' (n 74) 335. Wendy Lambourne, 'Transitional Justice and Peacebuilding after Mass Violence' (2009) 3 *International Journal Of Transitional Justice* 28, 34. Louise Arbour has called for a more holistic understanding of transitional justice: 'Transitional justice must have the ambition to assist the transformation of oppressed societies into free ones by addressing the injustices of the past through measures that will procure an equitable future. It must reach to—but also beyond—the crimes and abuses committed during the conflict that led to the transition, and it must address the human rights violations that pre-dated the conflict and caused or contributed to it. With these aims so broadly defined, transitional justice practitioners will very likely expose a great number of discriminatory practices and violations of economic, social, and cultural rights.' Louise Arbour, 'Economic and Social Justice for Societies in Transition' (2007), 40 *N.Y.U. Journal of International Law and Politics* 1, 2.

¹⁷² Harwell and Le Billon (n 15); Lisa Hecht and Sabine Michalowski, 'The Economic and Social Dimensions of Transitional Justice', ETJN Concept Paper, available at <<http://www.essex.ac.uk/tjn/documents/TheeconomicandsocialdimensionsofTJ.pdf>> accessed 7 June 2017. As Louise Arbour noted, the reality of this marginalization is also reflected in the conception of justice itself, as expressed for instance in the UN Secretary General's report on *The Rule of Law and Transitional Justice in Conflict and Post-Conflict Societies*: 'For the United Nations, "justice is an ideal of accountability and fairness in the protection and vindication of rights and the prevention and punishments of wrongs. Justice implies regard for the rights of the accused, for the interests of victims and for the well-being of society at large." The first sentence, "fairness in the vindication of rights," liberally construed, may imply the need to guarantee economic, social, and cultural rights. However, the language of "the victim" and "the accused" in the second sentence appears to circumscribe the concept of justice within a more traditional dispute resolution framework that primarily focuses on violations of civil and political rights. To the extent that this characterization is accurate, it reflects a narrow approach to justice.' (Arbour (n 171) 4). As Arbour goes on to note, this may be 'symptomatic of a deep ambivalence within justice systems about social justice.' (Arbour (n 171) 5). What this results in is an incomplete concept of justice, and translated into the realm of transitional justice mechanisms, such as international criminal prosecutions and truth commissions, this results in an equally incomplete narrative of the conflict as well as impunity for some. Arbour (n 171) 4–5.

¹⁷³ DiMeglio (n 80) 153 ('Failure to pursue justice against morally culpable individuals after war may result in a peace that lacks a sense of closure.').

derail transition.¹⁷⁴ Philippe Le Billon and Emily Harwell warn that ‘persistent impunity for widespread economic crimes with broad societal effects sends the message that there is still no rule of law’.¹⁷⁵ Indeed, Harwell observes elsewhere that: ⁶

the pattern of control and criminality in authoritarian regimes and among violent belligerents is intimately tied to the financial rewards of crimes in natural resource sectors. Therefore, as both a conceptual and practical matter, efforts to pursue accountability for civil and political abuses are rendered less effective by the neglect of economic crimes that facilitate and motivate those abuses.¹⁷⁶

In light of this and the now well-established recognition of the links between armed conflict and natural resource exploitation, resolving issues of the illegal exploitation of natural resources must necessarily be made one of the objectives of a nascent *jus post bellum*. As noted in the beginning of this chapter, illegal natural resource exploitation is at its core an economic crime, but as with other economic crimes, it has been largely absent from war crimes prosecutions.

The lack of provisions under which such crimes may be prosecuted in international criminal law is one example of how economic crimes have been marginalized in post-conflict contexts.¹⁷⁷ Kristen Boon aptly observes: ‘The laws of war are notoriously silent on matters relating to the economy.’¹⁷⁸ Aside from the provisions regarding pillage, which is almost universally present in the statutes of war crimes tribunals, there are no provisions with regard to related economic crimes, such as money laundering or illicit arms trade.¹⁷⁹

This leaves the crime of pillage as one of the main, if not only, potential avenues for addressing the illegal exploitation of natural resources in conflict and post-conflict situations.¹⁸⁰ As already noted, the war crime of pillage has been underutilized by international criminal tribunals when it comes to natural resource exploitation. In fact, other than the industrialist trials in the wake of the Second World War, this type of crime has been absent from the practice of these courts despite the growing recognition that economic crimes are often just as much at the heart of the conflict as crimes against persons.¹⁸¹ This recognition has not translated into actual prosecutions for illegal natural resource exploitation.¹⁸²

In addition to a lack of prosecutions of such crimes—and an absence of provisions that would be able to fully capture all aspects of illegal natural resource exploitation—the

¹⁷⁴ *Asset Recovery, Reconciliation and Economic Truth Commissions in Transitional Egypt—An Interview with Ruben Carranza*, 20 June 2013, Egyptian Initiative for Personal Rights, at <<http://eipr.org/en/blog/post/2013/06/20/1738>> accessed 7 June 2017, noting that ‘economic crimes committed by dictators and by combatants in an armed conflict often have a mutually reinforcing relationship with the human rights violations that they carried out.’ See also Ruben Carranza, ‘Pain and Plunder: Should Transitional Justice Engage with Corruption and Economic Crimes?’ (2008) 2 International Journal of Transitional Justice 310, 314.

¹⁷⁵ Harwell and Le Billon (n 15). ¹⁷⁶ Harwell (n 6). ¹⁷⁷ Kyriakakis (n 3) 117.

¹⁷⁸ Kristen E. Boon, ‘“Open for Business”: International Financial Institutions, Post-conflict Economic Reform, and the Rule of Law’ (2007) 39 N.Y.U. Journal of International Law and Politics 513, 536.

¹⁷⁹ See Kyriakakis (n 3) 116; Schabas (n 3) 2–4. ¹⁸⁰ Schabas (n 3) 3.

¹⁸¹ The Chief Prosecutor of the International Criminal Court in 2003, shortly after his election, touched on the importance of examining the economic aspects of the Congo conflict. Communications Received by the Office of the Prosecutor of the ICC, Press Release No.: pids.009.2003-EN, 16 July 2003, 3–4.

¹⁸² Schabas (n 3) 2.

marginalization of the economic side of conflict is also manifest in the limited pool of actors who are prosecuted for such crimes.¹⁸³ Some of the most important actors in the illegal exploitation of natural resources in conflict worldwide are transnational corporations; despite their prominent role, though, these actors have largely managed to remain under a cloak of invisibility when it comes to criminal prosecutions for their role in the pillage of natural resources.¹⁸⁴ Moreover, certain features of international criminal law influence national criminal tribunals' practice and approach. The lack of attention to the economic dimension of conflict and specifically the lack of prosecutions for illegal natural resource exploitation may lead to a decreased focus on these issues in domestic criminal law and can negatively affect accountability in general.¹⁸⁵ In addition, these trends have a tendency to solidify, and the absence of accountability for economic war crimes may become ingrained.¹⁸⁶

Even when pillage prosecutions take place with regards to acts perpetrated in the context of resource conflicts, these prosecutions have been mostly in relation to the pillage of personal property, such as goods, chattel, money, and not for the systemic plunder of property that was in fact used to finance and thus perpetuate the conflict.¹⁸⁷ Prosecutions for pillaging of relatively small personal property were the norm in the Yugoslav conflict and also with respect to the conflict in Sierra Leone, where a number of pillage prosecutions were in relation to livestock theft and money.¹⁸⁸ The ICC found Germain Katanga guilty of pillage for extensive destruction of property—such as houses, roofing sheets, furniture, and various other effects, such as food, livestock, and animals—in Bogoro, DRC.¹⁸⁹ In many of these cases, the stolen goods were not considered to be the principal reason for the fighting or the fighting was not considered to be impossible to sustain without the revenue produced by the theft.¹⁹⁰ Curiously, the illegal natural resource exploitation underlying and sustaining the Congolese conflict has gone largely unaddressed by the ICC.

The marginalization of the economic aspects of conflicts has also been true for truth and reconciliation commissions.¹⁹¹ Of more than thirty truth commissions established between 1974 and 2004, only three expressly engaged with economic crimes—those for Chad, Liberia, and Sierra Leone.¹⁹² The Sierra Leone Truth and Reconciliation Commission report touched on the link between armed conflict and extractive industries, identifying specific diamond mining companies that had links to the armed groups in Sierra Leone, and making the connection between human rights violations, corruption, and bad governance.¹⁹³ The Kenyan Truth, Justice and Reconciliation

¹⁸³ *ibid.*; see also Kyriakakis (n 3) 117. ¹⁸⁴ Schabas (n 3); Kyriakakis (n 3) 117.

¹⁸⁵ Kyriakakis (n 3) 118. ¹⁸⁶ *ibid.* 119.

¹⁸⁷ Patrick J. Keenan, 'Conflict Minerals and the Law of Pillage' (2014) 14 *Chinese Journal of International Law* 524, 536.

¹⁸⁸ *ibid.* 534–5.

¹⁸⁹ See Summary of *Prosecutor v. Germain Katanga*, Judgment Pursuant to Article 74 of the Statute, Trial Chamber II (ICC-01/04-01/07, 7 March 2014), at: <http://www.icc-cpi.int/en_menus/icc/press%20and%20media/press%20releases/Documents/986/14_0259_ENG_summary_judgment.pdf> accessed 7 June 2017.

¹⁹⁰ Keenan (n 187) 537. ¹⁹¹ Harwell (n 6).

¹⁹² Carranza, 'Pain and Plunder: Should Transitional Justice Engage with Corruption and Economic Crimes?' (n 174) 315.

¹⁹³ *ibid.* 320; Carranza Interview (n 174); Schabas (n 3) 14–15.

Commission included within its mandate the examination of economic crimes, such as grand corruption, irregular land acquisitions, and exploitation of natural resources.¹⁹⁴

In addition, the role of business is rarely scrutinized by these commissions.¹⁹⁵ Without transitional justice mechanisms addressing the economic aspects of conflict, they too forego the possibility to establish a more complete narrative.¹⁹⁶

It is therefore not surprising that there have been calls to establish so-called economic truth commissions.¹⁹⁷ Whether separate economic truth commissions will receive traction has yet to be seen. It is also uncertain whether scrutinizing economic wrongdoings in separate commissions (as opposed to being part of truth and reconciliation more broadly) will ultimately help mainstream accountability for economic crimes. It is possible that separate economic truth commissions may solidify the narrative of economic crimes—and the associated violations of economic, social, and cultural rights—as secondary to the violations of political and civil rights.¹⁹⁸ Another option, aside from separate economic truth commissions, could be a single truth commission with separate chambers for violations of civil and political rights and for economic crimes.¹⁹⁹ One benefit of separate commissions would be that these could potentially address one of the most important aspects of economic crimes: asset recovery.²⁰⁰ While asset recovery should not be the primary focus of these commissions, they may be able to take steps towards this objective through establishing a narrative for the atrocities that have taken place, adequately accounting for economic misdeeds.²⁰¹

The International Commission against Impunity (‘CICIG’) in Guatemala is an interesting hybrid body. Established at the behest of Guatemalan authorities and operating through the national courts, it is an international body investigating ‘corruption as an instrumentality of organized crime and human rights violations’ cases in Guatemala, with a specific focus on security forces.²⁰² Such a hybrid body, perhaps with a specific focus on economic crimes, including those related to natural resource exploitation, represents an option for states to take steps towards prosecuting those who have committed the worst of the atrocities, while also building the foundation for strong asset recovery cases.

To the extent that truth commissions take on economic crimes, attention will need to be paid to ensuring the commission has the necessary expertise. Most truth

¹⁹⁴ See Final Report of the Truth, Justice and Reconciliation Commission of Kenya, at <http://tjrkenya.org/index.php?option=com_content&view=article&id=573&Itemid=238> accessed 7 June 2017.

¹⁹⁵ The South African Truth and Reconciliation Commission did examine the role of business in maintaining the apartheid regime in its final report. Schabas (n 3) 14.

¹⁹⁶ Carranza, ‘Pain and Plunder: Should Transitional Justice Engage with Corruption and Economic Crimes?’ (n 174) 320; Kyriakakis (n 3) 117.

¹⁹⁷ Schabas (n 3) 3, 14; Carranza Interview (n 174); Carranza, ‘Pain and Plunder: Should Transitional Justice Engage with Corruption and Economic Crimes?’ (n 174) 319–20.

¹⁹⁸ Harwell (n 6). Arguing for separate economic truth commissions, Professor Carranza asserts that such a commission ‘can link human rights violations involving physical integrity—torture, killing, disappearances, sexual violence and displacement—with the motivation of gaining financial advantage or preserving impunity for corrupt or repressive regimes’, thereby examining their mutually reinforcing relationship. Carranza Interview (n 174).

¹⁹⁹ Harwell (n 6). ²⁰⁰ *ibid.* ²⁰¹ *ibid.*

²⁰² World Bank and UN Office of Drugs and Crimes, *Stolen Asset Recovery: Towards a Global Architecture for Asset Recovery*, at <https://www.unodc.org/documents/corruption/Publications/StAR/StAR_Publication_-_Global_Architecture.pdf> 47, accessed 7 June 2017.

commissions lack the kind of expertise that is needed for efficient recovery and repatriation of looted assets.²⁰³

6.4 Conclusion: Alternative Avenues for Accountability and Prevention

War crimes trials, including prosecutions for pillage, as well as alternative mechanisms of accountability, such as truth commissions, are integral to the *jus post bellum* legal landscape. Their role is to provide justice and accountability; and where there is a particular risk of conflict recurrence, they play an essential role in building a lasting peace. The normative necessity for war crime trials has been reaffirmed by a number of theorists.²⁰⁴ According to Richard DiMeglio, war crimes trials are necessary to provide a remedy for violations of *jus ad bellum* and *jus in bello* as well as to serve as deterrent.²⁰⁵ War crimes trials are also important in terms of establishing closure and addressing grievances, and thus forging the path towards lasting peace.²⁰⁶

Yet, as critics note, it is problematic to equate these trials with justice, especially considering that the narrative that they provide is often far from being complete.²⁰⁷ While such trials may be an important tool in providing accountability, just by reason of their limited resources and thus necessarily incomplete focus, paired with their marginalization of the economic dimensions of conflict, it must be recognized that they cannot in and of themselves provide the kind of justice and closure that is sought in post-conflict societies. The kind of selectivity in terms of prosecution seen to date, and not solely in terms of the crimes that are pursued, but also in terms of the actors that are put on trial, is indicative of the inability—in their current form and with the current focus—of international criminal law to address all of the key issues of justice in the aftermath of conflict. This lacuna is illustrated by the clear absence of any form of corporate accountability in international criminal tribunals. Moreover, the selectivity of international criminal tribunals in terms of the countries of origin of persons having been or being prosecuted has also generated criticisms, mostly from the global South.²⁰⁸

The selective focus of international criminal law is all the more problematic when we consider that achieving durable, sustainable peace must necessarily be one of the goals of any *jus post bellum* framework. If economic crimes—and in particular economic crimes relating to the illegal exploitation of natural resources—indeed lie at the root of many of our most current and recent violent conflicts, the lack of a comprehensive effort to address and disrupt these toxic processes results in impunity for many of the worst offenders and will result in continued conflicts over resources and continued

²⁰³ Mark V. Vlasic and Gregory Cooper, 'Beyond the Duvalier Legacy: What New "Arab Spring" Governments Can Learn from Haiti and the Benefits of Stolen Asset Recovery' (2011) 10 *Northwestern Journal of International Human Rights* 19. Moreover, the reparations system of the ICC has been meagre to date. Joseph M. Isanga, 'The International Criminal Court Ten Years Later: Appraisal and Prospects' (2013) 21 *Cardozo Journal of International & Competition Law* 235, 279.

²⁰⁴ See, for example, Kellogg (n 81); Gary J. Bass, 'Jus Post Bellum' (2004) 32 *Philosophy and Public Affairs* 384; DiMeglio (n 80); See also Larry May, *After War Ends: A Philosophical Perspective* (New York: Cambridge University Press, 2012), 67–70.

²⁰⁵ DiMeglio (n 80) 154.

²⁰⁶ *ibid.* 153.

²⁰⁷ Kyriakakis (n 3) 128–9.

²⁰⁸ *ibid.* 137.

international trade in conflict resources. Moreover, the perception of justice is just as important as justice itself. Much like corruption is measured by perception, the same can be said to apply to justice. Without fair, equitable, and equal justice for all, there can be no long-term resolution to conflict. As Brian Orend notes, a just ending to a conflict must necessarily encompass: (1) rolling back aggression and reestablishing the integrity of the victim of aggression as a rights-bearing political community; (2) punishing the aggressor; and (3) in some sense deterring future aggression, notably with regard to the actual aggressor but perhaps also, to some extent, other would-be aggressors.²⁰⁹

In addition, prosecutions can present an important step towards the recovery of assets squandered and plundered away. These assets, once recovered, could be instrumental in rebuilding and recovery efforts. The repatriation of assets could also help these societies to provide much needed funding for transitional justice mechanisms, without the need to rely solely on international assistance.²¹⁰

The regime of international criminal law, while often effective, is unable and at times unwilling to reach every aspect of a conflict, nor should it be expected to be a panacea of sorts. However, the economic dynamics that so often motivate, enable, and sustain armed conflict (and its associated war crimes and crimes against humanity) are glaring and serious omissions. This omission means that the necessary resolution and closure is unmet, as are expectations of fulfilling the requirements of justice and accountability. It is necessary therefore to reach beyond the possibilities of international criminal law as it currently stands. One option is to complement international criminal law with other avenues in an effort to terminate the link between natural resource exploitation and conflict. The more effective use of human rights mechanisms in the post-conflict period, as well as the application of the collective security regime—such as targeted UN sanctions—may be necessary, depending on the particular context, to curb the pillage of natural resources. Pillage of natural resources cuts across sectors and by its nature impacts human rights, can cause environmental degradation, and results in the depletion of natural resources, depriving societies of critical assets for reconstruction and development through corruption, the use of illicit financial flows and money laundering, thereby undermining the economic health of entire nations.

The law of pillage presents an as-yet underutilized tool for addressing conflict resources. To improve its application as part of *jus post bellum*, it is necessary to address temporal considerations, the relationship to the law of occupation, the scope of actors to whom pillage would apply, and the legal and practical implications of approaching pillage as an economic war crime.

²⁰⁹ Orend, as quoted in DiMeglio (n 80) 140.

²¹⁰ Carranza, 'Pain and Plunder: Should Transitional Justice Engage with Corruption and Economic Crimes' (n 174) 324.

Standard-setting Practices for the Management of Natural Resources in Conflict-Torn States

Constitutive Elements of *Jus Post Bellum*

*Daniëlla Dam-de Jong**

7.1 Introduction

Natural resources have played a key role in many modern armed conflicts, either as a driver for conflict or as a means to sustain the violence.¹ It is commonly acknowledged that restoring the governance of natural resources in conflict-torn states is imperative in order to end these armed conflicts and to achieve a lasting peace. The UN Security Council, in its resolutions, has set standards to this effect. In many of its resolutions the Security Council has emphasized the need to ensure effective, transparent, and accountable natural resource management. Also, in a more general vein, the Security Council emphasized that, ‘in countries emerging from conflict, lawful, transparent and sustainable management ... and exploitation of natural resources is a critical factor in maintaining stability and in preventing a relapse into conflict’,² while in relation to peacebuilding it underscored ‘the need for early and predictable support in priority areas of peacebuilding, including ... management of natural resources.’³

This chapter examines the standards set by the UN Security Council in relation to the management of natural resources in conflict-torn states, their operationalization, and their potential to shape the normative content of the applicable *jus post bellum*. For this purpose, the chapter examines the contribution of the UN and other international organizations to restoring the governance of natural resources in two particular countries recovering from armed conflicts, Liberia and the Democratic Republic of the Congo (‘DRC’). Section 7.2 will provide a brief overview of the historical background against which the Security Council acted. Section 7.3 will then discuss the standards developed by the Security Council in its relevant resolutions. Section 7.4 will focus on

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¹ See, for example, Karen Ballentine and Jake Sherman (ed.), *The Political Economy of Armed Conflict: Beyond Greed and Grievance* (Boulder, CO: International Peace Academy, Lynne Rienner Publishers, 2003); and Karen Ballentine and Heiko Nitzschke (eds.), *Profiting from Peace: Managing the Resource Dimensions of Civil War* (Boulder, CO: Lynne Rienner Publishers, 2005).

² UN Security Council Presidential Statement on Natural Resources and Armed Conflict, UN Doc. S/PRST/2007/22, 25 June 2007, para. 12.

³ UN Security Council Presidential Statement on Post-conflict Peacebuilding, UN Doc. S/PRST/2010/20, 13 October 2010, para. 4.

the implementation of these standards in the mandates of peacekeeping operations, while Section 7.5 examines their implementation in programmes set up by regional and international organizations involved in conflict resolution. Finally, Section 7.6 will assess the relevance of the Security Council's standard-setting practices for the development of a *jus post bellum* framework for the management of natural resources in conflict-torn states.

7.2 The Role of Natural Resources in Fuelling Armed Conflict in West Africa and the DRC

Natural resources have played a significant role in sustaining the armed conflicts that took place in the West African region in the 1990s and early 2000s, while they still fuel the armed violence in the DRC. Despite the fact that the dynamics of these armed conflicts differ significantly, in both instances natural resources provided the warring factions with revenues to continue their armed struggle, thereby hampering the prospects for a lasting peace. The current section aims to provide a brief historical overview of these armed conflicts and the role played by natural resources therein in order to explain the background for and the focus of the Security Council's measures.

7.2.1 The Situation in Liberia and the wider region

Liberia is a country rich in natural resources, particularly in timber, rubber, gold, diamonds, and iron ore.⁴ The country is also highly dependent on those resources. It derives around 70 per cent of its GDP from its agricultural sector, mainly from timber and rubber production.⁵ Founded as an independent state by freed American slaves, the Americo-Liberians, in 1847,⁶ Liberia was ruled by this minority group for over a century, much to the detriment of the majority of indigenous peoples. Some reforms were introduced in the 1970s when William Tolbert came to power. He tried to reconcile the interests of the different groups within Liberia with the aim of gradually transforming the autocratic system into a democracy. It was also his government that established a Forest Development Authority with the mandate to sustainably manage and conserve all forest resources. However, under his administration the economic situation seriously deteriorated and civil unrest broke out as a consequence. Samuel

⁴ According to African Economic Outlook 2014, Liberia's iron ore reserves are estimated between 2 to 5 billion metric tonnes.

⁵ In 2006, Liberia derived 68.9 per cent of its GDP from its agricultural sector, while in 2001 this was 72.7 per cent, with logging and rubber production as the main sources of foreign exchange for the government. See OECD, African Economic Outlook 2008 for Liberia, 365 for the 2006 figures and the Report of the Panel of Experts pursuant to Security Council Resolution 1343 (2001), para. 19, concerning Liberia, UN Doc. S/2001/1015, 17 October 2001, for the 2001 figures. On the role of timber, see the Report of the Liberian Truth and Reconciliation Commission, Vol. III (2009), Appendices, Title III on Economic Crimes and the Conflict, 10: 'Timber is one of Liberia's most significant natural resources and is a central source of government revenue. Between 1979 and 2003, timber comprised over 50% of the country's reported exports. In 2001, the timber sector represented over 20% of Liberia's GDP.'

⁶ For a comprehensive account of Liberia's history, see the Liberia Truth and Reconciliation Commission, Final Report, Vol. II, Consolidated Final Report of 30 June 2009, 93–172.

Doe, a member of the indigenous majority, benefited from this situation by taking over power through a *coup d'état* in 1980. Originally, Doe enjoyed wide popular support as Liberia's first indigenous president, but his regime soon became despotic and corrupt. These were the events leading up to the 1989–2003 Liberian civil war.

In the first year of the civil war, the two most important armed factions, the National Patriotic Front of Liberia ('NPFL') led by Charles Taylor and the Independent National Patriotic Front of Liberia ('INPFL') led by Prince Johnson, conquered major parts of Liberian territory, resulting in the capture and assassination of Samuel Doe in September 1990. With Doe out of the way, the rivaling factions started to fight each other. In the following years, as many as fifteen peace agreements were concluded, but to no avail.⁷ According to the Liberia Truth and Reconciliation Commission, the issue of control over the country's natural resource wealth was among the crucial issues explaining the failure of these agreements.⁸ Where the INPFL was willing to participate in a transitional government, Taylor refused to cooperate. Between 1990 and 1997, Taylor was in control over large portions of the Liberian territory. During this period, he granted important timber concession contracts to companies in territory under his control.⁹

Following the Abuja Peace Agreement of 1996, presidential elections were held in Liberia in July 1997 which were won by Charles Taylor. This position gave Taylor the opportunity to use the country's natural wealth to further his political agenda, including to use revenues from the diamond and timber industry to fight of opposing groups trying to take over power in Liberia and to support the Revolutionary United Front ('RUF') in the armed conflict that raged in neighbouring Sierra Leone.¹⁰ In January 2000, the Taylor government adopted a law declaring all forest resources to constitute the property of the government and making the issuing of new logging concessions subject to final approval by the president.¹¹ Similar laws were enacted for the mineral

⁷ These were the Banjul Communique, ECOWAS plan of 7 August 1990; the Bamako Ceasefire of 28 November 1990; the Banjul Joint Statement of 21 December 1990; the Lomé Agreement of 13 February 1991; the Yamoussoukro Accords of 30 June, 29 July, 17 September, and 30 October 1991; the Geneva Ceasefire of 17 July 1993; the Cotonou Agreement of 25 July 1993; the Akosombo Agreement of 12 September 1994; Acceptance and Accession to Akosombo Agreement, 21 December 1994; the Accra Clarification of the Akosombo Agreement of 21 December 1994; the Abuja Agreement of 19 August 1995; and the Supplement to the Abuja Agreement of 17 August 1996. See the Liberia Truth and Reconciliation Commission, Final Report, Vol. II, Consolidated Final Report of 30 June 2009, 159–60.

⁸ Liberia Truth and Reconciliation Commission, Final Report, Vol. II, Consolidated Final Report of 30 June 2009.

⁹ The Panel of Experts established by the UN Security Council to, *inter alia*, investigate links between the exploitation of natural resources and other forms of economic activity in Liberia, and the fuelling of conflict in Sierra Leone and neighbouring countries noted in its 2001 Report that '[d]uring the 1989–1996 civil war, timber provided Charles Taylor and his NPFL rebels their main independent source of revenue'. The Panel also pointed to the role of specific logging companies, the most important being the Oriental Timber Company (OTC), chaired by the Dutch Businessman Guus van Kouwenhoven, who currently stands trial before the Dutch court for his role in supplying weapons to the Taylor government in contravention of the weapons embargo imposed against Liberia by the UN Security Council. The Panel's 2001 report indicates that Van Kouwenhoven 'managed logging operations for [Taylor] through rebel-controlled Buchanan in the early 1990s'. See the Report of the Panel of Experts Pursuant to Security Council Resolution 1343 (2001), para. 19, concerning Liberia, UN Doc. S/2001/1015, 17 October 2001, paras. 322 and 333. See also the following section of this chapter for more details on the Panel of Experts and its mandate.

¹⁰ See Section 7.3.1 of this chapter for more details.

¹¹ See the Report of the Panel of Experts pursuant to Security Council Resolution 1343 (2001), para. 19, concerning Liberia, UN Doc. S/2001/1015, 17 October 2001, paras. 329–32.

sector, giving President Taylor ultimate power over all the country's natural resources. These laws enabled the Taylor government to set up opaque structures of public administration, the revenues being used *inter alia* for off-budget military expenditure.¹²

Where a fragile peace had been concluded in 1996, the civil war in Liberia flared up again from 1998 onwards. Armed resistance against the government became stronger with the years. One of the principal armed opposition groups, Liberians United for Reconciliation and Democracy ('LURD'), was able to take over control of some key diamond mining areas and engaged in smuggling practices to finance its armed struggle.¹³ Strong, armed opposition and increasing pressure by the international community forced Charles Taylor to resign in August 2003.

On 18 August 2003, the former government of Liberia and the two principal armed opposition groups, the LURD and the Movement for Democracy in Liberia ('MODEL'), signed a Comprehensive Peace Agreement. This agreement dealt with a number of issues, including arrangements for the installation of a transitional government and a request for the deployment of a UN stabilization force. Although it did not contain any specific provisions on natural resources, these were among the priority issues of the transitional government that was installed in October that year under chairmanship of Gyude Bryant. The transitional government embarked upon large-scale reforms of its public administration, including the forestry sector under the leadership of an international consortium consisting of UN related organizations and states.¹⁴ These reforms were undertaken as part of the Liberia Forest Initiative ('LFI') and the Governance Economic Management Assistant Plan ('GEMAP').¹⁵

When Ellen Johnson-Sirleaf was elected as president in 2006, most of the reforms had been initiated, but progress had been very limited and corruption and patronage politics remained rampant.¹⁶ In order to ensure a proper implementation of the reforms, President Johnson-Sirleaf enacted an executive order which implemented all recommendations of the Forest Concession Review Committee and declared null and void all existing concession claims.¹⁷ The same executive order established a Forest Reform Monitoring Committee, which undertook great legislative reforms in the forestry sector. Reforms were also introduced in the diamond sector, resulting in Liberia joining the Kimberley Process for the Certification of Rough Diamonds in 2007.¹⁸

¹² See the Report of the Panel of Experts appointed pursuant to Security Council Resolution 1395 (2002), para. 4, in relation to Liberia, UN Doc. S/2002/470, 19 April 2002, para. 141.

¹³ See the Report of the Panel of Experts on Liberia submitted in accordance with Resolution 1458 (2003), UN Doc. S/2003/498, 24 April 2003, paras. 125–30.

¹⁴ See for example, Report of the Panel of Experts pursuant to paragraph 22 of Security Council Resolution 1521 (2003) concerning Liberia, UN Doc. S/2004/396, 1 June 2004, paras. 93 and 107; Report of the Panel of Experts pursuant to paragraph 2 of Security Council Resolution 1549 (2004) concerning Liberia, UN Doc. S/2004/752, 24 September 2004, paras. 16–41.

¹⁵ These programmes will be discussed in Section 7.5 of this chapter.

¹⁶ See for example, Report of the Panel of Experts on Liberia submitted pursuant to Resolution 1647 (2005), UN Doc. S/2006/379, 7 June 2006, paras. 7–13.

¹⁷ *ibid.* para. 17.

¹⁸ The Kimberley Process for the Certification of Rough Diamonds is an import and export regime for the trade in rough diamonds, based on certification of rough diamonds to verify their origin. Diamond producing countries that participate in the system are to issue a certificate and take additional measures to ensure that the diamonds traded do not contribute to financing armed conflict. Diamond importing countries

7.2.2 The situation in the DRC

The DRC is particularly rich in natural resources. According to the United Nations Environment Programme ('UNEP'), the state owns 24 trillion dollars of untapped mineral reserves.¹⁹ This natural resource wealth has however never actually benefited the Congolese population. Throughout the DRC's history, political elites have used the natural resource wealth of the country for their personal enrichment. This practice continued after the country attained independence in 1960, in particular during President Joseph Mobutu's rule between 1965 and 1997. The DRC Mapping Report, drafted by independent experts under the auspices of the Office of the High Commissioner for Human Rights concluded, for example, that;

During Mobutu's rule, natural resource exploitation in Zaire was characterised by widespread corruption, fraud, pillaging, bad management and a lack of accountability. The regime's political/military elites put systems in place that enabled them to control and exploit the country's mineral resources, thereby amassing great personal wealth but contributing nothing to the country's sustainable development.²⁰

The invasion by Laurent-Désiré Kabila and his Alliance des Forces Démocratiques pour la Liberation du Congo-Zaire ('AFDL') with the support of Rwanda and Uganda in 1996 gave rise to new forms of misappropriation of the DRC's natural resources. A year after Kabila had been assigned president in May 1997, he ordered the Rwandan and Ugandan troops that had stayed behind to fight rebel groups operating from the DRC's border regions to leave the country.²¹ After this statement, fighting broke out between Rwandan and Ugandan troops on one side and the Congolese army, supported *inter alia* by Angola and Zimbabwe, on the other. In addition to these states, a number of armed groups was participating in the hostilities as well.

This moment in time signalled the start of a series of interlinked armed conflicts, which were characterized by practices of large-scale looting of the DRC's natural resources by the various parties to the conflict. Gaining control over natural resources played an

that participate in the system can only accept rough diamonds that are certified. Since all countries with major diamond centres, such as Belgium and Israel, currently participate in the system, diamond producing countries that do not participate in the Kimberley Process are effectively blocked access to the international diamond market. For more details on the Kimberley Process, see Jan Wetzel, 'Targeted Economic Measures to Curb Armed Conflict? The Kimberley Process on the Trade in 'Conflict Diamonds' in Noëlle Quéniyet and Shilan Shah-Davis (eds.), *International Law and Armed Conflict: Challenges in the 21st Century* (The Hague: T.M.C. Asser Press, 2010), 161–81; Andrew Grant, 'The Kimberley Process at Ten: Reflections on a Decade of Efforts to End the Trade in Conflict Diamonds' in Paivi Lujala and Siri Aas Rustad (eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding* (Oxford/New York: Earthscan, 2012), 159–79; and Daniëlla Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (Cambridge: Cambridge University Press, 2015), chapter 8.

¹⁹ UNEP, *Post-Conflict Environmental Assessment of the Democratic Republic of Congo* (UNEP, 2011).

²⁰ Office of the High Commissioner for Human Rights, Report of the Mapping Exercise Documenting the Most Serious Violations of Human Rights and International Humanitarian Law Committed Within the Territory of the Democratic Republic of the Congo Between March 1993 and June 2003 (2010), 351.

²¹ See ICJ, *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, Judgment of 19 December 2005, ICJ Reports 168, paras. 30 and 49. It was disputed before the Court whether this statement referred to all foreign troops (assertion of the DRC) or to Rwandan troops only (assertion of Uganda).

important role in the armed conflict for all parties, both as a means to obtain revenues to finance the conflict and for purely commercial purposes. During this period, foreign states as well as armed groups tried to secure access to mining sites in the DRC to amass the wealth. These practices have been extensively documented, both in reports issued by national authorities, but also by the Panel of Experts that was established by the UN Security Council. Furthermore, Uganda's role in the exploitation of the DRC's natural resources has been held to judicial scrutiny in the *Case Concerning Armed Activities on the Territory of the Congo* before the International Court of Justice. In this case, the International Court of Justice found Uganda to be internationally responsible for acts of looting, plundering, and exploitation of the DRC's natural resources committed by members of the Ugandan army in the territory of the DRC and for violating its obligation of vigilance towards these same acts committed by armed groups operating within territory under its effective control.²²

Misappropriation of Congolese natural resources was not only committed by foreign states and armed groups but also by the Congolese government itself. The DRC Mapping Report indicates in relation to the role of the Congolese government in these episodes that '[t]he two Congolese wars of 1996 and 1998 represented a further major setback to development, causing the destruction of a great deal of infrastructure and propagating the practice of resource pillaging inherited from Mobutu's kleptocratic regime, under the pretext of funding the war effort.'²³

The attraction of the natural resource wealth gradually changed the nature of the armed conflict. Control over lucrative natural resources became a reason to prolong the war, both for foreign states and for armed groups operating within the DRC. When Laurent-Désiré Kabila died in 2001, he was succeeded by his son, Joseph Kabila, as president of the DRC. Under his leadership, agreements were signed with Rwanda and Uganda, and international troops from neighbouring countries started to withdraw from Congolese territory.²⁴ In addition, Kabila Jr. signed a peace agreement with several Congolese militias, the Global and All Inclusive Agreement on the Transition in the Democratic Republic of the Congo, and established a Government of National Unity and Transition.

Formally, this momentum signalled a gradual transition into peace for the DRC. Nonetheless, fighting has continued until today, mostly in the Eastern part of the country, where some of the country's most important mining sites are located. There are a number of factors that aggravate the situation. One of these relates to the role of the Congolese army, the FARDC. Insurrectional movements within the army have taken over control of mining sites that used to be controlled by armed groups. These movements have started exploiting the sites for their own economic gain. Another factor relates to the fragile situation in the region, especially the difficult relationship between the DRC and its neighbouring states, most notably Rwanda and Uganda. These states are suspected of providing support to armed groups operating in Eastern Congo,

²² *ibid.*, specifically paras. 222–50.

²³ Office of the High Commissioner for Human Rights (n 20) 351.

²⁴ The Pretoria Accord with Rwanda was signed on 30 July 2002, while the Luanda Agreement with Uganda was signed on 6 September 2002.

among which is M23, which succeeded in taking over parts of Eastern Congo in the course of 2012.²⁵ Even though M23 was defeated a year later by the Congolese army together with the newly established UN Intervention Brigade, the situation in the DRC remains tense. Some armed groups have surrendered after the defeat of M23, but others remain active. The process of disarmament proves troublesome, while violent clashes still occur at the moment of writing this chapter.²⁶

7.3 Standards Developed in UN Security Council Resolutions

The current section focuses on the sanctions regimes imposed by the Security Council to address the situations in Liberia and the DRC. In both cases, the Security Council took an expanded view of its mandate to address threats to international peace and security, introducing structural reforms to the natural resources sectors in these states. These reforms were aimed at assisting the states to regain control over their natural resources sectors with a view to cutting off armed groups from existing revenue streams and to prevent natural resources being used to finance future conflict. Even though the Security Council has been cautious not to overstep its mandate, relying for the most part on consent by the government in relation to specific reforms, it is important to note that the measures imposed by the Council on these states as well as on companies contained substantive requirements in relation to the management of natural resources. These substantive requirements reflect common standards set by the Council for the management of natural resources in conflict-torn states.

Section 7.3.1 explains the Council's working methods in relation to threats posed to the peace by resource-related armed conflicts. Sections 7.3.2 and 7.3.3 analyse the measures imposed by the Council to address the situations in Liberia and the DRC. Finally, Section 7.3.4 contains an appraisal of the Security Council's practice in relation to these two situations and takes a closer look at the standards developed by the Council for improving the management of natural resources in conflict-torn states which can be inferred from its practice in relation to Liberia and the DRC.

7.3.1 The Security Council's working methods

The UN Charter has assigned the Security Council the primary responsibility for maintaining international peace and security.²⁷ For this purpose, it has given the Security Council a wide range of powers to perform its functions effectively. The principal powers of the Security Council relate to its role in the pacific settlement of disputes under Chapter VI of the UN Charter and its authority to adopt coercive measures in response to threats to the peace, breaches of the peace, and acts of aggression under Chapter VII of the UN Charter. Together these chapters offer the Security Council a variety of

²⁵ See, for example, the Final report of the Group of Experts on the DRC submitted in accordance with paragraph 4 of Security Council Resolution 2021 (2011), UN Doc. S/2012/843, 15 November 2012.

²⁶ See the Final report of the Group of Experts submitted in accordance with paragraph 5 of Security Council resolution 2136 (2014), UN Doc. S/2015/19, 12 January 2015.

²⁷ The legal basis for this function of the Security Council may be found in Art. 24 of the UN Charter.

options to address specific situations which constitute a threat to international peace and security.

In practice, resource-related economic measures under Article 41 of the UN Charter have been the principal means used by the Security Council to address the links between natural resources and armed conflict,²⁸ especially in the last two decades.²⁹ Examples include diamond sanctions in the cases of Angola, Sierra Leone, Liberia, and Côte d'Ivoire and timber sanctions in the case of Liberia.³⁰ In addition to these commodity sanctions, the Council has also imposed sanctions against individuals and companies involved in the trade in conflict resources, most particularly in the DRC. A striking aspect of these Security Council measures is that they do not only target companies that deal directly with armed groups, but also those operating further up in the supply chain.

The resource-related sanctions regimes are special in several ways. First of all, they are generally not directly targeting states. To the contrary, their aim is to assist the government of a conflict-torn state to regain control over the state's natural resources. Moreover, many of the sanctions regimes contain exemptions for natural resources traded by the government as well as incentives for the government to institute reforms in the management of the state's natural resources. Their aim is therefore not only to bar natural resources that fuel armed conflict from access to the market, but also to address the underlying mechanisms that make trade in these resources possible. This is the second reason which makes the resource-related sanctions regimes special.

In its Statement of 25 June 2007, the President of the Security Council clarified the objectives of the resource-related sanctions regimes adopted by the Security Council in the following words:

[t]he Security Council, through its resolutions, has taken measures on [the issue of natural resources contributing to armed conflict], more specifically to prevent illegal exploitation of natural resources, especially diamonds and timber, from fuelling armed conflicts and to encourage transparent and lawful management of natural resources, including the clarification of the responsibility of management of natural resources.³¹

²⁸ See Philippe Le Billon, 'Natural Resources, Armed Conflicts, and the UN Security Council' (Liu Institute for Global Issues, Briefing Paper No. 07-001, 30 May 2007), 2. Other tools include peacekeeping operations, which will be examined in the following section.

²⁹ Before the end of the Cold War, the Council only used its powers under Chapter VII once to impose resource-related coercive measures aimed at ending a conflict situation, namely in the case of natural resources originating in Southern Rhodesia. See UN Security Council Resolution 232 (1966) concerning an import ban on certain natural resources, including iron ore and copper and Resolution 253 (1968) concerning an import ban on all commodities and products. In this case, the Security Council imposed commodity sanctions against the illegal white minority regime as part of a broader package of measures in order to force the regime to step down. In addition, the purpose of these measures differed from modern regimes, since the measures were not directly aimed at addressing the specific contribution of those natural resources to the financing of the conflict situation. Their aim was rather to target all Southern Rhodesian export products in order to exert economic pressure on the regime.

³⁰ See, for example, UN Security Council Resolution 1173 (1998) concerning an import ban on diamonds originating in Angola; Resolution 1306 (2000) concerning an import ban on diamonds originating in Sierra Leone; and Resolution 1521 (2003) concerning an import ban on diamonds and timber products from Liberia.

³¹ Statement by the President of the Security Council, UN Doc. S/PRST/2007/22, 25 June 2007, para. 6.

This statement reveals the dual purpose of the Security Council's resolutions, that is to stop the trade in conflict resources on the one hand and to promote responsible resource management in conflict-torn states on the other. It also shows the interlinkages between conflict resolution and post-conflict peacebuilding: where the principal aim of the measures is to end an armed conflict, it is clear that those same measures constitute the basis for the management of natural resources in the immediate aftermath of armed conflict.

This also has implications for the applicable legal framework. Even though the relevant Security Council measures do not always have a mandatory character, they do set standards for the management of natural resources in the aftermath of armed conflict. This is another feature of the sanctions regimes which makes them special, the hypothesis being that the Security Council measures help to shape the normative content of the applicable *jus post bellum* in this way.

7.3.2 Resolutions adopted in relation to Liberia

The UN Security Council imposed three consecutive sanctions regimes in relation to Liberia. The first sanctions regime was established in 1992 with the aim of ending the civil war between the transitional government of Liberia and the NPFL and consisted of an arms embargo.³² It was terminated and replaced in 2001 by a new sanctions regime.³³ Interestingly enough, the objective of this sanctions regime was not related to the hostilities in Liberia itself, where opposition groups were fighting the government of Charles Taylor. Instead, it aimed to address the support provided by Charles Taylor to the RUF in Sierra Leone. Finally, the third sanctions regime was imposed after the departure of Charles Taylor in 2003. The aim of this sanctions regime was primarily to address threats to the peace in Liberia, particularly the threat posed by the proliferation of illegal arms to the Liberian peace process.³⁴

The sanctions imposed in relation to Liberia included commodity sanctions from 2001 onwards. The first commodity sanctions were imposed against diamonds, subsequent to the publication of a report by the Panel of Experts established by the Council to investigate the trade in rough diamonds from Sierra Leone. This report concluded that a large portion of Sierra Leonean diamonds exploited by the RUF reached the international diamond market through Liberia and that this was not possible without the involvement of high Liberian officials.³⁵

In light of these findings, the Security Council determined in Resolution 1343 (2001) that 'the active support provided by the Government of Liberia for armed rebel

³² See UN Security Council Resolution 788 (1992). For more details regarding this sanctions regime, see Jeremy Farrall, *United Nations Sanctions and the Rule of Law* (Cambridge: Cambridge University Press, 2007), 316–19.

³³ See UN Security Council Resolution 1343 (2001).

³⁴ See UN Security Council Resolution 1521 (2003), preamble, in which the Council determines that 'the situation in Liberia and the proliferation of arms and armed non-State actors, including mercenaries, in the sub region continue to constitute a threat to international peace and security in West Africa, in particular to the peace process in Liberia.'

³⁵ See the Report of the Panel of Experts appointed pursuant to Security Council Resolution 1306 (2000), para. 19, in relation to Sierra Leone, UN Doc. S/2000/1195, 20 December 2000.

groups in neighbouring countries, and in particular its support for the RUF in Sierra Leone, constitutes a threat to international peace and security in the region.³⁶ Invoking Chapter VII of the UN Charter, the Security Council demanded that the government of Liberia 'cease all direct or indirect import of Sierra Leone rough diamonds which are not controlled through the Certificate of Origin regime of the Government of Sierra Leone' and called upon the government 'to establish an effective Certificate of Origin regime for trade in rough diamonds that is transparent and internationally verifiable'.³⁷ In addition, the Security Council requested the Secretary-General to establish a Panel of Experts with the mandate to investigate, *inter alia*, violations of the sanctions and 'possible links between the exploitation of natural resources and other forms of economic activity in Liberia, and the fuelling of conflict in Sierra Leone and neighbouring countries'.³⁸

In its subsequent reports, the Panel of Experts investigated the role of the embargo on the trade in diamonds both from Liberia and Sierra Leone. An interesting conclusion was that, as a result of the embargo, Liberian diamonds were smuggled *inter alia* into Sierra Leone to be exported to the international diamond market under the guise of the newly set-up Sierra Leonean Certificate of Origin regime.³⁹ In addition, the reports highlighted the role of timber in the financing of armed conflict in the region, concluding that the exploitation of timber provided the government of Liberia with large amounts of money used to provide support to the (former) RUF and other rebel groups.⁴⁰

In response to these reports, the Security Council adopted Resolution 1408 (2002), which provided that 'the active support provided by the Government of Liberia to armed rebel groups in the region, in particular to former RUF combatants who continue to destabilize the region, constitutes a threat to international peace and security in the region'.⁴¹ In addition, the Security Council addressed the role of diamonds and timber in financing armed conflict in the region. In relation to diamonds, the Security Council reiterated its earlier call to the Liberian government to establish a Certificate of Origin regime for Liberian rough diamonds.⁴² The Security Council also called upon the Liberian government to bear in mind 'the plans for the international certification scheme under the Kimberley Process'⁴³ and proposed to exempt from the

³⁶ UN Security Council Resolution 1343 (2001), para. 9 of the preamble.

³⁷ *ibid.*, especially paras. 2(c) and 15. It is important to note here that the Sierra Leone sanctions regime exempted from the measures those rough diamonds controlled by the government of Sierra Leone with a certificate of origin regime to be set up by the government in cooperation with other states and relevant organizations. See UN Security Council Resolution 1306 (2000), especially paras. 2–5.

³⁸ UN Security Council Resolution 1343 (2001) especially para. 19.

³⁹ Report of the Panel of Experts Pursuant to Security Council Resolution 1343 (2001), para. 19, concerning Liberia, UN Doc. S/2001/1015, 17 October 2001, paras. 374–9; Report of the Panel of Experts appointed pursuant to Security Council Resolution 1395 (2002), para. 4, in relation to Liberia, UN Doc. S/2002/470, 11 April 2002, para. 136.

⁴⁰ Report of the Panel of Experts Pursuant to Security Council Resolution 1343 (2001), para. 19, concerning Liberia, UN Doc. S/2001/1015, 17 October 2001, paras. 309–15 and 319–50; Report of the Panel of Experts appointed pursuant to Security Council Resolution 1395 (2002), para. 4, in relation to Liberia, UN Doc. S/2002/470, 11 April 2002, paras. 138–50.

⁴¹ UN Security Council Resolution 1408 (2002), para. 11 of the preamble.

⁴² UN Security Council Resolution 1408 (2002), especially para. 7.

⁴³ Reference is made here to the Kimberley Process for the Certification of Rough Diamonds.

embargo those rough diamonds controlled by a transparent and internationally verifiable Certificate of Origin regime.⁴⁴ In relation to timber, the Council called upon the government of Liberia to ‘take urgent steps, including through the establishment of transparent and internationally verifiable audit regimes, to ensure that revenue derived by the Government of Liberia from the ... Liberian timber industry is used for legitimate social, humanitarian and development purposes.’⁴⁵

As this resolution did not produce any tangible results,⁴⁶ the Security Council decided to extend the sanctions regime to include timber sanctions. In Resolution 1478 (2003), the Council considered that the government of Liberia had not demonstrated that the revenue derived from the Liberian timber industry ‘is used for legitimate social, humanitarian and development purposes, and is not used in violation of Resolution 1408 (2002).’⁴⁷ Therefore it decided that ‘all States shall take the necessary measures to prevent ... the import into their territories of all round logs and timber products originating in Liberia.’⁴⁸ Furthermore, in relation to diamonds, the Security Council reiterated its appeal to the Liberian government to adopt a transparent and internationally verifiable Certificate of Origin Regime and also demanded that the regime be ‘fully compatible with the Kimberley Process’, which had become operational in January 2003.⁴⁹

A closer look at the Security Council’s approach in relation to the commodity sanctions reveals that the Council, instead of simply imposing sanctions on diamonds and timber, offered the government a way out by setting conditions for the lifting of sanctions. These conditions reflect the standards set by the Security Council. In relation to diamonds, the Council called upon the government ‘to establish an effective Certificate of Origin regime for trade in rough diamonds that is *transparent and internationally verifiable*.’⁵⁰ In relation to timber, the Council called upon the government of Liberia to ‘take urgent steps, including through the establishment of *transparent and internationally verifiable* audit regimes, to ensure that revenue derived by the Government of Liberia from the ... Liberian timber industry is used for *legitimate social, humanitarian and development purposes*.’⁵¹

The sanctions regime imposed pursuant to Resolution 1343 (2001) was terminated only a month after the timber sanctions came into effect, in response to the departure of President Taylor in August 2003 and the installation of a new transitional government in October that year. Nevertheless, in light of the fragile situation in the country, the timber and diamond sanctions were brought under a new sanctions regime. In contrast with the previous sanctions regime, which aimed to address the role of Liberia in fuelling threats to the peace in neighbouring countries, the aim of the new sanctions regime was primarily to address threats to the peace in Liberia, particularly the threat

⁴⁴ UN Security Council Resolution 1408 (2002), especially paras. 7 and 8.

⁴⁵ *ibid.*, especially para. 10.

⁴⁶ See the Report of Panel of Experts on Liberia submitted in accordance with Resolution 1408 (2002), UN Doc. S/2002/1115, 25 October 2002 and the Report of the Panel of Experts on Liberia submitted in accordance with Resolution 1458 (2003), 24 April 2003, UN Doc. S/2003/498.

⁴⁷ UN Security Council Resolution 1478 (2003), especially para. 16.

⁴⁸ *ibid.* especially para. 17(a). ⁴⁹ *ibid.* especially para. 13.

⁵⁰ UN Security Council Resolution 1343 (2001) (author’s emphasis).

⁵¹ UN Security Council Resolution 1478 (2003), especially para. 16 (author’s emphasis).

posed to the Liberian peace process by the proliferation of illegal arms.⁵² Recognizing the interlinkages between the illegal arms trade and the exploitation of diamonds and timber,⁵³ the objective of the sanctions regime was to stop these natural resources from fuelling armed conflict in the region and, for this purpose, to assist the new transitional government of Liberia to regain control over the diamond and timber industries.

The focus of the new sanctions regime was again on enhancing transparency and accountability in the government's management of natural resources as well as on promoting responsible business practices and proper use of the revenues derived from natural resources exploitation. In relation to diamonds, the Security Council instructed all States in Resolution 1521 (2003) 'to take the necessary measures to prevent the direct or indirect import of all rough diamonds from Liberia to their territory, whether or not such diamonds originated in Liberia.'⁵⁴ Furthermore, the resolution called upon the National Transitional Government of Liberia 'to establish an effective Certificate of Origin regime for trade in Liberian rough diamonds that is transparent and internationally verifiable' and encouraged the government 'to take steps to join the Kimberley Process as soon as possible.'⁵⁵

In relation to timber, the resolution stipulated that all states were to take the necessary measures 'to prevent the import into their territory of all round logs and timber products originating in Liberia.'⁵⁶ The Security Council also urged the government 'to establish its full authority and control over the timber producing areas, and to take all necessary steps to ensure that government revenues from the Liberian timber industry are not used to fuel conflict or otherwise in violation of the Council's resolutions but are used for legitimate purposes for the benefit of the Liberian people, including development.'⁵⁷ To this end, the Liberian government was encouraged 'to establish oversight mechanisms for the timber industry that will promote responsible business practices, and to establish transparent accounting and auditing mechanisms.'⁵⁸

In order to achieve the above-mentioned objectives and to ensure that the diamond and timber sanctions could eventually be lifted, the Security Council explicitly called upon states, international organizations, and other relevant bodies to offer assistance to the Liberian government, including assistance with regard to 'the promotion of responsible and environmentally sustainable business practices in the timber industry.'⁵⁹ In response to this call, a number of states and international organizations set up a programme in early 2004 to assist the Liberian government in introducing good governance reforms in the Liberian forestry industry ('LFI').

In Resolution 1579 (2004), the Security Council expressed its support for the LFI, referring to progress towards implementing the programme as a condition for lifting the sanctions. It encouraged the government to 'intensify its efforts' to meet the conditions for the lifting of sanctions, 'in particular by implementing the Liberia Forest Initiative and the necessary reforms in the Forestry Development Authority.'⁶⁰ In

⁵² UN Security Council Resolution 1521 (2003), preambular para. 8.

⁵³ UN Security Council Resolution 1521 (2003), paras. 7 and 8 of the preamble.

⁵⁴ *ibid.* para. 6 of the preamble. ⁵⁵ *ibid.* especially paras. 7 and 9.

⁵⁶ *ibid.* especially para. 10. ⁵⁷ *ibid.* especially para. 11. ⁵⁸ *ibid.* especially para. 13.

⁵⁹ *ibid.* especially para. 15. ⁶⁰ UN Security Council Resolution 1579 (2004), especially para. 3.

subsequent resolutions the Council added that these reforms would 'ensure transparency, accountability and sustainable forest management'.⁶¹

In 2005, an additional programme was launched to assist the Liberian government to enhance transparency and accountability in its public administration, including in the granting of natural resources concessions. The GEMAP was set up in response to reported irregularities in the granting of diamond concessions by the Liberian authorities, preventing Liberia's accession to the Kimberley Process.⁶² Again, the Security Council encouraged the Liberian government to implement the programme as a means to expedite the lifting of the sanctions.⁶³

The Liberian government effectively implemented the reforms proposed by the two programmes, leading to the lifting of the commodity sanctions. The timber sanctions were lifted in 2006 after extensive reforms of the forestry sector, including the adoption of legislation and the establishment of independent audits.⁶⁴ The diamond sanctions were lifted almost a year later, upon Liberia's accession to the Kimberley Process Certification Scheme.⁶⁵

The sanctions regime imposed in relation to Liberia is a prime example of how the Security Council's standard-setting practice functions. In the case of Liberia, the Council formulated substantive standards for the management of the state's natural resources, while leaving their implementation to the Liberian government and third parties. At the same time, the Council put pressure on the Liberian authorities to proceed with the necessary reforms by conditioning the lifting of the sanctions on diamonds and timber upon implementation of the standards. It was only when the Security Council was satisfied with the reforms undertaken by the authorities that it lifted the sanctions.

7.3.3 Resolutions adopted in relation to the DRC

The UN Security Council adopted a large number of resolutions in relation to the DRC before actually resorting to sanctions. These resolutions stated the Council's concern for the situation in the DRC and comprised reiterated calls on the parties to end the illegal exploitation of the DRC's natural resources. A sanctions regime was adopted only in 2003, when the armed conflict in the DRC had entered the phase of a gradual transition to peace.⁶⁶ It should therefore be seen as an attempt by the Security Council to support the peace process in the DRC.

The sanctions regime imposed by Resolution 1493 (2003) originally consisted of an arms embargo targeting particular armed groups, but two years later it was broadened

⁶¹ UN Security Council Resolution 1607 (2005), especially para. 4; and Resolution 1647 (2005), especially para. 3(a).

⁶² In this respect, see, for example, the Preliminary Report of the Panel of Experts on Liberia submitted pursuant to Resolution 1579 (2004) (On Diamonds) of 17 March 2005, UN Doc. S/2005/176, in particular, paras. 17–24; and Report of the Panel of Experts on Liberia submitted pursuant to Resolution 1579 (2004) of 13 June 2005, UN Doc. S/2005/360, paras. 97–119.

⁶³ See UN Security Council Resolution 1647 (2005), especially para. 4.

⁶⁴ See UN Security Council Resolution 1689 (2006), especially para. 1.

⁶⁵ UN Security Council Resolution 1753 (2007), para. 2 of the preamble and especially paras. 1–3.

⁶⁶ For an overview of the different phases in the armed conflict in the DRC between March 1993 and June 2003, see Office of the High Commissioner for Human Rights (n 20).

to include travel and financial sanctions.⁶⁷ The Council refrained from imposing resource-related sanctions at this stage, even though it consistently condemned the illegal exploitation of the natural resources and other sources of wealth of the DRC, expressing its intention to consider possible ways of ending it.⁶⁸ Rather, the Council *urged* ‘all States, and especially those in the region, to take the appropriate steps to end these illegal activities, including through judicial means where possible, and, if necessary, to report to the Council’ and later *demand*ed that neighbouring states as well as the Congolese government ‘impede any kind of support to the illegal exploitation of Congolese natural resources, particularly by preventing the flow of such resources through their respective territories.’⁶⁹

Nevertheless, from 2006 onwards, the Security Council started to address the illegal exploitation of Congolese natural resources in a more coherent manner, looking for more direct ways to stem the flow of conflict resources from the DRC. In Resolution 1698 (2006) the Council requested the Group of Experts to report on ‘feasible and effective measures the Council might impose to prevent the illegal exploitation of natural resources financing armed groups and militias in the Eastern part of the Democratic Republic of the Congo, including through a certificate of origin regime.’⁷⁰ The Council further requested the Secretary-General to assess the economic, humanitarian, and social impacts of such measures on the Congolese population.⁷¹ On the basis of this impact assessment,⁷² the Security Council decided to address the illegal exploitation of natural resources principally through the existing financial and travel sanctions, extending these to ‘individuals or entities supporting the illegal armed groups [operating] in the eastern part of the Democratic Republic of the Congo through the illicit trade of natural resources.’⁷³

This decision has been instrumental in subsequent standard-setting practices, because it set in motion a process leading to the adoption of due diligence guidelines for companies operating or sourcing from the minerals industry in the DRC. Where Resolution 1857 (2008) encouraged states to take measures ‘to ensure that importers, processing industries and consumers of Congolese mineral products under their jurisdiction exercise due diligence on their suppliers and on the origin of the minerals they purchase,’⁷⁴ Resolution 1896 (2009) explicitly recommended that importers and processing industries adopt policies and practices to prevent their businesses from

⁶⁷ UN Security Council Resolution 1493 (2003), especially para. 20. The travel and financial sanctions were introduced in Resolution 1596 (2005). For an overview of the sanctions regime, see Farrall (n 32) 411–18. See also Nico Schrijver, *Development without Destruction: The UN and Global Resource Management* (United Nations Intellectual History Project Series, Bloomington and Indianapolis: Indiana University Press, 2010), 184–6.

⁶⁸ See, for example, UN Security Council Resolution 1493 (2003), especially para. 28; and UN Security Council Resolution 1533 (2004), especially paras. 6 and 7.

⁶⁹ UN Security Council Resolution 1649 (2005), para. 16; UN Security Council Resolution 1698 (2006), para. 1.

⁷⁰ UN Security Council Resolution 1698 (2006), para. 6. ⁷¹ *ibid.* para. 8.

⁷² The Secretary-General’s report concluded that commodity sanctions would have negative impacts on artisanal miners and on the fragile peace process in the DRC. See the Report of the Secretary-General pursuant to paragraph 8 of Resolution 1698 (2006) concerning the Democratic Republic of the Congo, UN Doc. S/2007/68, 8 February 2007, paras. 62–3.

⁷³ UN Security Council Resolution 1857 (2008), especially para. 4(g).

⁷⁴ *ibid.* especially para. 15.

providing indirect support to armed groups.⁷⁵ More importantly, the Council mandated the Group of Experts to draw up guidelines for this purpose.⁷⁶

The due diligence guidelines presented by the Group of Experts in its 2010 final report require companies to adopt appropriate procedures to identify the risk of their purchases of minerals providing any sort of support to armed groups, sanctioned individuals or entities, and criminal networks or perpetrators of serious human rights abuses in the eastern part of the DRC, including from within the Congolese army. The guidelines follow a five-step risk-based approach to due diligence, consisting of strengthening company management systems, identifying and assessing supply chain risks, designing and implementing strategies to respond to identified risks, conducting independent audits, and publicly disclosing supply chain due diligence and findings.⁷⁷ The objective of the guidelines is therefore to provide companies with the tools to conduct a proper risk assessment in order to enable them to adequately respond to these risks. Once a risk has been identified, the guidelines require companies to suspend their contracts with their suppliers until the risk is removed.⁷⁸

In Resolution 1952 (2010), the Security Council expressed its support for the due diligence guidelines,⁷⁹ calling upon States

to take appropriate steps to raise awareness of the due diligence guidelines ... , to urge importers, processing industries and consumers of Congolese mineral products to exercise due diligence by applying the aforementioned guidelines, or equivalent guidelines [and] to regularly report to the Sanctions Committee on the actions they have taken to implement [the recommendations].⁸⁰

More significantly, the Security Council established an express link between compliance with the due diligence guidelines on the one hand, and the imposition of financial and travel sanctions on the other. It decided that the failure of an individual or entity to exercise due diligence consistent with the steps set out in the resolution could be a reason for them to be placed on the sanctions list.⁸¹ In this way the guidelines have a mandatory character for companies operating in or sourcing from the DRC.

The Security Council's subsequent resolutions focused strongly on ways to implement the due diligence guidelines adopted by the Group of Experts, including on the creation of a mechanism to trace the minerals supply chain, considered by the Group of Experts to constitute 'a key element of any due diligence exercise'.⁸² It is relevant

⁷⁵ UN Security Council Resolution 1896 (2009), especially para 16, which reads in full: '*Recommends* that importers and processing industries adopt policies and practices, as well as codes of conduct, to prevent indirect support to armed groups in the Democratic Republic of the Congo through the exploitation and trafficking of natural resources'.

⁷⁶ *ibid.* especially para. 7.

⁷⁷ See the Final report of the Group of Experts prepared pursuant to paragraph 6 of Security Council Resolution 1896 (2009), UN Doc. S/2010/596, 29 November 2010, para. 318.

⁷⁸ For more details, see *ibid.* paras. 328–55 for the first set of guidelines and paras. 356–69 for the second set.

⁷⁹ The Security Council supported 'taking forward the Group of Experts' recommendations on guidelines for due diligence for importers, processing industries and consumers of Congolese mineral products'. See UN Security Council Resolution 1952 (2010), especially para. 7.

⁸⁰ *ibid.* paras. 8 and 20.

⁸¹ *ibid.* para. 9.

⁸² See the Interim Report of the Group of Experts prepared in pursuance of paragraph 5 of Security Council Resolution 1952 (2010), UN Doc. S/2011/345, 7 June 2011, para. 77.

to note here that the Security Council assumed a secondary role in this, leaving the initiative largely to the International Conference for the Great Lakes Region and the Organisation for Economic Co-operation and Development ('OECD').⁸³ The Council limited its role to providing general support to these initiatives, including by adapting the mandate of MONUSCO to assist in the demilitarization of mining sites.⁸⁴

A final issue that is relevant to note is that the Security Council did not confine itself to addressing the role of individuals and entities providing direct or indirect support to armed groups. In many of its resolutions, the Council emphasized the responsibility of the Congolese government to improve the transparency of resource management, including in relation to revenues derived from the exploitation of natural resources.⁸⁵ Not only did the Council call on the government to establish tracing and certification systems to track the origin of minerals sourced in the DRC, but it also encouraged the government 'to further increase transparency in the administration of contracts for mining rights and the collection and accounting for taxes.'⁸⁶ Even though the Council formulated its request in non-hortatory language, it can clearly be regarded as a strong signal to the government to improve its management of natural resources.

7.3.4 Appraisal of the Security Council's standard-setting practice

In both sanctions regimes the UN Security Council focuses primarily on eliminating sources of revenue for armed groups. In Liberia two phases can be distinguished. Where the first phase addressed the Liberian government's active support of specific armed groups, most importantly the RUF, the second phase aimed to provide assistance to the new Liberian government to regain control over the state's natural resource sectors. Likewise, in the DRC, reinstating governance over the state's natural resources to the Congolese government is among the principal aims of the sanctions regime.

In both sanctions regimes the Security Council formulates standards that do not only affect the trade in natural resources, but also impact upon the management of natural resources within states. In this way, the Council aims to address the factors underlying the illegal exploitation of natural resources in a more structural manner. The most important common standards which can be derived from the sanctions regimes imposed by the Council in relation to Liberia and the DRC include 'transparency' and 'accountability'. These standards constitute the basis for the proper management of natural resources within states, and have particular relevance for addressing the root causes of armed conflict in conflict-torn states. Where in the case of Liberia, the Council applied these standards to government administration, in the case of the DRC, those same standards were held applicable to companies operating in the minerals sector.

In relation to government administration, the Council places great emphasis on transparency and accountability in relation to three issues. These are the granting

⁸³ See, for example, UN Security Council Resolution 1991 (2011), para. 17; and Resolution 2078 (2012), preambular para. 8.

⁸⁴ This is discussed in more detail in the following section.

⁸⁵ See, for example, UN Security Council Resolution 1756 (2007), para. 7.

⁸⁶ UN Security Council Resolution 2053 (2012), para. 25.

of concession contracts to companies; the trade in natural resources itself; and the administration of resource revenues. In relation to companies, the Council stresses the responsibility of companies for their business practices, both in relation to the choice of their business partners and, to a lesser extent, in relation to the impact of their business on the environment. Among the principal means indicated by the Security Council to implement the standards is the tracking and tracing of natural resources (verification of origin) and legislative reforms. The following section examines how these standards were operationalized in the mandates of UN operations.

7.4 Implementation of Standards in the Mandates of Peacekeeping Operations

The Security Council has employed peacekeeping operations in many resource-related armed conflicts. Examples include the UN Observer Mission in Angola ('MONUA'), the UN Transitional Authority in Cambodia ('UNTAC'), the UN Assistance Mission in Sierra Leone ('UNAMSIL'), and the UN Operation in Côte d'Ivoire ('UNOCI'). So far, the Council has however only in a few cases expressly included issues related to natural resources management in the mandate of a peacekeeping mission. The UN Mission in Liberia ('UNMIL') and the UN Organization (Stabilization) Mission in the Democratic Republic of the Congo (MONUC, later renamed MONUSCO), which are the focus of the current section, have received the most explicit mandate in this regard.⁸⁷

This mandate consisted both in enforcing the Security Council's sanctions and in providing assistance to the national government in the implementation of governance reforms proposed by the Council. Even though both operations received a Chapter VII mandate, it is relevant to note that they were employed with the consent of the government.⁸⁸ Their principal purpose was to provide assistance to the government in the transitional phase from armed conflict to peace. This section examines the two peace operations from the perspective of standard-setting. It explores the Council's approach towards operationalizing the standards identified in the previous section into the mandates of the two peacekeeping operations.

7.4.1 The UN Mission in Liberia

UNMIL which was established by the Security Council in September 2003 to relieve the ECOWAS mission in Liberia ('ECOMIL') forces that were already deployed in Liberia, from its very start, received an explicit mandate to assist the transitional government in the reestablishment of national authority throughout the country, including the establishment of a functioning administrative structure at both the national and local levels

⁸⁷ For more details on these and other peacekeeping operations, see UNEP, *Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations* (UNEP, 2012). See also on these operations Dam-de Jong (n 18) chapter 7.6.

⁸⁸ For the legal basis and typology of UN operations, see, for example, Carsten Stahn, *The Law and Practice of International Territorial Administration: Versailles to Iraq and Beyond* (Cambridge: Cambridge University Press, 2008); and Gregory Fox, *Humanitarian Occupation* (Cambridge: Cambridge University Press, 2008).

and in restoring proper administration of natural resources.⁸⁹ In addition to typical law enforcement tasks, relating to assisting the government to reinstate control over the diamond and timber producing areas,⁹⁰ UNMIL was also given an important advisory function, which was undertaken by the civil component of the mission. In addition, a specific Environment and Natural Resources Unit was created to give effect to UNMIL's mandate in relation to restoring proper administration of natural resources.

Most of the tasks undertaken by UNMIL pursuant to its mandate set out above included providing assistance to the government in drafting and implementing legislative reforms, assistance in the implementation of the GEMAP and LFI programmes, and providing advice to the government on sanctions compliance. Although the Council did not explicitly delegate these tasks to UNMIL, they were understood to fall within UNMIL's broad mandate. In addition, UNMIL was specifically instructed to assist the government in working 'towards establishing an official Certificate of Origin regime for trade in rough diamonds that is transparent and internationally verifiable, with a view to joining the Kimberley Process'.⁹¹ Another important task that was given to UNMIL was to assist the Liberian government and the Panel of Experts in the monitoring of sanctions.⁹² Finally, UNMIL was instructed to assist the Panel of Experts on its field missions in carrying out its investigations, also after the sanctions had been lifted.⁹³

UNMIL was therefore actively engaged in implementing the standards developed by the Security Council. Part of its work focused on providing practical assistance to the government in regaining control over the state's natural resources, while the operation also provided assistance to the government in devising the necessary administrative structures to enhance transparency and accountability in the state's management of natural resources. It should however be noted that UNMIL had a secondary role. Most of the reforms were undertaken by the group of states and international organizations that established the LFI and GEMAP programmes.

7.4.2 The UN Organization (Stabilization) Mission in the DRC⁹⁴

The United Nations Organization Mission in the Democratic Republic of the Congo ('MONUC') was established in November 1999 to assist the parties to the Lusaka Ceasefire Agreement, concluded earlier that year by the DRC, Angola, Namibia, Rwanda, Uganda, Zambia, and Zimbabwe, in its implementation.⁹⁵ Although the Council was aware of illegal resource exploitation activities in the DRC when it established MONUC,⁹⁶ it did not include resource-related tasks in MONUC's mandate until 2007. In its Resolution 1756 (2007), the Council instructed MONUC

⁸⁹ UN Security Council Resolution 1509 (2003), para. 3.

⁹⁰ See, for example, UN Security Council Resolutions 1607 and 1647 (2005).

⁹¹ UN Security Council Resolution 1607 (2005), para. 2. ⁹² *ibid.* para. 11.

⁹³ See, for example, UN Security Council Resolution 1961 (2010).

⁹⁴ The current section is drawn from Dam-de Jong (n 18) chapter 7.6.

⁹⁵ See UN Security Council Resolution 1279 (1999).

⁹⁶ Only seven months after it established MONUC, the Council requested the Secretary-General to establish an expert panel on the illegal exploitation of natural resources and other forms of wealth of the DRC. See Security Council Presidential Statement on the Democratic Republic of the Congo, UN Doc. S/PRST/2000/20, 2 June 2000.

to assist the Government of the Democratic Republic of the Congo in establishing a stable security environment in the country, and, to that end, to ... support operations [of the Congolese army] with a view to ... prevent the provision of support to illegal armed groups, including support derived from illicit economic activities.⁹⁷

A year later, this mandate was broadened to include monitoring and inspection tasks to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources.⁹⁸ MONUC was authorized to use all necessary means to carry out these tasks, although, in light of its limited capacities, priority was given to its primary task to protect the civilian population.⁹⁹ Pursuant to its new mandate, MONUC embarked upon a pilot project in cooperation with the Congolese government to bring together all state services in a limited number of trading counters in the eastern part of the DRC with a view to reinstate government control over the key mining sites. In Resolution 1906 (2009) the Security Council urged MONUC to 'consolidate and assess, jointly with the Government of the Democratic Republic of the Congo, its pilot project ... in order to improve the traceability of mineral products.'¹⁰⁰

In 2010, MONUC was renamed MONUSCO in order to reflect the new phase of the DRC's transition to peace.¹⁰¹ MONUSCO's tasks remained essentially the same, focusing *inter alia* on providing assistance to the Congolese government in reinstating government control over the key mining sites. Its mandate included consolidating the five trading counters set up to facilitate tracing the origin of minerals as well as to carry out spot checks and regular visits to mining sites, trade routes, and markets in the vicinity of the five pilot trading counters.¹⁰²

In addition to inspection tasks, MONUC/MONUSCO was also given the mandate to assist the Congolese government in its endeavours towards improving transparent and accountable management of the state's natural resources and revenues. In 2005 already, the Council encouraged MONUC 'to provide advice and assistance as well as the necessary support to the setting up by the Transitional Government, international financial institutions and donors, of an arrangement to strengthen support for good governance and transparent economic management.'¹⁰³ In its Resolution 1856 (2008), the Council decided that

MONUC will also have the mandate, in close cooperation with the Congolese authorities, the United Nations Country Team and donors, to support the strengthening of democratic institutions and the rule of law and, to that end, to ... contribute to the promotion of good governance and respect for the principle of accountability.¹⁰⁴

Likewise, MONUC/MONUSCO was given a role in assisting the government in strengthening its justice system in order to prosecute those responsible for illegal resource exploitation.¹⁰⁵

⁹⁷ UN Security Council Resolution 1756 (2007), para. 2.

⁹⁸ UN Security Council Resolution 1856 (2008), para. 3.

⁹⁹ *ibid.* paras. 5 and 6.

¹⁰⁰ UN Security Council Resolution 1906 (2009), para. 28.

¹⁰¹ See UN Security Council Resolution 1952 (2010), establishing MONUSCO.

¹⁰² See UN Security Council Resolutions 1952 (2010), para. 16 and 1991 (2011), para. 17.

¹⁰³ UN Security Council Resolution 1621 (2005), para. 4.

¹⁰⁴ See UN Security Council Resolution 1856 (2008), para. 4.

¹⁰⁵ UN Security Council Resolutions 1952 (2010), para. 16.

In 2013, a special Intervention Brigade was established within MONUSCO with the mandate to neutralize armed groups, to contribute in reducing the threat posed by armed groups to state authority and civilian security in eastern DRC and to make space for stabilization activities.¹⁰⁶ The Brigade did not receive specific instructions in relation to the mining sites. Likewise, the overall mandate of MONUSCO remained largely the same.¹⁰⁷

The mandate given by the Security Council to MONUC/MONUSCO in relation to natural resources was broad. In addition to monitoring and inspection tasks, MONUC/MONUSCO was also mandated to assist the government in good governance reforms. Nevertheless, although MONUC/MONUSCO focused largely on monitoring and inspection tasks, it engaged in some important administrative reforms to realize its mandate. By concentrating on the trade in natural resources in a specified number of trading counters, MONUC/MONUSCO made an important effort to enhance transparency in the commercial transactions of natural resources. It thereby established the basic facilities for a more advanced tracking and tracing system in the future.

7.4.3 The contribution of peacekeeping operations towards the implementation of standards

The UN operations in Liberia and the DRC received an explicit mandate to address issues related to the management of natural resources. In both states, reinstating government control over the state's natural resources was among the priorities of the operations. Part of their mandate consisted of law enforcement measures, including demilitarizing mining sites and effectuating controls, but they also actively assisted the government in implementing legislative reforms. In this way the Council's requests for transparency, accountability, and sustainability were operationalized within the state's institutions. Improving management of natural resources was realized *inter alia* by strengthening institutions, reflecting principles of democracy and good governance. The UN operations contributed to this by providing advice to the government and by actively engaging in legislative reforms.

7.5 Implementation of Standards in Management Reform Programmes

The requests of the Council to increase transparency and accountability in relation to the management of natural resources resulted in the establishment of programmes set up by international organizations and states to assist the government to operationalize these requirements. In relation to diamonds, states and the diamond industry set up

¹⁰⁶ UN Security Council Resolution 2098 (2013), para. 9.

¹⁰⁷ See, for example, UN Security Council Resolution 2136 (2014), para. 25. In its most recent resolutions, the Council expanded the civilian mandate of MONUSCO to include 'the consolidation of an effective national civilian structure to control key mining activities and to manage in an equitable manner the extraction and trade of natural resources in eastern DRC'. However, the Council formulated this task in the form of a recommendation and tied it to the use of good offices. See UN Security Council Resolutions 2098 (2013), para. 14 and 2147 (2014), para. 5.

the Kimberley Process for the Certification of Rough Diamonds, which introduced a tracking and tracing system for the trade in rough diamonds.¹⁰⁸ A similar system was introduced in relation to minerals originating from the DRC and neighbouring states. This system was developed within the framework of the International Conference for the Great Lakes Region ('ICGLR'), a partnership between the states situated in the Great Lakes Region. In addition, the ICGLR has set up a regional database on mineral flows.¹⁰⁹ These mechanisms aim to contribute to the effectuation of the due diligence guidelines approved by the Security Council, since the exercise of due diligence by companies depends upon systems that enable these companies to trace the origin of the traded minerals.¹¹⁰

Furthermore, the Security Council's call to assist the Liberian government in achieving the objectives set for the timber industry resulted in the establishment of the LFI set up by the United States, together with the World Bank, the International Monetary Fund, the European Commission, the International Union for the Conservation of Nature, the United Nations Food and Agriculture Organization and several other international and non-governmental organizations. The aim of the LFI was to assist the Liberian government to adopt the necessary reforms in its forestry sector to allow for the sustainable and transparent management of its forest resources for the benefit of the Liberian population.¹¹¹ The LFI programmes were comprehensive, in the sense that they focused on every aspect of sustainable forest management, including the three internationally recognized components of sustainable forest management.¹¹² This programme was complemented by the GEMAP initiated by the same partnership. The GEMAP was a very ambitious initiative, aimed at establishing transparent and accountable government administration, encompassing all aspects of government administration. Part of this programme was dedicated to the review of the Liberian system for issuing concessions for the exploitation of natural resources.¹¹³

¹⁰⁸ For more details on the Kimberley Process, see <<http://www.kimberleyprocess.com>> accessed 1 March 2015. Also see Wetzel (n 18); Grant (n 18); and Dam-de Jong (n 18) chapter 8.

¹⁰⁹ See <<http://www.icglr.org>> accessed 1 March 2015. The member states of the ICGLR held a Special Summit on illegal exploitation of natural resources in the Great Lakes region in 2010. The resulting Lusaka Declaration approves six practical tools that have been developed to curb the illegal exploitation of natural resources. These comprise the adoption of a regional certification mechanism; harmonization of national legislation; the creation of a regional database on mineral flows; the formalization of the artisanal mining sector; promotion of the Extractive Industry Transparency Initiative; and a Whistle Blowing Mechanism, offering individuals the possibility to report anonymously on illegal activities.

¹¹⁰ It must be noted that the ICGLR and the OECD were actively involved in the drafting of the guidelines submitted by the Group of Experts to the Security Council. This cooperation resulted in the adoption of a due Diligence Guidance as part of the OECD framework on investment. For more details, see Dam-de Jong (n 18) chapter 8.

¹¹¹ For more information on this initiative, see the website of the UN Food and Agriculture Organization, at <<http://www.fao.org/forestry/lfi/en/>> accessed 1 March 2015. Also see Stephanie Altman, Sandra Nichols, and John Woods, 'Leveraging High-Value Natural Resources to Restore the Rule of Law: The Role of the Liberia Forest Initiative in Liberia's Transition to Stability' in Päivi Lujala and Siri Aas Rustad (eds.), *High-Value Natural Resources and Post-Conflict Peacebuilding* (Oxford/New York: Earthscan, 2012), 337–65.

¹¹² The Non-Legally Binding Instrument on All Types of Forests, UN Doc. A/C.2/62/L.5, 22 October 2007 defines sustainable forest management in its Art. III (4) as 'a dynamic and evolving concept, [which] aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations.'

¹¹³ See, for example, the Report of the Panel of Experts on Liberia submitted pursuant to Resolution 1647 (2005), UN Doc. S/2006/379, 7 June 2006.

The contribution of the regional programmes to the implementation of the standards set in the resolutions of the Security Council consists mostly of measures that enable the control of the trade in natural resources. Much attention is dedicated to finding ways to increase transparency in the trade in natural resources, notably by adopting measures that enable tracing of the origin of minerals throughout the supply chain. Legislative reforms in this respect focus on strengthening internal and border controls. Nonetheless, more structural efforts, aimed at improving government administration of the state's natural resources, are undertaken as well. Reform of the system for issuing concessions is an important focus of these efforts.

7.6 Lessons for *Jus Post Bellum*

The standards developed by the Security Council for the management of natural resources aim to assist states in the transition from armed conflict to a durable peace. This is what makes these standards relevant for the purposes of defining a framework for a *jus post bellum*. The standards identified in this contribution are transparency, accountability, and sustainability. This chapter demonstrated that these standards have been operationalized in different ways, principally by strengthening national institutions and through regulating the trade in natural resources.

Some important questions remain however for the purposes of defining a framework for a *jus post bellum*. The first relates to the normative value of the standards developed by the Security Council. Can these standards be considered mandatory for states recovering from armed conflict and for companies conducting business in these states, thereby doing justice to the *jus* element in *jus post bellum*? Or are they merely recommendations, without formal legal authority?

In fact, the standards can be regarded as a mixture of voluntary and mandatory measures. For the most part the standards should be regarded as recommendations, adopted for the purpose of assisting states in the transition from armed conflict to peace. However, at the same time the standards are directly linked to sanctions imposed by the Security Council. The most obvious example is the link established by the Council between disrespect by companies for the due diligence requirements formulated by the Group of Experts on the DRC and their inclusion in a sanctions list. Also, by making implementation of the standards a prerequisite for the lifting of sanctions, the Council indirectly obliges states to adhere to them. This implies that the standards do have normative value.

In addition, it is important to note that the Security Council also provides clear indications regarding the means and methods for implementation of the standards. Even though the Security Council leaves the modes for the implementation of the standards largely to the states themselves, it formulates a clear preference for adherence to particular systems and programmes set up by third parties. The most notable examples are the Kimberley Process for the Certification of Rough Diamonds as well as the LFI and GEMAP programmes as means to give effect to the standards. In this way, the Council also gives clear indications on the substantive interpretation of the standards.

Finally, a more fundamental question would be whether the Security Council is the appropriate body to formulate partly binding standards that impact upon the right of

states to manage their own natural resources. According to the Principle of Permanent Sovereignty over Natural Resources, states have the right to freely dispose of their natural resources. The standards developed by the Security Council infringe upon this freedom. Does the Council have the authority to restrain this freedom for the purpose of addressing threats to the peace? Or should we conclude *vice versa* that these standards are not specific to *jus post bellum* but, to the contrary, reflect existing obligations under international law for all states in relation to the management of their natural resources?

This chapter cannot provide a clear-cut answer to this question. It is however to be noted that the standards set by the Security Council reflect developments in several fields of international law and practice, most notably in relation to the 'good governance' requirements developed by the international financial institutions. This is an indication of their broad acceptance by the international community. It is now time to build upon this practice and to develop the standards into clear guidelines for conflict resolution and peacebuilding as part of the broader framework of *jus post bellum*.

Environmental Implications of Disarmament

The CWC Case

*Ayşe-Martina Böhringer and Thilo Marauhn**

8.1 The CWC Obligation to Disarm

The Chemical Weapons Convention ('CWC')¹ is one of the most complex arms control and disarmament agreements having ever been concluded. This is not only due to the subject matter of the agreement but also to the underlying security interests of participating states parties, both at the time of negotiating the treaty and in the process of its continuous implementation.² In addition, the CWC is a truly ambitious exercise of global governance,³ aiming at dismantling existing stocks of chemical weapons and preventing the re-emergence of these weapons of mass destruction. To this end, the CWC seeks to achieve universality (and indeed has come close to, even though it has not yet been fully met),⁴ and it entails the establishment of a continuous monitoring of chemical industries (in light of the many dual use substances that are or may turn into precursors of chemical weapons).⁵

It is against this already existing complexity that states parties and experts alike have long been hesitant to address a further complication of the regime, namely the environmental implications of the CWC. At the time of negotiating the agreement and during the early years of its implementation there even was concern that environmental considerations might hamper the principal objectives of the CWC, and the question

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¹ 1974 UNTS 45; 32 ILM 800 (1993).

² For insights into the negotiating process see Thomas Bernauer, *The Chemistry of Regime Formation: Explaining International Cooperation for a Comprehensive Ban on Chemical Weapons* (Aldershot: Dartmouth Publishers, 1993). See also Daniel Feakes, 'The Adoption of the Convention and the Work of the Preparatory Commission' in Walter Krutzsch, Eric Myjer, and Ralf Trapp (eds.), *The Chemical Weapons Convention: A Commentary* (Oxford: Oxford University Press, 2014), 17–25.

³ Tejal Chandan and Ramesh Thakur, 'The Chemical Weapons Convention: Implementation, Challenges and Opportunities' (2006) United Nations University, Policy Brief No. 8, at <http://collections.unu.edu/eserv/UNU:3092/pb8_06.pdf> accessed 14 June 2017.

⁴ Scott Spence, 'Efforts by the OPCW to Promote Universality' in Krutzsch, Myjer, and Trapp (n 2) 27–35.

⁵ Lisa Tabassi, 'The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention)' in Geir Ulfstein, Thilo Marauhn, and Andreas Zimmermann (eds.), *Making Treaties Work: Human Rights, Environment and Arms Control* (Cambridge University Press, 2007), 273–300; Jennifer D. Wheatley, 'Chemical and Biological Weapons: Monitoring Compliance with Arms Control Agreements' in Paul C. Szasz (ed.), *Administrative and Expert Monitoring of International Treaties* (Ardley, New York: Transnational Publishers, 1999), 219–43.

was raised whether there is a tension of 'green vs peace'.⁶ This notwithstanding, one of the current authors, having always had an interest in both fields of public international law, has had the pleasure to research and publish on the issue at a relatively early stage, partly together with the late *Ulrich Beyerlin*.⁷

This chapter is meant to provide some insights into the interrelationship of arms control law and environmental law in light of the fact that arms control and disarmament have traditionally been an issue in *post bellum* situations.⁸ The chapter does not cover the subject matter as a whole. By way of example, it focuses on the CWC. With a view to the destruction of Syrian CW stocks and CW production facilities, this has recently been debated in the context of a current armed conflict that—at the time of writing—unfortunately continues and has not yet come to an end.

Taking a look at the disarmament obligations under the CWC first, Article I CWC requires states parties to destroy the chemical weapons and production facilities they possess, as well as CWs they may have abandoned on another state's territory:

- (2) Each State Party undertakes to destroy chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of the Convention.
- (3) Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention.
- (4) Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention.

The obligation to destroy also applies to 'old chemical weapons' as defined in Article II CWC.⁹ Reference to 'the provisions of this Convention' in Article I points to, among others, further specifications arising from Articles IV and V as well as from parts of the 'Annex on Implementation and Verification' (in the following: Verification Annex)

⁶ This was the title of a study on the Johnston Atoll, islands administered by the US, and eventually used for the destruction of chemical weapons; see Trevor Findlay, '*Green vs Peace*' *The Johnston Atoll Controversy* (Canberra: Australian National University, Peace Research Centre, 1990).

⁷ Ulrich Beyerlin and Thilo Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' in Daniel Bardonnet (ed.), *La Convention sur L'interdiction et L'élimination des Armes Chimiques* (Hague Academy of International Law, Dordrecht/Boston/London: Martinus Nijhoff, 1995), 187–211; the article builds on earlier research, the outcomes of which were published in German: Ulrich Beyerlin and Thilo Marauhn, *Abrüstung und Umweltschutz – eine völkerrechtliche Interessenskollision?* (Bochum: Brockmeyer, 1994).

⁸ Jann K. Kleffner, 'Peace Treaties' in Rüdiger Wolfrum (ed.), *The Max Planck Encyclopedia of Public International Law* (Oxford: Oxford University Press, 2011), margin note 16, at <<http://opil.ouplaw.com/home/EPIL>> accessed 14 June 2017; Jens Iverson, 'Contrasting the Normative and Historical Foundations of Transitional Justice and Jus Post Bellum' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 80–101, at 97, characterizing disarmament '(m)ixed procedural and substantive regional or mid-level applications' of *jus post bellum*.

⁹ According to Art. II(5) CWC the term 'old chemical weapons' means '(a) Chemical weapons which were produced before 1925; or (b) Chemical weapons produced in the period between 1925 and 1946 that have deteriorated to such extent that they can no longer be used as chemical weapons.'

attached to the Convention.¹⁰ The CWC includes a rigorous destruction schedule, based upon Article IV(6) of the Convention, clearly stating that

(s)uch destruction shall begin not later than two years after this Convention enters into force for it and shall finish not later than 10 years after entry into force of this Convention.

In the process of implementing the Convention the destruction schedule had to be adapted on the basis of Part IV(A) (24)–(25) of the Verification Annex, and subsequently again after the final deadline of fifteen years had passed.¹¹

8.2 Environmental Implications of Chemical Disarmament

While it is obvious that CWs destruction is not an easy exercise,¹² neither in terms of chemical processes nor in terms of the quantity of stocks, additional challenges arise from CW agents stored in munitions: first, CW agents in munitions were more difficult to destroy than those stored separately, as CW munitions had been built with no or very little thought of how they might be taken apart; second, munitions contained various types of explosives; third, the ageing of munitions gives rise to further risks.¹³

In principle, the CWC holds possessor states financially liable for the costs of destruction. Article IV, para. 16, CWC applies straightforward language: ‘Each State Party shall meet the costs of destruction of chemical weapons it is obliged to destroy.’ Problems arise in respect of CWs on a state party’s territory belonging to a non-party. Unless these weapons have been removed within the first year after the CWC has entered into force, the state party will be liable for destruction, and for the costs of destruction, subject to Article IV, para. 11, CWC, allowing for assistance by the Organisation for the Prohibition of Chemical Weapons (OPCW) and other states parties. It has rightly been argued that this may entail financial assistance, even though the CWC lacks a specific provision for the granting of such financial assistance through the OPCW.¹⁴ Beyond this joint reading of paras. 11 and 16, Article IV, para. 12, CWC includes a general obligation of states parties to cooperate, which may also be applied to financial matters.

Transportation problems arise for the purpose of transferring CWs from storage places to destruction sites (destruction facilities may not be available near storage locations), for abandoned CWs and in respect of samples. The timing envisaged by the Convention, including Article IV, para. 11, CWC is a complicating factor in this regard. A pertinent illustration of transportation is the removal of US CWs from Germany to

¹⁰ Detailed rules on the destruction of CWs and of CW facilities emerge from Parts IV(A), IV(B), and V of the Verification Annex.

¹¹ OPCW CSP, Decision: Final Extended Deadline of 29 April 2012, C-16/DEC.11, 1 December 2011.

¹² Studies by scientists and engineers provide useful insights into the matter, see for example, Vladimir M. Kolodkin and Wolfgang Ruck (eds.), *Ecological Risks Associated with the Destruction of Chemical Weapons* (Dordrecht: Springer, 2006).

¹³ See Beyerlin and Marauhn, ‘The Protection of the Environment in the Context of Chemical Weapons Destruction’ (n 7) 187–8.

¹⁴ Ralf Trapp and Paul Walker, ‘Article IV: Chemical Weapons’ in Krutzsch, Myjer, and Trapp (n 2) 119–50, at 146 (margin note 16).

the US facility on Johnston Island in the Pacific for destruction.¹⁵ Based upon a bilateral agreement preparations for the transportation of US CW stocks began in early 1990.

8.3 From Fragmentation to Integration

In fact, at least some provisions of the CWC relate to environmental issues. With regard to national implementation of state party obligations according to the CWC, the Convention, in its Article VII(3), stipulates that:

[e]ach State Party, during the implementation of its obligations under this Convention, shall assign the highest priority to ensuring the safety of people and to protecting the environment, and shall cooperate as appropriate with other States Parties in this regard.

However, the Convention is silent on the question of the standards to be applied. The first question arises with regard to the word 'priority'. In that respect, it is necessary to have a closer look at the relationship between environmental protection on the one hand, and chemical weapons destruction as the primary objective of the CWC on the other hand. Even though environmental concerns do not permit states parties to escape their obligations under the CWC, the Convention does recognize the need to reconcile the two positions.¹⁶ To this end, the extension of the deadline for the destruction of chemical weapons due to environmental concerns has been a valuable means.¹⁷

Furthermore, Article IV (10) CWC obliges states parties:

during transportation, sampling, storage and destruction of chemical weapons, [to] ... assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall transport, sample, store and destroy chemical weapons in accordance with its national standards for safety and emissions.

Similarly, Article V(11) CWC obliges states parties to:

assign the highest priority to ensuring the safety of people and to protecting the environment during the destruction of chemical weapons production facilities according to national standards for safety and emissions.

Both provisions specify Article VII(3) CWC to a certain extent by concretizing the kind of activities with regard to CWs destruction and the destruction of chemical weapons production facilities.

The reference to 'national standards' in both provisions gives states considerable leeway in determining how to transport, sample, store, and destroy CWs or how to destroy chemical weapons production facilities.

¹⁵ For details and further references see Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 190.

¹⁶ Alexandre Kiss and Dinah Shelton, *Guide to International Environmental Law*, (Leiden/Boston: Martinus Nijhoff, 2007), 258; Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 193.

¹⁷ Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 193.

These provisions are further specified by the Verification Annex of the CWC as well as by the OPCW, which provides support to states parties.¹⁸

In principle, Part IV(A), para. C.13 of the Verification Annex leaves it up to states parties to determine how they shall destroy CWs, which is, however, only allowed at specifically designated and appropriately designed and equipped facilities. An explicit prohibition is only imposed on the following processes: dumping in any body of water, land burial, or open-pit burning.

There are also many bilateral agreements dealing with environmentally sound destruction of chemical weapons. While contributing to an additional normative framework between participating states on matters related to CWs, they also play an important part in establishing rules on treatment of environmental risks related to storage and destruction of CWs. For instance, the agreement between Sweden and Russia deserves to be mentioned in this context. Under that agreement, Sweden undertook to assist Russia in considering possible threats resulting from the storage and destruction of the Russian CWs stockpile.¹⁹

However, as the existing normative framework on the basis of the CWC and bilateral agreements does not provide enough substantive and procedural standards with regard to environmental protection it is necessary to identify norms of international environmental law that are important in terms of chemical weapons destruction. In this respect the 'no harm' concept is of particular importance. The *Trail Smelter case*²⁰ provided the basis for the concept of prohibition on causing transboundary environmental harm:

The Tribunal, therefore, finds that the above decisions, taken as a whole, constitute an adequate basis for its conclusions, namely, that, under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

In the following, some legally binding international environmental agreements²¹ as well as non-binding instruments such as Principle 21 of the 1972 Stockholm Declaration included this concept, stipulating that:

[s]tates have ... the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states ...²²

¹⁸ See Ulrich Beyerlin and Thilo Marauhn, *International Environmental Law* (Oxford: Hart Publishing/München: CH Beck, 2011), 419 with further references.

¹⁹ Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 199.

²⁰ (1941) 3 RIAA 1907.

²¹ See, for example, Art. 3 of the 1992 Convention on Biological Diversity, 31 ILM 818 (1992): 'States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'; Art. 194(4) of the 1982 UN Convention on the Law of the Sea, 21 ILM 1261 (1982): 'In taking measures to prevent, reduce or control pollution of the marine environment, States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and in pursuance of their duties in conformity with this Convention.'

²² Declaration of the United Nations Conference on the Human Environment, Stockholm, 5–16 June 1972, UN Doc. A/CONF.48/14/Rev.1.

This concept is also reflected in the jurisprudence of the International Court of Justice,²³ stating that:

[a] State is ... obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State.²⁴

The 'no harm' concept comprises the following two elements: on the one hand, it prohibits states from causing significant transboundary environmental harm. On the other hand, it requires states to undertake adequate measures in advance of a case of significant transboundary environmental harm.²⁵ Yet, it is rather difficult in practice to determine the 'significance' of the harm in question. Another difficulty, for example, arises with regard to the question of 'reasonableness' of the activities to be taken by states. Actually, the application of relevant technical standards may provide a certain degree of certainty in this regard.²⁶ Despite these difficulties, however, this concept can be regarded as a 'customary substantive rule at the universal level'.²⁷ As regards the procedural obligations flowing from 'no harm', such as the obligation of consultation, exchange of information, early warning, and the assessment of potential transboundary impacts of projects at the national level, the latter does not seem to have become part of customary international law.²⁸ Against this background, it can be concluded that at least a set of minimum standards guide the transport of weapons and war material for the purpose of destruction, elimination, and conversion.²⁹

Similarly, the conduct of an environmental impact assessment and the precautionary principle are important tools to ensure environmental protection during disarmament operations. Even though the latter is not part of customary international law, it is reflected in many international environmental agreements.

Furthermore, there are certain international environmental agreements which may be relevant with regard to measures covered by the CWC especially in the context of transborder transport. For example, the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal³⁰ as well as the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa³¹ may

²³ See the 1996 *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, Judgment of 8 July 1996, ICJ Reports 226, 241 et seq.; cf. *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment of 25 September 1997, ICJ Reports 7, 41.

²⁴ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment of 20 April 2010, ICJ Reports 14, 56, para. 101; *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)*, Judgment of 16 December 2015, ICJ Reports 665, para. 118, at <<http://www.icj-cij.org/docket/files/150/18848.pdf>> accessed 14 June 2017.

²⁵ Günther Handl, 'Transboundary Impacts' in Daniel Bodansky, Jutta Brunnée, and Ellen Hey (eds.), *The Oxford Handbook of International Environmental Law* (Oxford: Oxford University Press, 2007), 531, 533 et seq.

²⁶ Beyerlin and Marauhn (n 18) 42.

²⁷ *ibid.* 44. See also Volker Röben, 'Air Pollution, Transboundary Aspects' in Rüdiger Wolfrum (ed.), *The Max Planck Encyclopedia of Public International Law* (Oxford: Oxford University Press, 2015) margin note 14, at <<http://opil.ouplaw.com/home/EPIL>> accessed 14 June 2017.

²⁸ Beyerlin and Marauhn (n 18) 45.

²⁹ Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 202.

³⁰ 28 ILM 657 (1989).

³¹ 30 ILM 775 (1991).

be interpreted as establishing the principle of priority of inland destruction. This means that one may argue that transborder transport of chemical weapons is only permitted if there are reasonable grounds for their destruction abroad.³² By way of example, it may be argued on the basis of the 'proximity principle', that is, that the foreign destruction facility is closer to the storage place of the weapons than domestic destruction facilities.³³ Although this principle has not yet become part of customary international law, it, however, requires reasoned justification for the transport of weapons for the purpose of destruction abroad. Furthermore, they both as well as several other international environmental agreements³⁴ establish the requirement of prior informed consent, obligating exporting states to provide adequate information on the planned transboundary movement of hazardous wastes.³⁵

The 1999 Basel Protocol on Liability and Compensation³⁶ establishes a comprehensive regime for liability and compensation for damage resulting from the transboundary movement of hazardous wastes. Once it enters into force it has the potential to adequately complement the framework of norms addressing transboundary movement of hazardous wastes.

Another important treaty regime establishing rules with regard to transboundary pollution is the 1979 Convention on Long-range Transboundary Air Pollution³⁷ and its eight protocols.³⁸ At least some of the protocols may contribute to the protection of the environment during the disposal of weapons by establishing certain minimum standards.³⁹ For instance, the 1984 Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe ('EMEP')⁴⁰ establishes a cost-sharing framework for a monitoring programme regarding review and assessment of air pollutants in Europe.⁴¹

It should also be noted that norms governing the transport of dangerous goods are also relevant in this context. Among these rules, there are the RID Rules of the Convention relative aux transports internationaux ferroviaires,⁴² the European

³² Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 203.

³³ *ibid.*

³⁴ Such as the Waigani Convention to Ban the importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement of Hazardous wastes within the South Pacific Region, see Katharina Kummer Peiry, 'Prior Informed Consent' in Rüdiger Wolfrum (ed.), *The Max Planck Encyclopedia of Public International Law* (Oxford: Oxford University Press, 2011) margin note 1, available at <<http://opil.ouplaw.com/home/EPIL>>.

³⁵ *ibid.* (margin note 5).

³⁶ See <<http://www.basel.int/TheConvention/Overview/LiabilityProtocol/tabid/2399/Default.aspx>> accessed 14 June 2017.

³⁷ 18 ILM 1442 (1979).

³⁸ For an overview of the protocols see the information at <http://www.unece.org/env/lrtap/status/lrtap_s.html> accessed 14 June 2017.

³⁹ Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 203.

⁴⁰ 27 ILM 701 (1988).

⁴¹ Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge/New York/Melbourne/Madrid/Cape Town/Singapore/São Paulo/Delhi/Mexico City: Cambridge University Press, 3rd edn, 2012), 248; see also <http://www.unece.org/env/lrtap/emep_h1.html> accessed 14 June 2017.

⁴² German Bundesgesetzblatt 1985 II, 666; the latest version is available at <http://otif.org/fileadmin/new/2-Activities/2D-Dangerous-Goods/RID_2017_E.pdf> accessed 14 June 2017.

Agreement Concerning the International Carriage of Dangerous Goods by Road⁴³ and by Inland Waterways,⁴⁴ and the International Maritime Dangerous Goods Code.⁴⁵ Another example are the UN Recommendations on the Transport of Dangerous Goods—Model Regulations⁴⁶ aiming at the provision of a basis for the development of uniform rules with regard to safe transport of dangerous goods.

8.4 The Syrian Case

The CWC only came into force in Syria on 14 October 2013 after formal accession to the Convention on 14 September 2013.⁴⁷ In addition to an exceptional disarmament procedure resulting from, *inter alia*, the civil war and the application of procedures and mechanisms partially modifying the CWC rules, the decision to destroy Syria's CWs at sea raised serious environmental concerns.⁴⁸

According to EC-M-33/DEC.1, the OPCW Executive Council decided, *inter alia*, that:

the Syrian Arab Republic shall ... complete the elimination of all chemical weapons material and equipment in the first half of 2014, subject to the detailed requirements, including intermediate destruction milestones, to be decided by the Council not later than 15 November 2013; ... complete as soon as possible and in any case not later than 1 November 2013, the destruction of chemical weapons production and mixing/filling equipment ...⁴⁹

Furthermore, the UN Security Council in its Resolution 2118 decided:

to authorize Member States to acquire, control, transport, transfer and destroy chemical weapons identified by the Director-General of the OPCW, consistent with the objective of the Chemical Weapons Convention, to ensure the elimination of the Syrian Arab Republic's chemical weapons program in the soonest and safest manner.⁵⁰

This Resolution finds its legal basis in Article 24 in conjunction with Article 103 UN Charter, *inter alia* giving the Security Council primary responsibility for peace and security.

⁴³ German Bundesgesetzblatt 1969 II, 1489. ⁴⁴ German Bundesgesetzblatt 2007 II, 1906.

⁴⁵ See the latest version (2016 Edition Amendment 38-16), at <<http://www.imo.org/en/Publications/IMDGCode/Pages/Default.aspx>> accessed 14 June 2017.

⁴⁶ See the nineteenth revised edition (2015), at <http://www.unece.org/trans/danger/publi/unrec/rev19/19files_e.html> accessed 14 June 2017.

⁴⁷ See S/1315/2015 (19 October 2015), Note by the Technical Secretariat, Status of Participation in the Chemical Weapons Convention as at 17 October 2015, at <https://www.opcw.org/fileadmin/OPCW/S_series/2015/en/s-1315-2015_e_.pdf> accessed 14 June 2017. See more generally Marie Jacobsson, 'Syria and the Issue of Chemical Weapons: A Snapshot of a Legal Time-Frame: The United Nations Security Council Resolution 2118 (2013) and the OPCW Executive Council Decision' in Jonas Ebbesson *et al.* (eds.), *International Law and Changing Perceptions of Security: Liber Amicorum Said Mahmoudi* (Leiden: Brill/Nijhoff, 2014), 134–51.

⁴⁸ Ralf Trapp, 'Elimination of the Chemical Weapons Stockpile of Syria' (2014) 19 *Journal of Conflict & Security Law* 7–23, 15 *et seq.*

⁴⁹ OPCW EC, Decision: Destruction of Syrian Chemical Weapons, EC-M-33/DEC.1 (27 September 2013), para. 1(c)–(d).

⁵⁰ UN Doc. S/RES/2118, 27 September 2013, para. 10.

Apart from some legal questions arising from EC-M-33/DEC.1,⁵¹ there are several special features foreseen with regard to the Syrian case. Firstly, Resolution 2118 of the UN Security Council and EC-M-33/DEC.1 establish the possibility of transfer of bulk agents from Syria to other countries for destruction.⁵² Secondly, these legal instruments foresee a relatively short time line for the completion of destruction. Thirdly, among others, the question of responsibility arises as:

upon removal of declared chemical weapons from its territory, the Syrian Arab Republic no longer has possession, nor jurisdiction, nor control over these chemical weapons.⁵³

However, as no country agreed to host the destruction of CWs coming from Syria—among others due to environmental concerns—the option of destruction of CWs at sea became the only solution.⁵⁴ Finally, the destruction process—chemical hydrolysis—was, among others, realized by a US freighter in the Mediterranean Sea,⁵⁵ which eventually brought the neutralized sulphur mustard effluent to Germany for disposal operations.⁵⁶ Moreover, many countries, among them Russia, Finland, Denmark, and Norway, were involved in the maritime transport of chemical agents, bringing them to the US freighter.

Against this background, especially the normative framework of the 1982 UN Convention on the Law of the Sea, the 1972 Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter⁵⁷ as well as of regional international environmental agreements, such as the 1976 Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution,⁵⁸ became highly relevant in practice for the first time in the history of the CWC.

In one of its reports issued in 2017 the OPCW Technical Secretariat again confirms the destruction of twenty-four of twenty-seven chemical weapons production facilities declared by Syria as well as all of the chemicals that were removed from its territory in 2014.⁵⁹ However, the OPCW Executive Council

[e]xpresses grave concern that the Secretariat . . . is not able to resolve all identified gaps, inconsistencies and discrepancies in the declaration of the Syrian Arab Republic, and

⁵¹ See Walter Krutzsch, Eric Myjer, and Ralf Trapp, 'Issues Raised by the Accession of Syria to the Chemical Weapons Convention' in Krutzsch, Myjer, and Trapp (n 2) 689–701, at 695.

⁵² *ibid.* 699.

⁵³ OPCW EC, Decision: Detailed Requirements for the Destruction of Syrian Chemical Weapons and Syrian Chemical Weapons Production Facilities, EC-M-34/DEC.1, 15 November 2013, para. 5.

⁵⁴ Trapp (n 48) 20.

⁵⁵ See OPCW, 'United States offers to destroy Syria's Priority Chemicals, OPCW receives expressions of interest from 35 private companies to destroy other Syrian chemicals', 30 November 2013, at <<https://www.opcw.org/news/article/united-states-offers-to-destroy-syrias-priority-chemicals/>> accessed 14 June 2017.

⁵⁶ See Paul F. Walker, 'Syrian Chemical Weapons Destruction: Taking Stock and Looking Ahead' (2014), at <https://www.armscontrol.org/ACT/2014_12/Features/Syrian-Chemical-Weapons-Destruction-Taking-Stock-And-Looking-Ahead#note7> accessed 14 June 2017. See also Christoph Beinlich and Benjamin Jüdes, 'Germany's Role in the Destruction of Syrian Chemical Weapons' in Andreas von Arnould, Kerstin Odendahl, and Nele Matz-Lück (eds.), *German Yearbook of International Law* Vol. 57 (Dunker and Humblot, 2014), 597–611.

⁵⁷ 11 ILM 1294 (1972). ⁵⁸ 15 ILM 290 (1976).

⁵⁹ OPCW, EC-84/DG.11, 24 January 2017, Note by the Director-General, Progress in the Elimination of the Syrian Chemical Weapons Programme, paras. 6 and 7.

therefore cannot fully verify that the Syrian Arab Republic has submitted a declaration that can be considered accurate and complete in accordance with the Convention or Council decision EC-M-33/DEC.1; and *demands* that the Syrian Arab Republic comply fully with its obligations under the Convention, Council decision EC-M-33/DEC.1, and United Nations Security Council resolution 2118 (2013) ...⁶⁰

Therefore, it decided

that the Secretariat shall, as soon as security conditions permit, conduct inspections in the Syrian Arab Republic at those sites identified by the OPCW-United Nations Joint Investigative Mechanism in its third and fourth reports as involved in the weaponisation, storage, delivery, and use of toxic chemicals as weapons ...⁶¹

In particular, the involvement of non-state actors in the development, acquisition, and use of chemical weapons currently poses a major challenge to the implementation of the CWC as a whole.⁶² Therefore, it does not seem that environmental protection will become one of the most important priorities of the CWC in the near future.

8.5 Lessons Learned

As the Syrian case shows, disarmament becomes more and more a 'complex project',⁶³ among others due to factors such as civil wars making it more difficult to realize chemical weapons destruction in an environmentally sound manner. As such, substantive environmental standards for the disposal of chemical weapons are a crucial aspect in achieving disarmament. However, it is at least equally important to have procedural cooperation and control mechanisms ensuring the implementation of obligations resulting from the CWC in an environmentally sound manner.⁶⁴

It has not been discussed in public how environmental issues would be considered within this process.⁶⁵ The OPCW Director-General assured in a public statement that:

the safety of people and protecting the environment has been one of the foremost considerations in all activities relating to the transportation and destruction of Syria's chemical weapons ... With regard to ... the destruction of two types of chemical agents aboard the Cape Ray, I would like to stress that hydrolysis is a mature technology that has been used for decades, for example within the US chemical destruction programme,

⁶⁰ OPCW, Executive Council, Decision, OPCW-United Nations Joint Investigative Mechanism Reports on Chemical Weapons Use in the Syrian Arab Republic, EC-83/DEC.5, 11 November 2016, para. 6 (emphasis in original).

⁶¹ *ibid.* para. 10.

⁶² *ibid.* paras. 2 and 7: 'Expresses grave concern with the finding of the third report of the OPCW-UN Joint Investigative Mechanism that the so-called "Islamic State of Iraq and the Levant" (ISIL) had been involved in the use of sulfur mustard in Marea, Syrian Arab Republic, on 21 August 2015; ... Expresses grave concern with the continued interest in the development, acquisition, and use of chemical weapons by non-State actors and the potential for this threat to increase over time, and underscores the essential role of the Organisation, with respect to preventing and responding to the threat posed by non-State actors to the object and purpose of the Convention.'

⁶³ Trapp (n 48) 22.

⁶⁴ Beyerlin and Marauhn, 'The Protection of the Environment in the Context of Chemical Weapons Destruction' (n 7) 207.

⁶⁵ Trapp (n 48) 22.

with no incidents of harm to people or the environment. While this technology has never before been used onboard a ship, the US authorities have undertaken rigorous trials of the Field Deployable Hydrolysis System ('FDHS') since it was installed aboard the ship and have implemented numerous safety and containment measures ... [A]ll destruction operations are conducted in accordance with US national regulations relating to the protection of people and the environment ...⁶⁶

However, it is doubtful whether it is satisfactory that such an international and complex project is 'only' conducted in accordance with US national regulations. The review process should at least also involve the legal services of the OPCW and the United Nations.⁶⁷

⁶⁶ OPCW, Director-General, L/ODG/192695/14, The Hague, 29 July 2014, at <https://www.opcw.org/fileadmin/OPCW/ODG/uzumcu/DG_Letter_Pancretan_Commission.pdf> accessed 14 June 2017.

⁶⁷ Trapp (n 48) 22.

Legal Protection of the Environment

The Double Challenge of Non-International Armed Conflict and Post-Conflict Peacebuilding

*Dieter Fleck**

9.1 Introduction

The protection international law provides against environmental damage in relation to armed conflict is less than perfect. A comprehensive regulation is not available. Applicable principles and rules are to be searched in different branches of international law. Their contents and consequences are often less than clear. Warring parties have taken advantage of such deficiencies. Military planners and operators notoriously tend to marginalize environmental obligations during military operations. Multilateral environmental agreements that have been concluded in peacetime are often neglected in the conduct of hostilities. Parties to an armed conflict may even find certain justification for such conduct in the principles and rules of international humanitarian law, a body of law that on the one hand requires no more (and no less) than ‘due regard’ to the protection and preservation of the natural environment, in that:

[m]ethods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions¹

and on the other provides but few specific treaty obligations of doubtful relevance: in international armed conflicts significant rules are limited to a prohibition of ‘environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury’² and ‘widespread, long-term and severe damage’ to the natural environment,³ that is damage of an extreme kind and scale that have

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¹ Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law*, 3 Vols (Cambridge: Cambridge University Press, 2005)—CIHL—Rule 44.

² Art. I(1) of the 1976 Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques (ENMOD), 1108 UNTS 151.

³ Arts. 35(3), 55(1) of the 1977 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (AP I), 1125 UNTS 3.

not occurred so far and may hardly be expected in the conduct of hostilities, unless weapons of mass destruction would be used. As far as the protection of the natural environment in non-international armed conflict is concerned, international humanitarian law is even less precise. The aforementioned Rule 44 of the Study on *Customary International Humanitarian Law* ('CIHL') applies, according to its authors, 'arguably' also during non-international armed conflicts. Yet there is but little relevant practice in non-international armed conflicts and the question whether *opinio juris* may bridge this vacuum to develop customary law nevertheless, still deserves some discussion.

The present situation has the potential to obscure existing environmental obligations and to deny clear legal guidance on this matter. Such guidance is, however, necessary for policy-makers and military operators alike. Lack of convincing assessment and uncertainty about the contents of existing rules may increase unnecessary suffering of civilian populations in war-torn territories, disrupt important ecosystems, and even prevent effective peacebuilding in post-conflict situations.⁴

The current International Law Commission ('ILC') project on the Protection of the Environment in Relation to Armed Conflicts⁵ undertakes to develop proposals on legal protections against environmental effects both *in bello* and *post bellum*.⁶ Taking a 'phased' approach by considering preparation and prevention measures (phase I), obligations relating to the protection of the environment during an armed conflict (phase II), and finally reparation and reconstruction measures (phase III), the project promises an in-depth evaluation of principles and rules deriving from several relevant branches of international law, most particularly environmental law, international humanitarian law, and human rights law. The Second Report explains existing rules of the law applicable during both international and non-international armed conflict that are directly relevant to the protection of the environment. The Third Report is focusing on post-conflict measures, including cooperation, sharing of information, best practices, and reparation. The ILC has started with identifying relevant principles and rules deriving from treaties and evolving custom.⁷ As the Special Rapporteur has noted in the Third Report, some matters such as environmental protection during the different phases of occupation, the role of non-state actors, and the responsibility of organized armed groups deserve further elaboration. Consultation and contact with states and the UN, the United Nations Environment Programme ('UNEP'), the United Nations Educational, Scientific and Cultural Organization ('UNESCO'), the International Committee of the Red Cross ('ICRC'), and relevant non-governmental organizations remains essential to reaffirm and further develop existing rules.

⁴ See the 2011 Report of the International Law Commission, Annex E, UN-Doc A/66/10, 347.

⁵ See International Law Commission, Reports by Marie G. Jacobsson, Special Rapporteur, Preliminary Report, UN Doc. A/CN.4/674, 30 May 2014 and Corr. 1; Second Report, UN Doc. A/CN.4/685, 28 May 2015; Third Report, UN Doc. A/CN.4/700, 3 June 2016.

⁶ See Michael Bothe, 'The ILC's Special Rapporteur's Preliminary Report on the Protection of the Environment in Relation to Armed Conflict: An Important Step in the Right Direction', in Pia Acconci *et al.* (eds.), *International Law and the Protection of Humanity* (Leyden: Brill/Nijhoff, 2016).

⁷ Text of the draft principles provisionally adopted in 2015 and technically revised and renumbered during the present session by the Drafting Committee, UN Doc. A/CN.4/L.870 Rev. 1 (26 July 2016); Text of the draft principles provisionally adopted during the present session by the Drafting Committee, UN Doc. A/CN.4/L. 876, 3 August 2016.

This chapter examines the legal basis on which environmental protections can be deemed to apply to non-international armed conflicts and what specific obligations may be entailed in post-conflict peacebuilding. In an effort to evaluate pertinent obligations in the conduct of hostilities (Section 9.2), several questions will be addressed that appear to have been widely neglected so far, including the following: would a specific international regulation constitute an unjustified intrusion on state sovereignty? Can rebel groups fighting governments realistically be expected to adhere to environmental obligations? Does individual criminal responsibility attach to breaches of relevant prohibitions? In what sense are parties to the conflict accountable for environmental devastation? May states be liable also for injurious consequences of acts not explicitly prohibited by international law? Furthermore, issues of post-conflict peacebuilding will be discussed, to explore which principles and provisions are accepted or should be developed here, thus addressing important aspects of *jus post bellum* (Section 9.3). Although many issues of the protection of the environment in relation to armed conflicts are still uncertain, an attempt to draw some conclusions appears necessary and possible (Section 9.4).

9.2 Environmental Obligations in Non-International Armed Conflict

It is typical for the *jus in bello* that rules on the protection of the environment in times of war have first been developed for international armed conflicts, whereas a state's military operations against insurgents was for a long time considered as that state's internal affair in which only rules of domestic law would apply. When after the Second World War international legal obligations of a state towards its own citizens in armed conflict were formally recognized with Article 3 common to the 1949 Geneva Conventions, there was still little idea that there should also exist international legal obligations to ensure the protection of the natural environment in non-international armed conflicts, despite the fact that significant examples of ecological devastation in such conflicts were known already at that time and the high probability of cross-border effects of such devastation which have become more evident in the following years, was clearly foreseeable by experts.

The use of chemical defoliants in the Vietnam War and a progressively developing environmental awareness in the 1970s have led to the first relevant treaty prohibitions with the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques ('ENMOD') and Articles 35(3) and 55(1) AP I. Yet both treaties are applicable in international armed conflicts only and their specific prohibitions are limited to environmental damage far above the scope of what had happened in any armed conflict so far. It remains, indeed, still subject to proof, whether the new treaty provisions exclude otherwise available options for military operations or—by prohibiting what is less than realistic anyway—may only lend themselves to disregard ecological devastation below the level so described. The latter reaction would not only neglect important principles of discipline and efficiency in the conduct of military operations, but also misinterpret relevant principles and rules of international humanitarian law: any attempt to argue that ecological damage below the level of 'widespread,

long-term and severe' devastation may be unlimited in armed conflicts is, indeed, excluded under the principle that the natural environment as such is to be recognized as a civilian object. It would also disregard the principle of proportionality and the rule that precautions in attack shall be taken. But the present state of law is less than explicit. Clear conclusions for military behaviour are yet to be drawn. Unequivocal commitments to specifically ensure protections against environmental damage in the conduct of armed hostilities are required and in non-international armed conflicts this task is particularly pertinent.⁸ Legal efforts to improve the present situation have not led to significant success so far.

It is impressive to see *opinio juris* developing nevertheless, showing states ready to confirm the protection of the natural environment in any armed conflict as a civilian object, and to describe the legal conditions for and consequences of using the environment as a military objective. General rules of international humanitarian law including those on the protection of enemy property from wanton destruction, the prohibition of excessive damage in the conduct of hostilities, the prohibition of pillage, the protection of civilian objects, and the rules regulating the use of weapons may, indeed, be more important and more effective for the protection of the natural environment than the specific rules of ENMOD and Articles 35(3) and 55(1) AP I mentioned above.⁹ It is important to note that those general rules apply in international and non-international armed conflicts alike. Moreover, there may be a better understanding today for peacetime protections of the natural environment under other international treaties and their continuing relevance in times of armed conflict,¹⁰ a factor that may further contribute to diminish differences in the rules pertaining to the conduct of hostilities in international and non-international armed conflict.

There is a long history of environmental damage in times of war. The Scythians scorched the earth to slow the advancing Persians. The Romans salted the land around Carthage to make it infertile. But such examples cannot lead to the acceptance of similar conduct today, in a world that has become more densely populated, more vulnerable, and much smaller in the sense that accepted principles and rules progressively spread around the globe. The destruction of oil wells in Kuwait during the Gulf War of 1990–1, excessive environmental damage in the Democratic Republic of the Congo between 2000 and 2011, the release of hazardous substances in industrial sites as a result of attacks against Hezbollah in Lebanon 2006, and ecological devastations in a great many other non-international armed conflicts have, indeed, alerted public opinion at global scale. Yet many armed opposition groups are fighting to secure (and

⁸ Sandesh Sivakumaran, *The Law of Non-International Armed Conflict* (Oxford: Oxford University Press, 2012), 528, refers to a 2006 commitment of the Lord's Resistance Army ('LRA') in the Democratic Republic of the Congo to protect certain endangered species located in Garamba National Park, adding that in subsequent years the LRA continued to launch attacks inside the Park and has killed park rangers.

⁹ For a recent comprehensive evaluation of pertinent rules of current international law see Jean-Marie Henckaerts and Dana Constantin, 'Protection of the Natural Environment' in Andrew Clapham and Paola Gaeta, *The Oxford Handbook of International Law in Armed Conflict* (Oxford: Oxford University Press, 2014), 469–91.

¹⁰ See 2011 Report of the International Law Commission, chap. VI, sect. E, Draft Articles on Effects of Armed Conflicts on Treaties, UN-Doc. A/66/10, 171–96.

denying the state to exercise) control on natural resources, such as oil, diamonds, gold, logging timber, and wildlife animals. It is difficult to ensure respect for legal limitations where the exploitation of natural resources, even resources necessary for the survival of civilians, is used for war funding, thus misusing natural resources as sources of war and drivers of war.

Too many warring parties today hazard the consequences of large-scale devastations despite the fact that in long-term perspective such conduct may jeopardize their own interests. While this may explain the difficulties for progressive legal developments, international rules for internal armed conflicts have been successfully invoked nevertheless. After long and difficult negotiations on the contents of the Second Additional Protocol to the Geneva Conventions,¹¹ attacks on objects indispensable to the survival of the civilian population¹² and pillage¹³ were prohibited for non-international armed conflicts of a higher threshold.¹⁴ Predatory exploitation of natural resources has been condemned in UN reports and used as inducement for Security Council sanctions irrespective of whether or not it falls under existing treaty prohibitions of the *jus in bello*.¹⁵

9.2.1 Due regard for the natural environment in armed conflict

A more systematic elaboration on the extent of customary rules on the protection of the natural environment and their applicability in non-international armed conflict may be based on the principle that in any armed conflict the right of the parties to choose methods or means of warfare is not unlimited (see Art. 35(1) AP I) and that such methods and means must be employed with due regard to the protection and preservation of the natural environment (Rule 44 CIHL). As argued in the Study on CIHL, the latter obligation may apply also in non-international armed conflicts, if there are effects in another state.¹⁶ Such effects are, indeed, notorious for environmental destruction, as pollution of air or water may hardly be limited to a state's national territory. The Study goes even further in suggesting that the customary rule may also apply to parties' behaviour within the state where the armed conflict takes place.¹⁷ While the applicability of this rule as a legal obligation in non-international armed conflicts has been

¹¹ 1977 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (AP II), 1125 UNTS 609.

¹² Art. 14 AP II. ¹³ Art. 4(2)(g) AP II.

¹⁴ The threshold for application of that Protocol is considerably higher than what was more liberally circumscribed as 'armed conflict not of an international character' in Art. 3 common to the Geneva Conventions. It requires an armed conflict between regular armed forces of a state and organized armed groups under responsible command, exercising territorial control and carrying out sustained and concerted military operations (see Art. 1(1) AP II). The Protocol does not even apply to armed conflicts between different groups of non-state actors, which have become quite common today.

¹⁵ See Daniëlla Dam-de Jong, 'From Engines for Conflict into Engines for Sustainable Development: The Predatory Exploitation of Natural Resources in Situations of Internal Armed Conflict' (2013) 82(1) *Nordic Journal of International Law* 155–77, reprinted in Rosemary Rayfuse (ed.), *War and the Environment: New Approaches to Protecting the Environment in Relation to Armed Conflict* (Leiden/Boston: Brill/Nijhoff, 2014), 205–27.

¹⁶ Henckaerts and Doswald-Beck (n 1) Vol. I, 148–9.

¹⁷ *ibid.* 149.

disputed still recently,¹⁸ and relevant state practice shows but slow developments,¹⁹ a discussion of the underlying legal principle may help to clarify the situation.

It should be noted that the 'due regard' formula that forms a central part of Rule 44 CIHL is also used in other branches of international law for situations in which a more specific legal obligation does not (yet) exist. An obligation to show 'due regard' appears in the 1982 United Nations Law of the Sea Convention ('UNCLOS')²⁰ in a few instances which are, however, not typical for that convention's rules on the protection of the marine environment. Before these shall be examined here for better understanding, it may be recalled that while the main objective of UNCLOS is regulating peacetime cooperation, the convention is of considerable relevance also for the law of naval warfare and maritime neutrality, due to the fact that the conduct of naval operations in peacetime has an impact on wartime naval operations as well.²¹ While the provisions of the convention regarding protection and preservation of the marine environment do not apply to warships and state aircraft, 'each State shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such vessels or aircraft' that such vessels or aircraft 'act in a manner consistent, so far as is reasonable and practicable', with the convention (Art. 236 UNCLOS). These saving clauses notwithstanding, the convention generally requires a distinct behaviour in respect of the natural environment even for warships, mitigated only by the clauses 'not impairing operations or operational capabilities' and 'so far as is reasonable and practicable', whereas the 'due regard' formula, wherever it applies, requires only *to consider* certain aspects or interests, without, however, prescribing a specific action to take. The general standard used in UNCLOS for obligations concerning the protection and conservation of the marine environment in peacetime is rather straightforward. It requires, for example, that:

States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention (Art. 194(2) UNCLOS)

and that states take measures 'to minimize to the fullest possible extent' any release of toxic, harmful, or noxious substances and any pollution (Art. 194(3) UNCLOS). This clearly requires more than what is expressed by the 'due regard' formula: it establishes an obligation to take appropriate measures, not only to just consider navigational rights

¹⁸ See Karen Hulme, 'Natural Environment' in Elisabeth Wilmschurst and Susan Breau (eds.), *Perspectives on the ICRC Study on Customary International Humanitarian Law* (Cambridge: Cambridge University Press, 2007), 204–37, 232; Karen Hulme, 'Taking Care to Protect the Environment Against Damages: A Meaningless Obligation?' (2010) 92 *International Review of the Red Cross* 675, 686, 691.

¹⁹ See Practice Relating to Rule 44. Due Regard for the Natural Environment in Military Operations, at <https://www.icrc.org/customary-ihl/eng/docs/v2_rul_rule44> accessed 9 June 2017.

²⁰ 1982 United Nations Convention on the Law of the Sea (UNCLOS), 1833 UNTS 397.

²¹ See Wolff Heintschel von Heinegg, 'The Law of Military Operations at Sea' (chapter 20) and Wolff Heintschel von Heinegg and Martin D. Fink, 'Maritime Interception/Interdiction Operations' in Terry D. Gill and Dieter Fleck (eds.), *The Handbook of the International Law of Military Operations* (Oxford: Oxford University Press, 2nd edn, 2015).

of others and ecological consequences involved while leaving it to planners and operators to balance these measures and consequences against military requirements.

The 'due regard' formula is used in UNCLOS only in a few instances: to confirm that a coastal state in exercising its rights and performing its duties in an exclusive economic zone shall have due regard to the rights and duties of other states (Art. 56(2) UNCLOS); to describe a state's obligations in respect of the removal of abandoned installations (Art. 60(3) UNCLOS); and to regulate the prevention, reduction, and control of marine pollution in ice-covered areas (Art. 234 UNCLOS).

While these are clearly defined exceptional cases, literature and practice have used the 'due regard' formula more broadly to address a general obligation on the protection of the natural environment in armed conflict: the 1994 San Remo Manual on International Law Applicable to Armed Conflicts at Sea was the first international document that introduced this formula for the protection of the natural environment in armed conflict.²² It stipulates that methods and means of warfare should be employed with due regard for the natural environment²³ and that states establishing an exclusion zone or war zone shall give due regard to the rights of neutral states to legitimate uses of the sea.²⁴ More recently the Harvard Manual on the Law of Air and Missile Warfare stated that 'due regard ought to be given to the natural environment' when planning and conducting air or missile operations.²⁵ While the Harvard Manual thus appears to slightly step behind well accepted stricter standards (without offering any explanation for the use 'ought to' instead of 'must' in its Commentary), it also confirms that this rule applies in international and non-international armed conflict likewise.²⁶

As demonstrated by this short overview, the 'due regard' formula in discussions of the protection of the natural environment in armed conflict, first in naval warfare and later in air and missile warfare, was borrowed from UNCLOS where it is used, however, for situations other than operations affecting the natural environment. Nevertheless, Rule 44 of the Study on CIHL applies this formula in all theatres of war, yet without explaining its meaning and without commenting on practical consequences.

The relevant standard of behaviour in the exercise of due regard for the interests of others and for other protection requirements has often been specified as 'due diligence'. The ILC, in its 2001 Articles on the Prevention of Transboundary Harm from Hazardous Activities, has used this latter term to describe appropriate measures to prevent significant transboundary harm in order to exert the best possible efforts to minimize an existing risk, not, however, to guarantee that significant harm will be totally prevented, if it is not possible to do so.²⁷ In an effort to offer a definition of this term in a form as specific as possible, the Commentary states the following:

²² International Institute of Humanitarian Law, *San Remo Manual on International Law Applicable to Armed Conflicts at Sea*, prepared by international lawyers and naval experts convened by the International Institute of Humanitarian Law, edited by Louise Doswald-Beck (Cambridge: Cambridge University Press, 1995).

²³ *ibid.* 119–20. ²⁴ *ibid.* 181–3.

²⁵ *Manual on International Law Applicable to Air and Missile Warfare*, Bern, 2009 (Cambridge, MA: Harvard University, Program on Humanitarian Policy and Conflict Research—HPCR), Rule 89.

²⁶ *ibid.* Rule 89, commentary para. 4.

²⁷ Articles on Prevention of Transboundary Harm from Hazardous Activities with Commentaries, UN Doc. A/56/10, *Yearbook of the International Law Commission*, 2001, Vol. II, Part Two, 148, at <<http://legal>.

What would be considered a reasonable standard of care or due diligence may change with time; what might be considered an appropriate and reasonable procedure, standard or rule at one point in time may not be considered as such at some point in the future. Hence, due diligence in ensuring safety requires a State to keep abreast of technological changes and scientific developments.²⁸

It may also follow from this understanding that during wartime a different degree of obligation will apply than in a situation of normal peace. Yet the 2001 ILC Articles have not offered any specific comment on this question. Fundamental obligations to prevent transboundary harm continue to exist in the event of an armed conflict. These obligations are closely connected with the obligation to take precautions for the protection of the civilian population in the conduct of hostilities. Due diligence, precaution, and prevention are closely linked and difficult to be treated separately. The answer for what is appropriate and reasonable may drastically change as soon as armed hostilities are conducted. As will be discussed below (Section 9.3), also in post-conflict peacebuilding the applicable standards of protection may still be different from normal peacetime situations. This should be taken into consideration when, in rather general terms and without further consideration, due diligence is being referred to as the standard basis for the protection of the environment from harm.²⁹

'Due diligence' standards are not unique to the protection of the natural environment. They are equally relevant for other branches of international law where agreement on stricter rules may not have been reached, but a need was felt to find a balance between rights and obligations of different subjects of international law. Thus an obligation of states to apply due diligence in ensuring cyber security³⁰ and taking preventive measures against malicious cyber activities originating from their territory is being discussed as part of the duty not to harm rights of other states.³¹ This obligation, too, has been developed as a peacetime rule and may be subject to change *in bello* and *post bellum*.

While the question remains open to what extent there is a commonality of understanding in the different areas in which the notion of due diligence is applied, there appears to be consensus that due diligence is of relevance to obligations that require states to have due regard for the interests of others and that due regard/due diligence is an obligation of conduct, not an obligation of result.³² What is at stake here is a

un.org/ilc/texts/instruments/english/commentaries/9_7_2001.pdf> accessed 16 June 2017, Art. 3, commentary paras. 7–11.

²⁸ *ibid.* para. 11.

²⁹ Timo Koivurova, 'Due Diligence' in *Max-Planck Encyclopedia of Public International Law*, at <www.mpepil.com> accessed 14 August 2017, paras. 20–26.

³⁰ Wolff Heintschel von Heinegg, 'Legal Implications of Territorial Sovereignty in Cyberspace' in Christian Czosseck, Rain Ottis, and Katharina Ziolkowski (eds.), *4th International Conference on Cyber Conflict* (Tallinn: NATO CCD COE Publications, 2012), at <https://ccdcoe.org/publications/2012proceedings/CyCon_2012_Proceedings.pdf>, 7–19, 17–18, accessed 14 August 2017.

³¹ See Katharina Ziolkowski (ed.), *Peacetime Regime for State Activities in Cyberspace. International Law, International Relations and Diplomacy* (Tallinn: NATO CCD COE Publication, Tallinn 2013), xvi, 165–71, 186.

³² See ILA Study Group on Due Diligence in International Law, at <https://olympereaseauinternational.files.wordpress.com/2015/07/due_diligence_-_first_report_2014.pdf> accessed 9 June 2014, First Report (Washington Conference, 2014), 5, 30; Second (Final) Report (Johannesburg Conference, 2016), 2, 46–7.

primary rule of conduct, rather than a secondary rule of state responsibility. The notion so described remains very general in its contents, and its application is subject to various considerations. Yet it provides an objective standard of behaviour, taking into account the technical, economical, and financial capacities available at the time. While that standard may change according to the particular context, developments over time and in relation to the risks involved, an objective assessment of responsibilities, considering all relevant circumstances of the specific case, is required here.

Based on this understanding of the ‘due regard/due diligence’ standard, the contents of Rule 44 CIHL and its applicability in non-international armed conflicts becomes clearer. It describes an obligation of parties to an armed conflict to show concern for environmental effects of their military operations, and to minimize such effects not only in view of transboundary damage, but also within the territory of operations. This includes the special consideration expressed in the last sentence of Rule 44, which may be read together with the preceding sentence as follows:

Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking [feasible] precautions [to avoid, and in any event to minimize, incidental damage to the environment].³³

While some doubts have been expressed in this respect, based on the argument that a party cannot be expected to exercise due regard based on information other than that available at the time,³⁴ it should be considered that lack of certainty is nothing one may neglect in planning and performing military operations, even less so when it is feasible to take appropriate precautions in the conduct of military operations.

9.2.2 Customary obligations in non-international armed conflict

Standard-setting projects have underlined the importance of, and also realistic possibilities for, environmental protection projects during armed conflicts, both international and non-international.³⁵ During the last decades consensus among decision-makers on the importance of ecological considerations for military operations has progressively developed. UNEP has conducted a comprehensive review of the environmental effects of armed conflicts,³⁶ thus helping to build a systematic and reliable base of knowledge that may be used for policy-making and military planning and has broadened

³³ See above, accompanying text to n 1.

³⁴ William H. Boothby, *Weapons and the Law of Armed Conflict* (Oxford: Oxford University Press, 2009) 101.

³⁵ See, for example, Britta Sjöstedt, ‘The Role of Multilateral Environmental Agreements in Armed Conflict: “Green-keeping” in Virunga National Park. Applying the UNESCO World Heritage Convention in the Armed Conflict of the Democratic Republic of the Congo’ (2013) 82(1) *Nordic Journal of International Law* 129–53, reprinted in Rosemary Rayfuse (ed.), *War and the Environment. New Approaches to Protecting the Environment in Relation to Armed Conflict* (Leiden/Boston: Brill/Nijhoff, 2014), 179–204; see also Britta Sjöstedt, *Protecting the Environment in Relation to Armed Conflict—The Role of Multilateral Environmental Agreements* (Lund: Lund University, 2016).

³⁶ UNEP, *Protecting the Environment During Armed Conflict. An Inventory and Analysis of International Law* (UNEP, 2009).

acceptance of pertinent international obligations.³⁷ The development of new rules of the *jus in bello* has often started with experience in internal wars, as can be demonstrated by the Lieber Code³⁸ and the Prohibition of Dum-Dum Bullets.³⁹ A specific case in point is the prohibition of landmines through the 1997 Ottawa Convention,⁴⁰ which according to its Article 1(1) applies likewise in international and non-international armed conflicts and is, at least in part, a result of concerns about the effect of landmines on the natural environment.⁴¹ But while it is clearer today than in former decades that states do have international obligations *vis-à-vis* their own citizens, it remains a complex question, whether—and if so *how*—armed opposition fighters are in fact bound to apply principles and rules of international law.⁴² An affirmative answer to this question may be given, following the concept of legislative jurisdiction: states have to transform international law into domestic law, as binding for the state, not just the present government.⁴³ They may also accept self-executing provisions of international humanitarian law as binding for all citizens, including armed opposition groups. Yet clear and reliable commitments of warring parties and special agreements, as foreseen under Article 3(3) common to the Geneva Conventions, remain of particular relevance in this context.

State practice and practice of armed opposition groups is a continuing matter of concern for any discussion on the protection of the environment in relation to armed conflicts. Practice is important, not only to confirm the existence of a rule as part of customary international law, but also to ensure compliance with and respect for existing rules. Yet it may be accepted that in international humanitarian law *opinio juris* deserves certain prominence, thus even shadowing state practice in its role for establishing a principle or rule of customary law. In international humanitarian law, distinct from other legal branches, the formation of a customary norm appears to be possible ‘even when there is no widespread and consistent State practice, or even no practice at all’. The late Antonio Cassese, developing this argument in due consideration of the impact of the laws of humanity and dictates of public conscience,⁴⁴ convincingly

³⁷ See also Michael Bothe, Carl Bruch, Jordan Diamond, and David Jensen, ‘International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities’ (2010) 92 *International Review of the Red Cross* 569–92; Michael Bothe, ‘The Ethics, Principles and Objectives of Protection of the Environment in Times of Armed Conflict’ in Rayfuse (n 35) 91–108.

³⁸ Instructions for the Government of Armies of the United States in the Field, prepared by Francis Lieber, promulgated as General Orders No. 100 by President Lincoln (24 April 1863).

³⁹ Declaration (IV, 3) concerning Expanding Bullets, signed at The Hague, 29 July 1899, 1 *AJIL Supplement* (1907) 155–7.

⁴⁰ Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (Ottawa Convention) 18 September 1997, 2056 *UNTS* 211.

⁴¹ Sivakumaran (n 8) 527, making this argument, also refers to an ad hoc Declaration of 21 March 2000 against the use and production of landmines in the Philippines. It should not be overlooked, however, that in a post-conflict setting remnants of war may also protect the environment, as mined areas are no longer open for exploitation and further pollution.

⁴² See Dieter Fleck (ed.), *The Handbook of International Humanitarian Law* (Oxford: Oxford University Press, 3rd edn, 2013), Section 1201, commentary, para. 5.

⁴³ See, for example, Roger O’Keefe, ‘Universal Jurisdiction. Clarifying the Basic Concept’ (2004) *Journal of International Criminal Justice* 735–60, 736, 756.

⁴⁴ Antonio Cassese, *International Law* (Oxford: Oxford University Press, 2nd edn, 2005), 160–1; see also Antonio Cassese, ‘The Martens Clause: Half a Loaf or Simply Pie in the Sky?’ (2000) 11 *European Journal*

referred to the Martens Clause as a cornerstone of international humanitarian law, which was coined at the 1899 Hague Peace Conference and confirmed in Article 1(2) AP I and in the Preamble (para. 4) of AP II. Similarly, in critical reviews of the Study on CIHL, the dominating question remained whether and to what extent *opinio juris* could be established, rather than trying to match with the seminal work undertaken by the ICRC to collect and evaluate relevant practice.⁴⁵ That many rules on means and methods of fighting and protection are likewise applicable in international and non-international armed conflicts is common coinage today.⁴⁶ It clearly derives from *opinio juris* rather than practice. Deviating from practice is normally (and rightly so) taken as an example of breaches, but not as relevant for limiting or denying the existence of a customary rule of international humanitarian law.

9.2.3 National sovereignty and its limits

The existing law on the protection of the natural environment during armed conflict is a convincing example for the often-discussed limits to national sovereignty that do apply today. It forms an essential part for human security in a world characterized by global challenges. The rule of law, respect for the rights of others, and accountability of states and individuals for non-compliance with the law deserve particular attention when discussing state sovereignty and non-interference in the domestic affairs of other states. Ecological dangers are border-crossing by nature. They convincingly call for international commitments and acceptance of clear obligations under international law. This may well lead to the removal of old thinking, to a progressively developing *opinio juris*, and eventually to the adoption of relevant rules even for non-international armed conflict.

9.2.4 Criminal responsibility

Does individual criminal responsibility attach to breaches of pertinent prohibitions of international and/or national law in armed conflict? While an affirmative answer will be necessary to prosecute such breaches, the exercise of jurisdiction may face problems that are not to be solved easily. National jurisdiction is one of states and it is only in exceptional cases that armed opposition groups themselves could exercise disciplinary or criminal justice in an effective manner. There will be difficulties for all warring parties to ensure prosecution of crimes during the armed conflict. International jurisdiction on ecological crimes in non-international armed conflicts is factually non-existent today: the 1998 Rome Statute⁴⁷ addresses serious violations of the laws and customs applicable in armed conflicts not of an international character (Art. 8(2), lit.

International Law 187, reprinted in Antonio Cassese, *The Human Dimension of International Law, Selected Papers* (Oxford: Oxford University Press, 2008), 39–69.

⁴⁵ See, for example, Elizabeth Wilmshurst and Susan Breau (eds.), *Perspectives on the ICRC Study on Customary International Humanitarian Law* (Cambridge: Cambridge University Press, 2007).

⁴⁶ See Fleck (n 42) Section 1212.

⁴⁷ Rome Statute of the International Criminal Court (ICC Statute), 17 July 1998, 2187 UNTS 3.

c and e ICC Statute), which protect civilians and other persons *hors de combat*, but the Statute does not mention the natural environment. Pillaging a town or place is listed here as a war crime also in non-international armed conflicts (Art. 8(2), lit. e (v) ICC Statute), whereas pillaging natural resources is not, despite the fact that no such limitation applies under Art. 4(2)(g) AP II.

9.2.5 Reparation for environmental damage

State responsibility requires reparation for victims of armed conflict,⁴⁸ which may take the form of restitution, compensation, and satisfaction (Art. 34 ARSIWA⁴⁹). While it is difficult to implement this principle under wartime situations, victimized states and individuals do have a right to demand reparation and to pursue this right post-conflict. There should be no doubt that the right for reparation includes losses and damage caused by breaches of environmental obligations *in bello*. Is this right limited to wrongful acts or may states (including states represented by former rebel groups) be held liable also for injurious consequences of acts *not* prohibited by international law? The 2006 ILC Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities⁵⁰ underline that there must be ‘prompt, adequate and effective remedies’ in the event of transboundary damage caused by hazardous activities (Principles 4 and 6), which may have occurred despite compliance by the relevant state with its obligations concerning prevention of such damage. But the commentary explains that:

liability is excepted if, despite taking all appropriate measures, the damage was the result of (a) an act of armed conflict, hostilities, civil war or insurrection; or (b) the result of a natural phenomenon of exceptional, inevitable, unforeseeable and irresistible character; or (c) wholly the result of compliance with a compulsory measure of a public authority in the State of injury; or (d) wholly result of a wrongful intentional conduct of a third party.⁵¹

To prove this argument, the Rapporteur Dr. P.S. Rao referred to exceptions under relevant treaty law on liability for nuclear damage and the EU Directive 2004/35 on environmental liability,⁵² examples which may not be fully convincing, as these conventions are limited to nuclear damage and the EU Directive applies between EU Member States

⁴⁸ Art. 3 Hague Convention (IV) Respecting the Laws and Customs of War on Land (18 October 1907) 2 AJIL Supplement 90–117 (1908); Art. 91 AP I. See International Law Association, Declaration of International Law Principles on Reparation for Victims of Armed Conflict (Substantive Issues), adopted at the seventy-fourth ILA Conference (The Hague, 2010), and Procedural Principles for Reparation Mechanisms, adopted at the seventy-sixth ILA Conference (Washington DC, 2014).

⁴⁹ Articles on Responsibility of States for Internationally Wrongful Acts—ARSIWA—(ILC, 2001).

⁵⁰ 2006 Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, with commentaries, UN Doc. A/61/10, *Yearbook of the International Law Commission*, 2006, Vol. II, Part Two, at <http://legal.un.org/ilc/texts/instruments/english/commentaries/9_10_2006.pdf> accessed 14 August 2017.

⁵¹ *ibid.* 161 and 434, para. 2.

⁵² 1997 Protocol to amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage, reproduced in INFIRC/566, Art. IV (3); 1963 Vienna Convention on Civil Liability for Nuclear Damage, reproduced in INFIRC/500 with Add. 1-5, Art. IV (3); 2004 Protocol to amend the 1960 Convention on Third Party Liability in the Field of Nuclear Energy, at <http://www.oecd-nea.org/law/brussels_supplementary_

only. Such conditions will hardly exist in any non-international armed conflict. Hence a clarification would be useful to make that understanding more acceptable, or further adapt the 2006 Principles to existing principles of state responsibility as necessary.

Reparation issues deserve more attention today in the *jus in bello*, even if it will be difficult to adopt appropriate general principles and procedures prior to the end of hostilities and even considering that during the conduct of hostilities there are notorious implementation problems for all parties to the conflict. Effective measures for avoidance, limitation, and reparation of environmental damage are of key importance in this context. No exception for environmental devastation caused in non-international armed conflicts could convincingly be construed here. A clear commitment to a responsible settlement will be essential for post-conflict peacebuilding. Hence a well commented set of rules on the subject appears necessary to enhance international awareness for the protection of the environment in relation to armed conflicts as a means to accept and ensure good governance.

9.3 Environmental Obligations Post-Conflict

While a systematic interdisciplinary assessment of the impact of environmental reconstruction and a dialogue with policy-makers are still in a fairly early stage,⁵³ it should be clear that cooperation for the use of shared natural resources may help to prevent armed conflicts and support peacebuilding. To provide meaningful advice to political and military decision-makers and support them in efforts to move towards ‘environmental peacebuilding’, an integrated approach by environmentalists, peace researchers, and international lawyers is required. Scientific and social factors need to be explored in a case-specific manner and forms and processes for transboundary environmental cooperation need to be regulated in a spirit of showing advantages to participants rather than providing one-sided restrictions.

9.3.1 Environmental projects and peacebuilding

UNEP, working to further develop UN capacities for early warning and early action in countries that are vulnerable to conflicts over national resources and ecological exploitation, has issued policy recommendations to integrate pertinent measures in peacebuilding processes.⁵⁴ The aim is to identify problem areas and support opportunities for environmental cooperation to complement and reinforce peacebuilding activities.

More efforts at larger scale will be necessary to make environmental peacebuilding projects more effective. Very practical tasks need to be performed and further developed to achieve certain complementarity between humanitarian assistance and

convention.pdf> accessed 14 August 2017, Art. 9; 1997 Convention on Supplementary Compensation for Nuclear Damage Convention, reproduced in INFCIRC/567, Annex Art. 3(5); EU Directive 2004/35 on environmental liability, Art. 4(1) and (6).

⁵³ See Alexander Carius, ‘Environmental Peacebuilding: Conditions for Success’ (2006) Environmental Change and Security Report No 12, 59–75.

⁵⁴ UNEP, *From Conflict to Peacebuilding. The Role of Natural Resources and the Environment* (UNEP, 2009).

development activities and ensure continuity of these efforts for a sustainable post-conflict peacebuilding. Typical examples, which will be essential to overcome insecurity and ensure post-conflict recovery, may be found in the fields of water management and agriculture.⁵⁵ Other tasks should follow suit: environmental and health monitoring will be necessary to ensure acceptable living conditions. Professional services should be provided over a longer period to ensure the removal of unexploded ammunition and toxic remnants of war. Reconstruction of infrastructure will be essential for economic recovery. None of these measures is without direct impact on the protection of the natural environment. Hence it is safe to conclude that to ensure peacebuilding and economic recovery, nature conservation may not be neglected.

A few legal principles and rules for post-conflict peacebuilding may be identified according to timeframes and geographical reach of particular challenges that are to be faced. As prioritization is essential for meeting the many post-conflict tasks, a certain freedom of approach must be accepted. Concentration on a few commitments will be necessary to ensure effective results step by step and engage state and non-state actors for participation. Hence pragmatic limitation, conciliation, and participation—principles this author has advocated for a discussion of the *jus post bellum* in general⁵⁶—may be of particular value for an effective environmental restoration post-conflict. Furthermore, transboundary effects of environmental damage must be considered, but it is to be accepted that a ‘polluter pays’ principle will not fully work post-conflict. Hence the implementation of multilateral environmental agreements may not be possible without exceptions post-conflict. For the sake of clarity and effectiveness relevant provisions ought to be revised or suspended in this respect. Neighbouring states are inevitably bound to participate in protection and restoration activities, but their engagement may not suffice to face the challenge, so that the international community at large will be called for, even if the damage as such would remain limited to regional scale.

9.3.2 Special reparation principles post-conflict

For post-conflict peacebuilding to be effective, full-scale efforts of the international community are required within a short time-frame, to be followed by long-term activities under different (i.e. peacetime) conditions thereafter. First activities may not provide a full remedy for a burden that under normal peacetime conditions would require sustainable efforts over a longer period. Enormous starting endeavours will be necessary, well exceeding existing legal obligations. Yet in a longer perspective meeting such challenge may be more effective and also more economic than any more cautious approach. It is in that sense that it will be necessary to prioritize peacebuilding

⁵⁵ See Emmy Simmons, ‘Harvesting Peace: Food Security, Conflict, and Cooperation’ *Environmental Change and Security Program Report*, Vol. 14 Issue 3 (Washington, DC: Woodrow Wilson International Center for Scholars, 2013).

⁵⁶ Dieter Fleck, ‘*Jus Post Bellum* as a Partly Independent Legal Framework’ in Carsten Stahn, Jennifer S. Easterday, and Jens Jensen (eds.), *Jus Post Bellum. Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 43–57, 56–7.

over retribution⁵⁷ and implement environmental restoration in an effort to serve wider interests.

The 2001 Articles on the Prevention of Transboundary Harm from Hazardous Activities⁵⁸ may pose specific, albeit different challenges for sending states of peace operations and for their host states. Highly developed states with prospering economies will be in a different position than other states to discern, and effectively avoid, a potential disruption of ecological systems. Their military contingents operating in the host state should use environmental standards they have to comply with at home, unless there are convincing reasons to authorize an exemption. The role of peacekeeping contingents from developing countries may be different, but the UN or the regional organization involved may, and should, offer advice and support for meeting appropriate environmental standards, even if national laws and regulations of the host state are not (yet) available. Foreign armed forces participating in a peace operation should realize that any negligence in meeting those standards would be counterproductive to the task they have to perform. Finally, the host state of a peace operation should receive advice and support from the international community to develop and implement an environmental protection agenda as part of its peacebuilding efforts and adapt its national laws and regulations accordingly.

Liability for ecological disruption is a matter not to be neglected in post-conflict peacebuilding. State responsibility for wartime damage caused to neighbouring states must be honoured in addition to a great many other burdens in the reconstruction phase after an armed conflict. States must ensure civil liability of private contractors. The question whether responsibility is to be accepted in this context also for injurious consequences arising out of acts not prohibited by international law deserves to be addressed as well. It is not altogether theoretical, as even best-practice conduct in the armed conflict may have caused immense harm, not only within the own country, but also in neighbouring states. The Principles adopted in 2006⁵⁹ may be useful to direct international cooperation post-conflict. But they are not directly binding; wartime damage may be formally excluded in their implementation; and full compensation will hardly be possible. It remains important for international and regional organizations involved in post-conflict reconstruction processes to support parties to the former armed conflict in meeting their responsibilities. Together with sending states of peacekeeping contingents such organizations are challenged here to exert their influence and set good examples themselves by fully meeting their own obligations as far as reparation for wrongful acts committed during peace operations are concerned.

⁵⁷ Cymie R. Payne, 'The Norm of Environmental Integrity in Post-Conflict Legal Regimes' in Stahn, Easterday, and Iverson (n 57) 502–18, 518.

⁵⁸ See Articles on Prevention of Transboundary Harm from Hazardous Activities with Commentaries (n 27).

⁵⁹ See 2006 Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising Out of Hazardous Activities, with commentaries (n 50).

9.4 Conclusions

Legal protections of the natural environment in relation to armed conflict derive from different branches of international law and are characterized by the continuing relevance of peacetime obligations during armed conflicts. A few general conclusions may be drawn here:

- (1) While a *lex specialis* role of international humanitarian law is to be recognized in armed conflict, this role is limited in practice as far as the protection and preservation of the natural environment is concerned. This is due to the absence of meaningful specific treaty provisions on the subject. ENMOD and Articles 35(3) and 55(1) AP I are of extremely limited impact on modern armed conflicts and they do not affect other obligations relevant for the protection of the natural environment in the conduct of hostilities.
- (2) Treaty and customary rules on the protection of civilian objects in armed conflict fully apply to the protection of the natural environment.
- (3) For the development of customary law in international and non-international armed conflict *opinio juris* has certain prominence, thus even shadowing state practice in its role for identifying and establishing a customary principle or rule.
- (4) Protection standards applicable in international armed conflict are more and more recognized today as being applicable also for the behaviour of states and non-state actors in non-international armed conflicts.
- (5) The obligation of parties to an armed conflict to show due regard/due diligence for the natural environment is an obligation of conduct to show concern for environmental effects of military operations, and to minimize such effects not only in view of transboundary damage, but also in view of damage within the territory of operations. It is an objective standard of behaviour calling for responsible planning and precautions in attack, taking into account the technical, economical, and financial capacities available at the time
- (6) The right to claim reparation for losses and damage caused by breaches of the *jus in bello* includes damage caused by breaches of environmental obligations. Liability for injurious consequences of acts not prohibited by international law may be limited or excluded during armed conflicts. Conditions and standards for such limitation or exclusion deserve further consideration.
- (7) While the *jus post bellum* requires pragmatic limitation, conciliation, and participation as general attitudes to ensure post-conflict peacebuilding and secure sustainable recovery from wartime devastations, the need for prioritization must be accepted. This may entail specific consequences for forms, amounts, and time schedules for retribution. It should not lead, however, to limiting or avoiding necessary measures towards a sustainable recovery of the natural environment.
- (8) International and regional organizations involved in post-conflict reconstruction processes should support former parties to the armed conflict in meeting their responsibilities. They should assume responsibility for the national

contingents under their command and support third parties in their search for compensation.

On 5 November 2001 the UN General Assembly declared 6 November of each year as the *International Day for Preventing the Exploitation of the Environment in War and Armed Conflict*.⁶⁰ UN Secretary-General Kofi Annan has underlined in 2003:

Ensuring environmental sustainability is not a luxury; it is a prerequisite for the future peace and prosperity of our planet.⁶¹

States and international organizations remain challenged to fully act according to this conviction. Indeed, since ENMOD and AP I were adopted, *opinio juris* has come a long way to endorse this conviction. Principles and rules on protecting the environment in armed conflict are now clearer than one generation before. The role of academia was not the least important in achieving this progressive normative development.

⁶⁰ UN General Assembly Resolution 56/4, see <<http://www.timeanddate.com/holidays/un/day-preventing-environment-exploitation-in-war>> accessed 9 June 2017.

⁶¹ Annan calls for expanded laws against environmental damage in war (6 November 2003), see <<http://www.un.org/apps/news/story.asp?NewsID=8800&Cr=environment>> accessed 9 June 2017.

10

Eco-Struggles

Using International Criminal Law to Protect the Environment During and After Non-International Armed Conflict

*Matthew Gillett**

10.1 Introduction

As armed conflicts continue to flare up around the world, the spectre of serious damage to the environment is a recurring and growing threat. Conflict disrupts and often disables the regulatory authorities that typically enforce environmental protections, such as national and local governments, forestry rangers, and factory inspectors. As domestic regulatory systems break down, international criminal law presents an alternative mechanism that may potentially be used to address serious environmental harm. This chapter examines the provisions of international criminal law that are applicable to prosecute environmental harm, particularly during non-international armed conflicts ('NIAC'), which have grown increasingly prevalent since the end of the Second World War.¹

The analysis begins by instantiating environmental harm caused during armed conflicts. It then surveys the law applicable to environmental harm during NIACs, which has traditionally been less developed and articulated than the law applicable during international armed conflicts ('IAC').² The exegesis adheres to the

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¹ In the *Tadić* Jurisdictional Decision of 2 October 1995, the Appeals Chamber of the ICTY observed that internal armed conflicts, or civil wars, have become increasingly prevalent, cruel, and protracted and that NIACs increasingly impact on third states; *Prosecutor v. Duško Tadić*, Appeals Chamber, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, (IT-94-1-A, 2 October 1995) ('*Tadić* Jurisdiction Decision'), paras. 96–7.

² In *Prosecutor v. Duško Tadić* the ICTY Appeals Chamber held that the ICTY could exercise criminal jurisdiction over crimes committed during NIACs, reflecting an apparent trend towards removing the distinction between IAC and NIAC; *Tadić* Jurisdiction Decision (n 1) paras. 97, 137. See also Jean Allain and John R.W.D. Jones, 'A Patchwork of Norms: A Commentary on the 1996 Draft Code of Crimes against the Peace and Security of Mankind' (1997) 1 *European Journal of International Law* 100–17, 116. The Rome Statute of the International Criminal Court has reversed this trend—using the dichotomy between IACs and NIACs as the primary organizational principle of its war crimes provision (Art. 8); Antonio Cassese and Paola Gaeta, *International Criminal Law*, (Oxford: Oxford University Press, 2nd edn, 2008) 96.

International Law Commission's call for the examination and clarification of this area of the law.³

After assessing the various potentially applicable provisions of international criminal law, the analysis examines the basis for extending to NIACs the protection against military attacks causing excessive environmental harm (set out in Art. 8(2)(b)(iv) of the Rome Statute), which is currently only applicable in IACs. This provision prohibits causing widespread, long-term, and severe damage to the natural environment excessive in relation to any concrete and direct anticipated military advantage ('disproportionate environmental attacks'). The study primarily focuses on the provisions applicable at the International Criminal Court ('ICC'), as this is the only international criminal tribunal of potentially unlimited geographic jurisdiction.

While this study concentrates on circumstances of armed conflict, the ambit is not restricted to the limited period of active hostilities, but also looks to the aftermath of hostilities, including post-conflict peacebuilding efforts, to discern means of redress for serious environmental harm.⁴ Traditionally, international law applicable to armed conflict has been bifurcated into *jus ad bellum*, concerning the principles governing the initiation of hostilities, and *jus in bello*, concerning the conduct of warring parties during hostilities. There has been only limited analysis and development of the application of the international law of armed conflict to address the transition to peace, referred to as *jus post bellum*.⁵ In the context of NIACs, which are even less regulated by international law than IACs, the traditional view remains well entrenched that international criminal and humanitarian law diminish in relevance as hostilities end.

Contrasting with the traditional view is the increasing awareness of the continuing relevance of aspects of international law concerning armed conflict in the aftermath of conflict. The various principles, provisions, and practices of international law of armed conflict that apply in the wake of hostilities are grouped under the label *jus post bellum*, which can be defined as the 'laws and norms of justice that apply to the process of ending war and building peace'.⁶ This study takes into account *jus post bellum* as it applies

³ Report of the International Law Commission on the work of its sixty-sixth session 5 May–6 June and 7 July–8 August 2014, ILC Report, A/69/10, 2014, chap. XI, paras. 186–222 (concerning protection of the environment during armed conflict), paras. 192, 199, 201. See also Third report on the protection of the environment in relation to armed conflicts, Marie G. Jacobsson, Special Rapporteur, ILC Doc. A/CN.4/700, 3 June 2016.

⁴ Environmental harm also occurs outside of the context of any armed conflict, but that harm is not addressed in this analysis.

⁵ Pointing out that only recently the *jus post bellum* has begun to get attention, see Larry May, 'Jus Post Bellum, Grotius and Meionexia' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 15 (with further references).

⁶ Jennifer S. Easterday, Jens Iverson, and Carsten Stahn, 'Exploring the Normative Foundations of Jus Post Bellum: An Introduction' in Stahn, Easterday, and Iverson (ibid.) 1. See also Eric de Brabandere, 'The Concept of Just Post Bellum in International Law: a Normative Critique' in Stahn, Easterday, and Iverson (ibid.) ('Jus post bellum may be viewed as a normative set of principles rather than substantive rules which would give guidance in the application of the existing rules governing post-conflict reconstruction. Such principles may for example include the principle of proportionality, or the accountability of foreign actors.').

to NIACs, in order to give a full account of the legal regime applicable to the cycle of war and peace.

10.2 Environmental Harm During and After Armed Conflicts

It is an unfortunate truism that the environment is jeopardized, and often harmed, during armed conflict.⁷ This concern was echoed in Principle 24 of the Rio Declaration on the Environment and Development, whereby the collected states recognized that:

warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.⁸

Based on a study of the impact of armed conflict on the environment, the United Nations Environment Programme ('UNEP') concluded in 2009 that 'armed conflicts have continued to cause significant damage to the environment—directly, indirectly, and as a result of a lack of governance and institutional collapse.'⁹

Environmental harm caused by military activities has been documented by international organizations in several conflicts, including in the Vietnam War,¹⁰ the first Gulf War in 1991,¹¹ the Israeli Defence Force operations in Lebanon in 2006,¹² and the North Atlantic Treaty Organization ('NATO') bombing campaign against Serbia in 1999.¹³ Armed activities have caused the United Nations Educational, Scientific and Cultural Organization ('UNESCO') to list several national parks in the Democratic Republic of Congo ('DRC'), including the famed Virunga National Park, home of the mountain gorillas, as being in danger.¹⁴

⁷ For an historical overview, see Tara Weinstein, 'Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?' (2005) 17 *Georgetown International Environmental Law Review* 699–700.

⁸ General Assembly, Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992, Rio Declaration on Environment and Development, 12 August 1992.

⁹ UNEP, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP, 2009), 8. Armed conflict can have unintended benefits for the environment, by rendering areas effectively out of bounds for human populations; UNEP, *Our Environment, Our Wealth* (UNEP, 2006), 395. However, that incidental possibility should not overshadow the demonstrated risks of armed conflict resulting in serious environmental degradation.

¹⁰ Ines Peterson, 'The Natural Environment in Times of Armed Conflict: A Concern for International War Crimes Law?' (2009) 22 *Leiden Journal of International Law* 331–2; Aaron Schwabach, 'Environmental Damage Resulting from the NATO Military Action Against Yugoslavia' (2000) 25 *Columbia Journal of Environmental Law* 117, 126.

¹¹ UN Security Council Resolution 687, adopted on 3 April 1991, para. 16; UNEP (2009) (n 9) 8.

¹² See Third report on the protection of the environment in relation to armed conflicts, (n 3) para. 79 citing General Assembly Resolution 69/212, paras. 4 and 5.

¹³ See Office of the Prosecutor Press Release, Prosecutor's Report on the NATO Bombing Campaign, The Hague, 13 June 2000, PR/P.I.S./510-e; Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia ('Final Report on NATO'), at <<http://www.icty.org/sid/10052>> accessed 16 October 2015. Views on the final recommendations of the report are mixed. See, for example, Paolo Benvenuti, 'The ICTY Prosecutor and the Review of the NATO Bombing Campaign against the Federal Republic of Yugoslavia' (2001) 12(3) *European Journal of International Law* 503–29.

¹⁴ See UNESCO website, at <<http://whc.unesco.org/en/danger/>> accessed 8 January 2016.

Illegal exploitation of, and damage to, the environment can both intensify conflict during active hostilities and reignite hostilities in the aftermath of conflict. Environmental harm feeds a vicious cycle of resource depletion, increasingly violent inter-group clashes, and environmental expropriation (the assertion of ownership rights or the spoliation of environmental features without lawful right). At the ICC, the Court determined in the *Lubanga* Judgment that exploitation of natural resources in the Ituri region of the DRC fed the protracted armed conflict.¹⁵ More recently, the ICC Office of the Prosecutor's charges against Bosco Ntaganda allege that 'The district of Ituri is rich in natural resources, including gold, diamonds, coltan, timber and oil ... Competition over these resources has, in many ways, fanned the flames of conflict in the area.'¹⁶

Exploiting the natural environment is an increasingly prevalent means of financing armed conflict.¹⁷ The UN Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo concluded that paramilitary groups remaining in the Congo after the larger conflicting parties left had 'built up a self-financing war economy centered on mineral exploitation.'¹⁸ The UN Security Council recognized in Resolution 1856, which extended the UN Mission in the Democratic Republic of the Congo ('MONUC'), that

the link between the illegal exploitation of natural resources, the illicit trade in such resources and the proliferation and trafficking of arms is one of the major factors fueling and exacerbating conflicts in the Great Lakes region of Africa, and in particular in the Democratic Republic of Congo.¹⁹

The incidental effects of armed conflict can also seriously harm the environment. In the Central African Republic ('CAR'), for example, the influx of small arms from the conflicts in Chad and Sudan resulted in a transition to more deadly hunting practices, which in turn contributed to a reported reduction of the elephant population by around 90 per cent between the 1970s and 1990s, and the virtual extinction of the rhinoceros population.²⁰ Similar incidental effects are being felt in the DRC,²¹ and CAR, where the elephant population, which numbered up to 10,000 thirty years ago, has now been reported to have essentially disappeared.²²

¹⁵ *Prosecutor v. Thomas Lubanga Dyilo*, Judgment Pursuant to Article 74 of the Statute, Trial Chamber I, (ICC-01/04-01/06-2842, 14 March 2012) ('*Lubanga* Article 74 Decision').

¹⁶ *Prosecutor v. Ntaganda*, Public redacted version of 'Prosecutor's Pre-Trial Brief', Trial Chamber VI, (9 March 2015, ICC-01/04-02/06-503-Conf-AnxA), (1 September 2015, ICC-01/04-02/06-503-AnxA-Red2), para. 7.

¹⁷ Karen Hulme, 'Environmental Security: Implications for International Law' (2009) 19(1) *Yearbook of International Environmental Law* 3, 15; Daniëlla Dam-de Jong, 'From Engines for Conflict into Engines for Sustainable Development: The Potential of International Law to Address Predatory Exploitation of Natural Resources in Situations of Internal Armed Conflict' (2013) 82 *Nordic Journal of International Law* 155–77, 155–6.

¹⁸ Final report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo, UN Doc. S/2002/1146, 16 October 2002, para. 12.

¹⁹ UN Security Council Resolution 1856, S/RES/1856 (2008), 22 December 2008.

²⁰ UNEP (2006) (n 9) 395.

²¹ UN Security Council Resolution 1856, S/RES/1856 (2008), 22 December 2008.

²² U. C. Jha, *Armed Conflict and Environmental Damage* (New Delhi: Vij Books India Pvt Ltd, 2014), 103.

Systems of natural resource exploitation continue after the termination of conflict. Post-conflict rebuilding efforts must address serious environmental damage that has occurred, or that is continuing to occur, in order to allow for people to access resources needed to earn their livelihoods. The continuity of environmental harm during and after armed conflicts necessitates efforts to identify legal mechanisms to address such harm in the rubric of *jus post bellum*.

10.3 The Application of International Criminal Law to Environmental Harm During Non-International Armed Conflicts

With the recent flourishing of international courts and the increasing distillation of substantive and procedural rules, the field of international criminal law constitutes a potential means of addressing environmental harm. The following discussion assesses the capacity of the international criminal law, in its current state, to address serious environmental harm, particularly during NIACs.

The relevance of international criminal law is not limited to situations of international conflict. Indeed, international criminal law has a proven track record of application to the context of NIACs. At the International Criminal Tribunal for the Former Yugoslavia ('ICTY'), International Criminal Tribunal for Rwanda ('ICTR'), and more recently at the ICC, convictions have been entered for crimes, including war crimes, crimes against humanity, and genocide, committed during NIACs.²³

However, international criminal law should not be seen as a panacea for the environmental degradation that is occurring throughout the world, often in the context of armed conflict. Due to jurisdictional constraints, international criminal law does not automatically apply to all situations.²⁴ The utility of international criminal law in relation to environmental harm is also restricted by the lack of jurisdiction over corporate entities.²⁵ Given that environmental harm is often carried out by groups acting for a profit motive, the limit on personal jurisdiction to natural persons is significant.

²³ See for example: (ICC) *Prosecutor v. Lubanga* Article 74 Decision (n 15); *Prosecutor v. Germain Katanga*, Judgment Pursuant to Article 74 of the Statute, Trial Chamber II, (ICC-01/04-01/07, 7 March 2014); (ICTY) *Prosecutor v. Ljube Bošković*, Trial Chamber, Judgment, (IT-04-82-T, 10 July 2008); (ICTR) *Prosecutor v. Ferdinand Nahimana*, Trial Chamber I, Judgment, (ICTR-99-52-T, 3 December 2003). No genocide convictions have been entered at the ICC to date.

²⁴ The ICTY, ICTR, Extraordinary Chambers in the Courts of Cambodia ('ECCC'), and Special Tribunal for Lebanon ('STL') are self-evidently limited to specific geographic areas, and the ICC only has jurisdiction over the territory and nationals of state parties unless another state voluntarily accepts the ICC's jurisdiction or the UN Security Council refers a situation to the court. Rome Statute, Arts. 12–13. Rome Statute of the International Criminal Court, 17 July 1998, 2187 UNTS 38544, Art. 8, para. 2(f). See also Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977, 1125 UNTS 17513, Art. 1 (2).

²⁵ None of the existing international tribunals currently have jurisdiction over corporations for substantive crimes. At the STL, the Court has found that, for cases of contempt, it has jurisdiction over legal persons, which would include companies, non-governmental organizations, and other entities; *In The Case Against New TV S.A.L. Karma Mohamed Tahsin Al Khayat*, Decision On Interlocutory Appeal Concerning Personal Jurisdiction In Contempt Proceedings, (STL-14-05/PT/AP/ARI26.1, 2 October 2014) ('STL Decision'), paras. 82–83 ('many corporations today wield far more power, influence and reach than anyone person', 'the prosecution of natural persons, rather than the legal persons that they serve, would fail to underline and punish corporate cultures that condone and in some cases encourage illegal behavior').

International criminal law is not a fail-safe mechanism even when it applies. International courts lack the security forces needed to assure the immediate enforcement of arrest warrants. Evidence is sometimes corrupted by mistakes, improper influence, and the passing of time. And there is no iron-clad, indisputable evidence that international criminal law has any general deterrent effect against the future commission of atrocities.²⁶ With respect to environmental harm, these problems exacerbate the difficulty of prosecuting perpetrators under the highly restricted definitions of the provisions addressing harm to the environment, as evidenced by the fact that no individual has been convicted under international criminal law specifically for destruction of the environment.²⁷

In light of these limitations, international criminal law provides a complementary, but not comprehensive, vehicle for redress.²⁸ It is best considered as a branch of a multifaceted approach to environmental harm, incorporating other mechanisms, such as peacekeeping missions and Security Council sanctions,²⁹ which will generally provide more immediate and contemporaneous means of confronting serious environmental harm.

10.3.1 The provisions of international criminal law capable of application to environmental harm

Running through the substantive provisions of the Rome Statute of the ICC, there are very few environmental protections that apply during NIACs.

Genocide can be prosecuted irrespective of the occurrence of an armed conflict of any nature. There is a precedent for charging conduct involving environmental harm as a means of carrying out genocide under Article 6 of the Rome Statute to a situation that has been classified as a NIAC. The ICC Prosecutor indicted and charged President Omar Al-Bashir with genocide under Article 6(c), for ‘deliberately inflicting on [the Fur, Masalit and Zaghawa ethnic groups] conditions of life calculated to bring about their physical destruction in part.’³⁰ These conditions of life resulted from ruining or depleting natural and man-made resources that the named victim populations rely on for their survival.³¹

²⁶ On the issue of the deterrent effect of international criminal proceedings, see Kathryn Sikkink, *The Justice Cascade: How Human Rights Prosecutions Are Changing World Politics* (New York: W. W. Norton, 2011).

²⁷ Weinstein (n 7) 698, 704.

²⁸ Penal sanctions are necessary as civil sanctions have often proved insufficient to deter companies from polluting behaviour, see Timothy Schofield, ‘The Environment as an Ideological Weapon: A Proposal to Criminalise Environmental Terrorism’ (1998–1999) 26 *Boston College Environmental Affairs Law Review* 639, 642.

²⁹ See Dam-de Jong (n 17) 156 (noting that sanctions have been placed on commodities in the conflicts in Angola, Sierra Leone, Liberia, and Cote d’Ivoire).

³⁰ *Situation in Darfur, The Sudan*, Summary of Prosecution’s Application under Article 58, (ICC-02/05-152, 14 July 2008), para. 1.

³¹ *ibid.* 5–7 (as related in the prosecutor’s application: ‘[The attackers] destroy all the target groups’ means of survival, poison sources of water including communal wells, destroy water pumps, steal livestock and strip the towns and villages of household and community assets. As a result of the attacks, at least 2,700,000 people, including a very substantial part of the target groups attacked in their villages, have been forcibly expelled from their homes.’ ‘Militia/Janjaweed and the Armed Forces repeatedly destroyed, polluted or poisoned these wells so as to deprive the villagers of water needed for survival.’).

However, genocide is inherently anthropocentric, with the origins of the term arising from 'genus', meaning peoples, and 'cide', meaning killing. Genocide could only ever be used to prosecute environmental harm as an incidental occurrence related to efforts to destroy a protected group. Moreover, proving genocide requires showing the accused's specific intent to destroy the targeted group in whole or in part, which is a heavy burden of proof, as reflected in the extremely limited number of convictions for genocide under international criminal law.³²

Similar to genocide, crimes against humanity (Art. 7) apply irrespective of the existence of an armed conflict. Crimes against humanity may incidentally address environmental harm, during peacetime and during armed conflicts, including NIACs. It is possible that certain crimes against humanity, such as other inhumane acts, which essentially concern acts causing serious bodily or mental injury, would cover serious environmental damage. This could occur, for example, if perpetrators poisoned natural water sources or removed natural food sources in local flora or fauna, in turn causing serious bodily and/or mental harm.

The crimes against humanity of deportation and forcible transfer could also be perpetrated by or through serious environmental damage. Deportation and forcible transfer are sometimes referred to under the term forcible displacement.³³ They involve the forcible expulsion of persons from places where they are lawfully present without grounds permitted under international law. These crimes have been charged before international courts in connection with environmental damage. For example, in the *Bashir* case, referred to above, attacks impacting on the victims' group's means of survival, including natural resources, are charged as a means of displacing the population.³⁴

Other crimes against humanity could also encompass aspects of environmental harm. Extermination, which essentially concerns the killing of large numbers of people, can be committed through the infliction of conditions of life calculated to bring about the destruction of part of a population. Such conditions include depriving the victims of access to food or medicine, which could occur as a result of an attack on the environmental habitat of a people.³⁵ For crimes against humanity to apply the damage would need to be committed in conjunction with a widespread or systematic attack directed against a civilian population pursuant to a state or organizational policy.³⁶

However, these crimes, in keeping with their labels (crimes against humanity and genocide) are conditioned on showing harm to humans and their property. They could only ever address environmental damage incidentally. Using these provisions to

³² While there have been several convictions for genocide at the ICTR, the occurrence of the genocide there was so well established that it was taken judicial notice of as the Tribunal's operations continued. At the ICTY only four individuals have been convicted for commission of genocide, at the time of writing, with convictions upheld on appeal: Ljubisa Beara, Vujadin Popovic, Radovan Karadzic, and Zdravko Tolimir.

³³ Technically, the term forcible displacement is used when deportation or forcible transfer or both are charged as underlying forms of persecution. In *Naletelić and Martinović* the ICTY Appeals Chamber opined that for the purposes of a persecutions conviction it is irrelevant to distinguish between deportation and forcible transfer and that criminal responsibility is sufficiently captured by forcible displacement. *Prosecutor v. Mladen Naletelić and Vinko Martinović*, Appeals Chamber, Judgment, (IT-98-34-A, 3 May 2006), para. 154.

³⁴ *Situation in Darfur, The Sudan* (n 30), paras. 14–15.

³⁵ See ICC Elements of Crimes, footnote 9.

³⁶ Rome Statute Art. 7(1)(k); Statute of the ICTY Art. 5(i); Statute of the ICTR Art. 3(i).

substitute for the direct prosecution of environmental harm would not signal the international community's condemnation of environmental harm itself. This would lessen the declaratory impact and potential deterrent effect of any resulting conviction.

Before looking at the applicability of war crimes under Article 8 to environmental harm, it should be noted that the Rome Statute also contains the crime of aggression.³⁷ Aggression is defined in detail in Article 8bis of the Rome Statute, and can generally be said to refer to the 'use of armed force by a State against the sovereignty, territorial integrity or political independence of another State, or in any other manner inconsistent with the Charter of the United Nations'.³⁸ A series of examples of acts of aggression are enumerated in article 8bis. These acts of aggression generally involve the use of armed force by a state against another state, and so would not naturally apply in the context of a NIAC.

Environmental degradation through military attacks could arguably qualify under this definition. For example, if a state were to send its forces to pollute the water supplies of another state in order to exact concessions from the targeted state, it could meet the definition of an act of aggression under Article 8bis(2)(a).³⁹ Similarly, a nuclear attack on another state could readily qualify as an armed attack. Accusations of aggression that also concerned environmental harm were levelled at NATO during its 1999 bombing campaign against Serbian security and military positions. Although no criminal case eventuated in the international courts, the initial enquiry into NATO's acts conducted by the Office of the Prosecutor of the ICTY provides a limited form of precedent for investigating aggression.⁴⁰

However, environmental harm through means other than military attacks, such as the 'downstream' polluting effects of environmentally harmful practices, would be difficult to qualify as aggression as they would not typically involve the use of armed force. Moreover, environmental degradation committed during a NIAC would not qualify as aggression, no matter how severe, because of the definition's implicit reference to the use of force by a state against another state.

Liability for aggression will also be limited by the leadership requirement. This clause of Article 8bis restricts the pool of persons potentially liable for the crime of aggression to those in positions to effectively control or direct the political or military action of a state. There is an open question as to whether financiers, industrialists, lobbyists, and other individuals with considerable influence on politicians and military leaders would fall into this category.⁴¹ Given that environmental harm is frequently attributed to

³⁷ The crime of aggression was not yet operational at the time of writing this chapter and will be activated in 2017 at the earliest.

³⁸ Art. 8bis.

³⁹ 'The invasion or attack by the armed forces of a State of the territory of another State ...'

⁴⁰ See Office of the Prosecutor Press Release, Prosecutor's Report on the NATO Bombing Campaign, The Hague, 13 June 2000, PR/P.I.S./510-e; Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia ('Final Report on NATO'), at <<http://www.icty.org/sid/10052>> accessed 16 October 2015, para. 30.

⁴¹ Roger S. Clark, 'Amendments to the Rome Statute of the International Criminal Court Considered at the First Review Conference on the Court, Kampala, 31 May–11 June 2010' (2010) 2 Göttingen Journal of International Law 696–7. See also Stefan Barriga, 'Against the Odds: The Results of the Special Working Group on the Crime of Aggression' in Stefan Barriga, Wolfgang Danspeckgruber, and Christian Wenaweser (eds.), *The Princeton Process on the Crime of Aggression: Materials of the Special Working Group on the crime of Aggression, 2003–2009* (Boulder, CO: Lynne Rienner Publishers, The Liechtenstein Institute on

corporate executives and directors, the leadership requirement may exclude an important class of potential perpetrator of environmental harm from any indirect prosecution through the vehicle of the aggression amendments.

Looking at the applicability of war crimes to environmental harm, there are several provisions that could be used to address harm to the environment. The most directly relevant provision is Article 8(2)(b)(iv) of the Rome Statute of the ICC. It is a partially ecocentric provision, which prohibits:

Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or *widespread, long-term and severe damage to the natural environment* which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated. (emphasis added)

However, this provision only applies to *international* armed conflicts. There is no analogue of this provision in the parts of Article 8 addressing NIACs. Given that many serious conflicts throughout the twentieth and twenty-first centuries have been NIACs,⁴² the limitation of Article 8(2)(b)(iv) to IAC leaves a lacuna in the framework of international criminal law applicable to environmental harm.⁴³

Moreover, the elements of Article 8(2)(b)(iv) are exacting and would apply only in the most extreme circumstances of environmental damage. The three requirements for the extent of the damage—widespread, long-term, and severe, are cumulative and must all be met in order for criminal responsibility to arise. The terms, which are not defined in the Rome Statute, but have been subjected to commentary in negotiations over other international law instruments and in academic literature, are potentially extremely restrictive.

The term ‘widespread’ refers to the required geographical scope of the environmental damage. The specific threshold in terms of square kilometres remains undefined and could vary between several hundred square kilometres, as interpreted in relation to the Convention on the Prohibition of Military or any Hostile Use of Environmental Modification Techniques 1976 (‘ENMOD’) (discussed below),⁴⁴ to thousands of square kilometres, as suggested in background materials concerning Additional Protocol I (‘AP I’) to the Geneva Conventions.⁴⁵

Self-Determination at Princeton University, 2009), 8; Kevin J. Heller, ‘Retreat from Nuremberg: The Leadership Requirement in the Crime of Aggression’ (2007) 18(3) *European Journal of International Law* 477–97.

⁴² UNEP Study (2009) (n 9) 4, referring to Uppsala Conflict Data Program Database, at <http://www.pcr.uu.se/gpdatabase/search.php> accessed 1 June 2017. See also *Tadić* Jurisdictional Decision (n 1) para. 97.

⁴³ See, for example, Dr. Mohammed Wattad, ‘The Rome Statute & Captain Planet: What Lies Between “Crimes Against Humanity” and the “Natural Environment?”’ (2009) 19 *Fordham Environmental Law Review* 265, 268.

⁴⁴ Understanding I of the Conference of the Committee of Disarmament (‘ENMOD Memorandum of Understanding’) reprinted in Adam Roberts and Richard Guelff (eds.), *Documents on the Law of War* (Oxford: Clarendon Press, 2nd edn, 1989).

⁴⁵ Ines Peterson, ‘The Natural Environment in Times of Armed Conflict: A Concern for International War Crimes Law?’ (2009) 22 *Leiden Journal of International Law*, 331–2.

The term 'severe' refers to the intensity of the damage caused to the environment independent of its geographic ambit or temporal duration. Severe environmental damage denotes harm going beyond typical battlefield destruction.⁴⁶

The criterion of 'long-term' refers to the temporal duration of the environmental damage. The specific minimum duration of 'long-term' remains undetermined, and could vary from a period of several months or a season, matching the interpretation of 'long-lasting' in Article 1 of ENMOD,⁴⁷ to a period of decades, as has been sometimes ascribed to the interpretation of 'long-term' in Articles 35(3) and 55 of AP I.⁴⁸ It is unclear how the element of 'long-term' could practically be measured in the context of a criminal prosecution, but it is clear that the perpetrator's knowledge of the possibility of such damage would have to be assessed on the basis of the knowledge available to him/her at the time of the offence.⁴⁹

The final clause of Article 8(2)(b)(iv)—'would be clearly excessive in relation to the concrete and direct overall military advantage anticipated'—introduces a balancing test into the evaluation of environmental damage caused by armed conflict. The ICC Elements of Crimes state that the 'military advantage anticipated' is assessed from the perspective of the perpetrator on the basis of the information available to him/her at the time of launching the attack.⁵⁰ This is a highly exacting standard for any prosecution to prove. According to Cassese and Gaeta, it provides belligerents with 'a very great latitude' which makes 'judicial scrutiny almost impossible'.⁵¹ Because of these requirements, Article 8(2)(b)(iv) has been described as 'a huge leap backwards'.⁵² The narrow formulation in Article 8(2)(b)(iv) implies not only that there are forms of environmental damage that are not excessive despite being widespread, long-term, and severe, but also that any environmental damage that does not conjunctively fill all the criteria of widespread, long-term, and severe could never be excessive.

At the same time, in at least one respect, Article 8(2)(b)(iv) is potentially broad in its coverage. This is because it is not limited in terms of the types of attacks and means of warfare that it would cover. Accordingly, attacks carried out with nuclear weapons would be covered and potentially prosecutable if it could be shown that the expected incidental environmental damage was not justified by the anticipated military advantage.⁵³

⁴⁶ See *travaux préparatoires* to Article 35(3) of AP I, CDDH/215/Rev.1, para.27, in 15 Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflict, Geneva 1974–77, 268–9 (Bern: Federal Political Department, 1978).

⁴⁷ See ENMOD Memorandum of Understanding (n 45).

⁴⁸ Michael Schmitt, 'Green War: An Assessment of the Environmental Law of International Armed Conflict' (1997) 22(1) *Yale Journal of International Law* 71, 107. See also, for example, Australia Department of Defence, *The Manual of the Law of Armed Conflict*, Australian Defence Doctrine Publication, 06.4, Australian Defence Headquarters, 11 May 2006, para. 7.14 (interpreting 'long-term' as meaning a period of decades).

⁴⁹ Elements of Crimes of the Rome Statute of the International Criminal Court (n 36) footnote 37.

⁵⁰ Elements of Crimes of the Rome Statute of the International Criminal Court (n 36) footnote 36.

⁵¹ Cassese and Gaeta (n 2) 96. ⁵² *ibid.*

⁵³ In this respect, see, for example, Dissenting Opinion of Judge Weeramantry in *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, Judgment of 8 July 1996, ICJ Reports 226, at <<http://www.icj-cij.org/docket/files/95/7521.pdf>> accessed 8 January 2016.

Despite its limitations, Article 8(2)(b)(iv) does directly address grave environmental harm and reflects at least a limited recognition of the need to protect the environment. It shows that the Rome Statute partially incorporates ecocentric values, albeit subject to anthropocentric values. There have been several calls to amend the provisions of Article 8(2)(b)(iv) or even add an entirely new crime to the Rome Statute addressing environmental harm.⁵⁴ Such amendments could see the restrictive terms of Article 8(2)(b)(iv) reframed so that the terms need not be cumulative or so that the terms themselves were given understandings designed to lessen their restrictive formulation. However, these proposals may take many years to be adopted, if at all, and suffer from several theoretical and practical shortcomings. In light of these concerns, the state parties may consider an interim measure whereby a corresponding version of Article 8(2)(b)(iv) should be added to the war crimes applicable in NIACs (Article 8(2)(e)), as discussed in more detail below.

Several other provisions could incidentally address harm to the environment committed during NIACs, but are not squarely focused on condemning environmental harm. These include, for example:

- Article 8(2)(e)(xii)⁵⁵ (destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war);⁵⁶
- Article 8(2)(e)(v)⁵⁷ (pillaging a town or place, even when taken by assault);
- Article 8(2)(e)(xiii)⁵⁸ (employing poison or poisonous weapons);
- Article 8(2)(e)(xiv)⁵⁹ (employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices).⁶⁰

The International Law Commission's Special Rapporteur on Protection of the Environment during Armed Conflict has suggested a broad-brush solution whereby the environment would simply be classified as civilian in nature, thereby rendering attacks on it unlawful absent its use for military purposes.⁶¹ However, some ILC

⁵⁴ See Steven Freeland, *Addressing the Intentional Destruction of the Environment during Warfare under the Rome Statute of the International Criminal Court*, *Supranational Criminal Law: Capita Selecta*, (Cambridge: Intersentia, 2015). See also Polly Higgins, 'Eradicating Ecocide', at <<http://eradicatingecocide.com/the-law/>> accessed 14 August 2017, (seeking to encourage the adoption of a crime of genocide).

⁵⁵ This provision mirrors Art. 8(2)(b)(xiii) but applies in non-international armed conflict.

⁵⁶ It is required that the property was protected from that destruction or seizure under the international law of armed conflict; ICC Elements of Crimes (n 36) 26, 44. (See also Art. 8(2)(a)(iv) (Extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly).

⁵⁷ This provision mirrors Art. 8(2)(b)(xvi) but applies in non-international armed conflict.

⁵⁸ This provision mirrors Art. 8(2)(b)(xvii) but applies in non-international armed conflict.

⁵⁹ This provision mirrors Art. 8(2)(b)(xviii) but applies in non-international armed conflict.

⁶⁰ This provision is based on The Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (1925).

⁶¹ ILC Report of its sixty-seventh session, held in July 2015, where it considered the second report of the Special Rapporteur, A/CN.4/685, Chapter IX, Protection of the Environment in Relation to Armed Conflicts, footnote 376 ('The natural environment is civilian in nature and may not be the object of an attack, unless and until portions of it become a military objective. It shall be respected and protected, consistent with applicable international law and, in particular, international humanitarian law'). See also Marie G. Jacobsson, Special Rapporteur, Third Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A/CN.4/700, 3 June 2016.

members expressed concerns over the wholesale categorization of the environment as civilian, and the ensuing implications for the principle of distinction.⁶²

10.3.2 Pillage⁶³

Pillage is often referred to as a relevant crime to address environmental damage in the form of misappropriation and consequent degradation.⁶⁴ However, the crime of pillage under Article 8(2)(b)(xvi) for IACs and Article 8(2)(e)(v) for NIACs, which is defined as the intentional appropriation of property for private or personal use,⁶⁵ fits uneasily with environmental damage in three ways.

First, the provision's focus on appropriation, as opposed to destruction or spoliation,⁶⁶ would exclude a significant portion of the damage done to the environment during armed conflict. Destruction of the environment is not necessarily conducted with a view to the exercise of ownership rights. For example, if an attack involves the contamination of an area through radiation it is difficult to conceptualize the attack as an appropriation of property.

Second, the idea of the environment constituting property is a contested notion. It is clear that in some cases, aspects of the natural environment can constitute property,⁶⁷ as would arise, for example, where a property happens to encompass a copse of native trees. However, questions arise concerning the extent to which the environment can be globally referred to as property. Did the forests and vegetation killed during Operation Ranch Hand in Vietnam constitute property? What body of law is used to determine who owns the property in question? What if severe damage to international waterways was caused during an armed conflict? The 'property' requirement means that pillage would not be likely to address the full extent of the environmental harm.

Third, the limitation of pillage in the Rome Statute to appropriation for private or personal use is a major restriction on the range of appropriations that occur during armed conflict. Warring factions will regularly use misappropriated property to fund their military campaigns, rather than for personal ends, which will not always be identical.⁶⁸

In *Case concerning Armed Activities on the Territory of the Congo (DRC v. Uganda)*, the International Court of Justice ('ICJ') held that members of the Ugandan People's Defence Force who carried out 'looting, plundering and exploitation of natural resources in the territory of the DRC' acted in violation of *jus in bello*,⁶⁹ including the prohibition of pillage.⁷⁰ However, it is unclear if the same conduct could be prosecuted

⁶² ILC Report of its sixty-seventh session (n 62) Chapter IX, Protection of the Environment in Relation to Armed Conflicts, para. 154.

⁶³ See, in connection with this section, chapter 6 in this volume. ⁶⁴ Dam-de Jong (n 17) 164.

⁶⁵ Elements of Crimes (n 36), Art. 8(2)(b)(xvi). Aside from the nature of the conflict, the elements of pillage in non-international armed conflict match those in international armed conflict.

⁶⁶ *Prosecutor v. Moinina Fofan and Alley Kondewa*, Appeal Chamber, Judgment (SCSL-04-14-A, 28 May 2008), para. 309.

⁶⁷ Dam-de Jong (n 17) 162. ⁶⁸ *ibid.* 165.

⁶⁹ *Case concerning Armed Activities on the Territory of the Congo (DRC v. Uganda)*, Judgment of 19 December 2005, ICJ Reports 168, para. 245, generally paras. 222–9.

⁷⁰ *ibid.* paras. 222–9, 245. The Court noted that both The Hague Regulations of 1907 (Art. 47) and Geneva Convention IV of 1949 (Art. 33) prohibit pillage, para. 245. Dam-de Jong (n 17) 165.

as pillage at the ICC, as it would depend on whether the specific conduct was carried out for personal or private ends. In this respect, resource exploitation by rebel groups in order to finance their activities could be classified as having personal or private motivations rather than public, and this question should not be considered *in abstracto*.⁷¹ Conversely, governments will claim that any exploitation of the natural environment carried out on official instructions will be inherently public in nature and automatically excluded from constituting pillage. This potential insulation from liability may explain why governments were willing to include pillage committed in NIACs among the prohibitions enunciated in the Rome Statute.

Any prosecution involving charges of pillaging natural resources is likely to see the accused party contending that the resources were utilized for the public purposes matching the aims of the governmental or rebel movement and not for private ends. Given that the burden of proof is on the prosecution to bring evidence to support its charges beyond reasonable doubt, and given the likelihood that any large-scale resource exploitation will involve reasonably large numbers of people, the requirement of private or personal ends is likely to be difficult to prove. This considerably curtails the utility of the prohibition against pillage to address serious environmental harm.

10.3.3 Starvation of civilian population

Starvation of the civilian population is also a war crime that overlaps with environmental harm. In the context of IACs, Article 8(2)(b)(xxv) of the Rome Statute⁷² bans intentionally using starvation of civilians as a method of warfare by depriving them of objects indispensable to their survival, including wilfully impeding relief supplies as provided for under the Geneva Conventions. This directly relates to methods such as razing and destroying crops and means of sustenance of people living off the land. The prohibition is broad as it does not contain the military necessity exception that is included in many other war crimes formulations such as destroying the enemy's property under Article 8(2)(b)(xiii).

However, there is no analogue of this provision in the parts of Article 8 addressing NIACs. The omission is particularly glaring as Article 14 of Additional Protocol II ('AP II'), which applies to NIACs, prohibits attacks on objects indispensable to civilian populations, including 'foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works'.⁷³ Although the examples listed in Article 14 of AP II are primarily man-made objects, features of the natural environment could also fall within these categories. Many peoples' food

⁷¹ Dam-de Jong (n 17) 165.

⁷² See also AP I, Art. 54 (prohibiting attacks against 'objects indispensable to the survival of the civilian population,' meaning objects that are of basic importance to the population's livelihood); AP II, Art. 14, which applies the prohibition to non-international armed conflict (prohibiting attacks on objects indispensable to civilian populations, including foodstuffs, agricultural land, crops, livestock, drinking water installations and irrigation works); Michael Schmitt, 'Humanitarian Law and the Environment' (1999–2000) 28 *Denver Journal of International Law and Policy* 265, 301–2; Aaron Schwabach, 'Ecocide and Genocide in Iraq: International Law, the Marsh Arabs, and Environmental Damage in Non-International Conflict' (2004) 15 *Columbia Journal of International Law and Policy* 1, 25.

⁷³ See also Art. 54 AP I and Art. 14 AP II.

sources include fruit, vegetables, cereals, animals, and fish that constitute part of the natural environment and many people source water from natural wells. Equally, many people caught up in armed conflicts rely on the natural environment for their livelihoods. For example, in the DRC, local populations rely on artisanal mining.⁷⁴ If warring factions were to take over those mineral or metal deposits and remove them or render them useless for the local population, the conduct would potentially breach Article 14 of AP II by depriving the population of its means of financing its survival.

Article 14 of AP II is designed as a form of safety net for civilian populations caught up in internecine conflict.⁷⁵ Prohibiting the destruction, ruination, or removal of supplies and objects essential for the survival of the population is an important means of containing the impact of armed conflict on the civilian population. The omission of this prohibition from the Rome Statute provisions covering NIACs is concerning—the starvation of the civilian population would not necessarily be directly prosecutable.

10.3.4 Destruction of property

Prosecuting environmental damage as a violation of Article 8(2)(b)(xiii) (destruction or seizure of enemy property) raises the awkward issue of the environment constituting property, which is discussed above. To the extent that the natural environment can constitute property, it is likely to vest in the state.⁷⁶ Consequently, any destruction of the environment may suffer from an inherent asymmetry, applying to rebel forces but not to governments.

This provision also includes a military necessity exception clause, which would serve to filter out all but the most egregious examples of environmental harm. Dam posits that the ‘burning of parts of a forest to clear mining sites or for large-scale timber extraction may fall within the ambit of the prohibition.’⁷⁷ However, parties carrying out such harm may be able to link the operation to their military goals and thus squeeze the conduct into the imperative military necessity exception. If, on the other hand, a group such as ISIS⁷⁸ started attacking the natural environment as part of its shock and scare propaganda tactics, such conduct could qualify under the provision subject to the additional elements being fulfilled.

The preceding survey shows that, at the world’s only international criminal court, there is no provision directly applicable to environmental harm committed in the context of a NIAC. There are indirectly applicable provisions, particularly war crimes, but they are subject to restrictions that could significantly limit their utility for the prosecution of environmental harm.

⁷⁴ Dam-de Jong (n 17) 163. ⁷⁵ *ibid.* ⁷⁶ *ibid.* 166. ⁷⁷ *ibid.*

⁷⁸ ISIS is the acronym commonly used to describe the so-called Islamic State, also known as Daesh.

10.4 Extending Environmental Protections to Non-International Armed Conflicts

With the ICC having only one provision directly addressing environmental harm (Article 8(2)(b)(iv)), and that provision only applicable in the context of IACs, the question arises as to whether the Rome Statute should be amended to add a mirror provision applicable to NIACs. While there have been several calls to amend the Rome Statute to address environmental harm, including by adding a new crime, such as ecocide, to its provisions, these will require a huge groundswell of political will to be realized. As an intermediary and complementary step, the state parties may consider whether the crime of disproportionate environmental harm set out in Article 8(2)(b)(iv) should be added to the war crimes provision applicable to NIACs (Article 8(2)(e)). Some relevant considerations are as follows.

10.4.1 The symbolic value of prohibiting disproportionate environmental harm during NIACs

Article 8(2)(b)(iv) serves the purpose of directly addressing grave environmental harm and demonstrating that the Rome Statute is not limited to anthropocentric values but also has an ecocentric component. If a mirror provision were adopted addressing environmental harm in NIACs, prosecutors would have a basis to prosecute environmental harm committed during NIACs. The symbolic value of such an amendment to the Rome Statute would be significant. Prohibiting conduct under international criminal law indicates that the international community considers the conduct to be a sufficiently serious threat to justify the elevation of proceedings to the international level. Because of the added notoriety, such proceedings send a cautionary message to actors throughout the world engaging in environmentally harmful activities.

Prohibiting conduct under international criminal law can lead to the prosecution of individual human beings, often high level political or military figures, and potential penal sanctions. Focusing proceedings on such individuals can serve a powerful symbolic function, which reverberates amongst other high level individuals making decisions that can lead to grave environmental harm.

10.4.2 Impact on future generations

Protecting the environment fits with the values under-girding the Rome Statute, particularly in protecting the interests of future inhabitants of planet earth. In its preamble, the Rome Statute indicates that it is designed to protect the current population of the world and 'future generations'.⁷⁹ One of the most pressing concerns for future

⁷⁹ Rome Statute, Preamble, 'Determined to these ends and for the sake of present and *future generations*, to establish an independent permanent International Criminal Court in relationship with the United Nations system, with jurisdiction over the most serious crimes of concern to the international community as a whole.' (emphasis added).

generations will be the state of the environment.⁸⁰ In this sense, extending the protection against disproportionate environmental harm committed during NIACs would accord with the animating spirit behind the consensus reached in Rome in 1998.

10.4.3 Gravity

Environmental harm committed during NIACs can be of concern because of its sheer gravity.⁸¹ Such damage can reach sufficient proportions to jeopardize the feasibility of ongoing human occupation of the land, implicating the rights of future generations. The use of landmines, for example, is widespread in NIACs and kills not only human beings but also animals long after the conflict ends. UNEP reports that in Angola landmines have caused the deaths of thousands of animals including antelope and elephants.⁸² During the conflict in Liberia, environmental harm escalated in keeping with the conflict. It was reported that, as the economy and infrastructure were devastated, GDP was halved and a third of the population caused to flee to neighbouring countries. Mains electricity was reduced by 99 per cent, resulting in far greater reliance on charcoal, and a corresponding reduction in forest cover by 2 per cent per year.⁸³ The trade in bushmeat (which means wild animals such as monkeys and apes, including endangered species) rose exponentially. As prices increased, many farmers were reported to have switched to hunting as their primary means of earning a living.⁸⁴

There are many other areas of the world where grave environmental harm has been caused in connection with NIACs. The sheer gravity of the harm that can be inflicted on the environment through unscrupulous practices militates in favour of international attention.

10.4.4 Transboundary harm

Environmental harm, including when committed during NIACs, is a concern because it often results in transboundary harm.⁸⁵ As concluded in a 2011 Office of the High Commissioner for Human Rights report on human rights and the environment, 'One country's pollution can become another country's environmental and human rights problem, particularly where the polluting media, like air and water, are capable of easily crossing boundaries.'⁸⁶ Where individuals act to cause serious harm that traverses state boundaries, international criminal law provides a means of signalling the opprobrium of the international community.⁸⁷ Given that environmental degradation requires

⁸⁰ See Sébastien Jodoin, 'Protecting the Rights of Future Generations Through Existing and New International Criminal Law' in Sébastien Jodoin and Marie-Claire Cordonier Segger (eds.), *Sustainable Development, International Criminal Justice, and Treaty Implementation* (New York: Cambridge University Press, 2015).

⁸¹ See UNEP (2009) (n 9) footnote 9, part 2. ⁸² UNEP (2006) (n 9) 395.

⁸³ *ibid.* 399–400. ⁸⁴ *ibid.* ⁸⁵ *ibid.* 392.

⁸⁶ OHCHR Report Analytical Study on the Relationship between Human Rights and the Environment, A/HRC/19/34, 16 December 2011, para. 65.

⁸⁷ *Tadić* Jurisdictional Decision (n 1) para. 58 ('This organ is empowered and mandated, by definition, to deal with trans-boundary matters or matters which, though domestic in nature, may affect 'international peace and security').

collective solutions,⁸⁸ international criminal law presents itself as an appropriate vehicle by which the international community may take multilateral action. Although international criminal law is not limited to situations of transboundary harm, it has particular utility in such circumstances when the interests of multiple jurisdictions are concerned.

10.4.5 Environmental harm can exacerbate conflict and jeopardize economic and social recovery

Environmental harm committed during armed conflict exacerbates cycles of armed violence, as it entrenches the positions of the parties to the conflict as the available natural resources shrink.⁸⁹ The depletion or destruction of environmental features prejudices a return to normalcy, as it removes a means of restarting the economy in order to enhance the chances for a successful transition to peace.⁹⁰ Armed conflict typically leads to the large-scale displacement of the civilian population, which places increased strain on already stretched resources and makes environmental recovery programmes difficult to implement.⁹¹ There is no indication that these forms of harm are less prevalent or severe in NIACs than in IACs, which also militates in favour of an extension of the prohibition to NIACs.

10.4.6 The traditional reluctance to impose international law obligations concerning natural resources

Alongside the policy arguments for extending the provisions of the Rome Statute to protect the environment in NIACs, there are also competing interests that run counter to such an amendment.

The criminal prohibitions applicable during NIACs are more limited⁹² than those applicable during IACs, as mentioned above. This is primarily because of the strong state interest in retaining control over events occurring within the confines of the state's territory. The state interest in exclusive control over its territory is likely to be particularly fervent in relation to the natural environment. Underlying the reluctance of states to sign onto obligations constraining their use and misuse of the environment during NIACs is the strong domestic imperative of retaining exclusive sovereignty over the natural resources within a state's borders. The principle of sovereignty over natural resources is enshrined in several multilateral treaties, including Article 1(2) of the 1996 International Covenant on Civil and Political Rights and the 1966 International Covenant on Economic, Social and Cultural Rights, and was stated in the Declaration

⁸⁸ Robert Cryer, 'The International Criminal Court and its relationship to Non-Party States' in Carsten Stahn and Goran Sluiter (eds.), *The Emerging Practice of the International Criminal Court* (The Hague: Martinus Nijhoff, 2009), 116 (footnote 10).

⁸⁹ UNEP (2006) (n 9) 393. ⁹⁰ *ibid.* 395. ⁹¹ *ibid.* 394.

⁹² For example, apart from the environmental harm element of the provision discussed above, attacks entailing excessive civilian damage, including civilian objects, are criminalized in IACs under Art. 8(2)(b) (iv). However, there is no corresponding provision in NIACs under Art. 8(2)(c) or (e). This has been also noted by the ICC in *Mbarushimana: Prosecutor v Callixte Mbarushimana*, Decision on the Confirmation of Charges, (ICC-01/04-01/10-465-Red, Pre-T.Ch. I, 16 December 2011), footnote 290.

on Permanent Sovereignty over Natural Resources of the United Nations General Assembly.⁹³ It also forms part of customary international law.⁹⁴

State policy-makers are concerned about constraining their ability to exploit the natural environment when suppressing domestic threats. If excessive environmental harm were a crime during NIACs, government forces could face accusations of committing atrocities when responding to threats from rebel groups. The spectre of rebel groups charging members of the government with crimes against the environment would not be a palatable prospect for the state authorities.⁹⁵ Moreover, many NIACs arise from resource scarcity and it is not difficult to imagine anti-statal forces focusing on governmental exploitation of the environment as a rallying point to garner support for their struggles.

10.4.7 The practicalities of amending the Rome Statute to address environmental harm in NIACs

As set out above, Article 8(2)(b)(iv) is highly exacting and would only apply to the most extreme instances of environmental damage. In this light, it must be asked whether there is any utility in extending Article 8(2)(b)(iv) to NIACs, or whether that would simply constitute window dressing with no real practical effect. Because Article 8(2)(b)(iv) has not been tested, no definitive answer can be given to this question at this time. However, the blurred line between IACs and NIACs, with both forms of conflict often running in tandem,⁹⁶ and the broad-ranging nature of environmental damage in most cases militate in favour of ensuring that the elements of Article 8(2)(b)(iv) are consistent with the putative comparative provision applying to NIACs. To the extent the terms of Article 8(2)(b)(iv) are amended, the same adjustments should be reflected in the comparative provision applying to NIACs.⁹⁷

Whereas the practical impact of amending the Rome Statute to prohibit disproportionate environmental harm in NIACs is hard to gauge, the extension of the prohibition on excessive environmental harm to NIACs would serve a symbolic function, indicating that the serious degradation of the environment is illegal within and without the confines of NIACs.

There is an analogous precedent for the creation of a mirror prohibition for Article 8(2)(b)(iv) for NIACs. An extension was carried out at the Kampala Review Conference in 2010 with respect to articles in the Rome Statute addressing poison or poisoned weapons; asphyxiating gases, liquids, materials, or devices; and expanding bullets. At

⁹³ UN General Assembly Resolution 1803 (XVII), Declaration on Permanent Sovereignty over Natural Resources, adopted on 14 December 1962, in particular, paras. 1 and 5.

⁹⁴ *Case concerning Armed Activities on the Territory of the Congo* (n 70), para. 244.

⁹⁵ To date, the impact of domestic legal provisions legitimizing the environmental harm is unclear in relation to international prosecutions.

⁹⁶ *Prosecutor v. Katanga*, Article 74 Decision (n 23), Section on Nature of the Armed Conflict.

⁹⁷ Art. 8(2)(b)(iv) is two-pronged and concerns not only environmental harm, but also concerns attacks with disproportionate effects on civilians. The discussion of the creation of a comparative provision concerning NIACs would have to address the anthropocentric prong of Art. 8(2)(b)(iv) and whether it can readily be applied to NIACs, which is a subject going beyond the topic of this analysis.

the time of the adoption of the Rome Statute, these acts had only been criminalized in the context of IACs, but were extended in 2010 in the same terms to NIACs.⁹⁸

10.4.8 Environmental harm perpetrated during in NIACs is already criminalized under some sources of international law

It is apposite to note that some sources of international law already criminalize serious environmental harm in NIACs. Gathering state practice and the practice of non-state actors in NIACs has proved challenging.⁹⁹ Nonetheless, various instruments of international law provide guidance as to the direction and content of the law in NIACs.

In its Study on Customary International Humanitarian Law¹⁰⁰ ('ICRC's Study'), the International Committee of the Red Cross ('ICRC') surveyed the sources of international law prohibiting this conduct¹⁰¹ in order to determine its status as customary international law.¹⁰² Although the ICRC did not restrict its survey to instruments that criminalize the conduct *per se*, its survey provides a useful repository of potentially relevant sources of international law.¹⁰³

⁹⁸ Paras. 2(e)(xiii)–2(e)(xv) were amended by Resolution RC/Res.5 of 11 June 2010 (adding paras. 2(e)(xiii)–2(e)(xv)). See also Amal Alamuddin and Philippa Webb, 'Expanding Jurisdiction over War Crimes under Article 8 of the Rome Statute' (2010) 8 *Journal of International Criminal Justice* 1237.

⁹⁹ Third Report on the Protection of the Environment in Relation to Armed Conflicts (n 62) para. 15.

¹⁰⁰ Jean-Marie Henckaerts and Louise Doswald-Beck, *ICRC Customary International Humanitarian Law* (Cambridge: Cambridge University Press, 2005).

¹⁰¹ ICRC Study 156–7. Rule 45 of the ICRC Study on Customary International Law provides: The use of methods or means of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment is prohibited. Destruction of the natural environment may not be used as a weapon. ICRC Rules, 151. See also, Rule 44, which provides '[m]ethods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions.' See ICRC's Study, Vol I: Rules, Rule 44, 147. Rule 44 applies to IACs and 'arguably' also to NIACs. However, there is no corresponding provision of international criminal law in any form, and so the Rule could not be used to impose individual criminal responsibility under the current rubric of international law. In relation to Rule 45, it should be noted that Rule 45 is also not unlimited in application: the ICRC has acknowledged that it does not apply to nuclear weapons; Jean-Marie Henckaerts, 'Customary International Humanitarian Law: A Response to US Comments' (2007) 89 *International Review of the Red Cross* 473, 482. Note that many treaties contain prohibitions against the use of nuclear weapons on specific vulnerable areas of the world; for example, 1959 Antarctic Treaty; 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere; 1967 Treaty for the Prohibition of Nuclear weapons in Latin America (Treaty of Tlatelolco); 1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof; cited in Neil Popović, 'Humanitarian Law, Protection of the Environment, and Human Rights' (1995–1996) 8 *Georgetown International Environmental Law Review* 67, 82–3.

¹⁰² The standard for determining the existence of a rule of customary international law is well established. The International Court of Justice has observed that 'an indispensable requirement' of customary international law is that 'State practice, including that of States whose interests are specially affected, should have been both extensive and virtually uniform in the sense of the provision invoked; ... and should moreover have occurred in such a way as to show a general recognition that a rule of law or legal obligation is involved.': *North Sea Continental Shelf Cases (Federal Republic of Germany v. Denmark; Federal Republic of Germany v. Netherlands)*, Judgment of 20 February 1969, ICJ Reports 3, 4, 43).

¹⁰³ There is a long-standing dispute between the ICRC and the United States concerning the status under international law of the prohibition of environmental harm during armed conflict. The ICRC states that the prohibition of environmental harm during NIACs has crystallized as customary international law, and 'arguably' applies to non-international armed conflict. The United States rejects the customary status of the

For present purposes, the dispute over the customary status of the prohibition on excessive environmental harm is not critical. Amending the Rome Statute to extend the prohibition against excessive environmental harm to NIACs is not dependent on the customary status of the prohibition, as the Rome Statute's provisions on substantive offences are formulated without prejudice to customary international law.¹⁰⁴ Moreover, the ICRC assessment focused on whether the prohibition existed in customary humanitarian law and did not restrict the assessment to the criminalized version of the prohibition.¹⁰⁵ Nonetheless, the survey provides a useful legal resource to inform the debate as to the existing status of the prohibition of excessive environmental harm during NIACs.

In its analysis, the ICRC cited five international treaties, several other instruments relevant to international law, a large number of military manuals and pieces of national legislation, and several statements made by representatives of states.¹⁰⁶ The following analysis addresses the most relevant of these sources in order to identify the sources which apply this prohibition in NIACs. In keeping with the focus on provisions imposing individual criminal responsibility, and in line with the fact that ICRC Rule 45 largely overlaps with the grave breach of disproportionate environmental harm set out in Article 8(2)(b)(iv) of the Rome Statute, the following survey pays particular attention to whether the relevant source of law entails individual criminal responsibility.

10.4.9 Additional Protocols I and II

First, the ICRC cited Article 8(2)(b)(iv) of the Rome Statute itself and AP I.¹⁰⁷ Both these sources are limited to IACs and therefore can be put aside for present purposes.¹⁰⁸

prohibition of environmental harm *in toto* (in both IACs and NIACs) and criticizes the ICRC methodology, particularly in relation to the ICRC review of state practice. The United States argued that the ICRC's Study 'places too much emphasis on written materials, such as military manuals and other guidelines published by States, as opposed to actual operational practice by States during armed conflict. Although manuals may provide important indications of State behavior and *opinio juris*, they cannot be a replacement for a meaningful assessment of operational State practice in connection with actual military operations.' John Bellinger and William Haynes, 'A US Government Response to the International Committee of the Red Cross Study Customary International Humanitarian Law' (2007) 89(866) *International Review of the Red Cross* 445 and also 444 (as to the general grounds of its critique).

¹⁰⁴ Rome Statute, Art. 10. In reality, the *lex lata* of the Rome Statute is likely to serve as a gravitational mass, pulling all customary definitions of crimes in the direction of its terms, particularly as the caseload of the Court increases and judgments and appeal judgments are issued.

¹⁰⁵ Because the present analysis concerns the support for the prohibition being criminalized, it is important to examine the sources of international law criminalizing environmental harm in NIACs, as well as the sources that limit the criminalization to IACs, in order to better understand how and when states have framed a legal basis to outlaw environmental harm in NIACs.

¹⁰⁶ ICRC Study (n 101) Rule 45, Practice, 156–7.

¹⁰⁷ The most directly applicable IHL provision is Art. 35(3) of AP I, which prohibits causing widespread, long-term and severe damage to the natural environment. However, this only applies in IACs. Also in AP I, under the heading 'Civilian Objects', Art. 55 prohibits the use of methods or means of warfare which are intended or may be expected to cause widespread, long-term, and severe damage to the natural environment and thereby to prejudice the health or survival of the population. This overlaps considerably with Art. 35(3), except that its reference to the population indicates that it is more of an anthropocentrically conceived prohibition. It also only applies in IACs.

¹⁰⁸ Art. 56 prohibits attacking dams, dikes, and nuclear electrical power stations if the release of 'dangerous forces and consequent severe losses among the civilian population' might result. It also prohibits attacking any surrounding military objective that might result in the release of dangerous forces; AP I, Art. 56(1).

As mentioned above, Article 35(3) AP I is the underlying humanitarian law prohibition of article 8(2)(b)(iv) Rome Statute, applicable in IACs. In explaining the reasons for the inexistence of a similar provision in AP II, the ICRC's Study noted that, during the negotiations on AP II to the Geneva Conventions in 1975, Australia proposed the addition of a provision (Article 28 *bis*) concerning the protection of the natural environment.¹⁰⁹ Australia stressed that 'destruction of the environment should be prohibited not only in international but also in non-international conflicts.'¹¹⁰ However, this proposal was not successful.¹¹¹ According to the ICRC's Study, the reasons for the rejection 'may have been linked to the simplification process undertaken in the last stages of the negotiations in order to ensure the adoption of Additional Protocol II.'¹¹² The rejection of this proposal indicates that the prohibition on disproportionate environmental damage was not universally accepted in 1975.

10.4.10 The Convention on Certain Conventional Weapons

The UN Convention on Certain Conventional Weapons (1980) brings together a number of treaties containing prohibitions of certain uses of conventional weapons (such as the indiscriminate use of landmines, explosive remnants of war, and incendiary attacks).¹¹³ In its preamble, the Convention refers to environmental underpinnings, stating that 'it is prohibited to employ methods or means of warfare which are

The fact that the dams, dikes, or power stations are military objectives does not remove this protection, unless they provide regular, significant, and direct support of military operations. In the case of dams, they must also be used other than in their normal manner: Art. 56(2). The launching of attacks against works or installations is listed as a grave breach in the context of IACs: ICRC Commentary, para. 2158 'It should be noted that launching an attack against works or installations containing dangerous forces under certain conditions is condemned by Article 85 "(Repression of breaches of this Protocol)," paragraph 3(c), of the Protocol as a grave breach.' Art. 56 of AP I is applied to non-international armed conflicts by Art. 15 of AP II. Although this rule has some potential to address environmental harm, it is relatively narrow in focus and is anthropocentrically formulated, being premised on harm, or risk of harm, to human beings.

¹⁰⁹ The draft provision stated: '[i]t is forbidden to employ methods and means of combat which are intended or may be expected to cause widespread, long-term, and severe damage to the environment.' CDDH, Official Records, Vol. XV, CDDH/215/Rev. 1, Report of Committee III, Geneva, 3 February–18 April 1975, 324. Cited by the ICRC's Study (n 101) Vol. II–Practice, Part 1, 877. See also Australia, Statement at the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts ('CDDH') (Geneva 1974–77), Official Records, Vol. XIV, CDDH/III/SR.20, 14 February 1975, 176. Cited by the ICRC's Study (n 101) Vol. II–Practice, Part 1, 877.

¹¹⁰ Australia (n 110).

¹¹¹ The proposal was rejected in the plenary by twenty-five votes in favour, nineteen against and thirty-three abstentions. CDDH Official Records, Vol. VII, CDDH/SR.51, 3 June 1977, 114. Cited by the ICRC's Study (n 101) Vol. II–Practice, Part 1, 878.

¹¹² ICRC's Study (n 102) Vol. I, Rules, 156.

¹¹³ *ibid.* 154. See also Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, 10 October 1980 ('Conventional Weapons Convention'). The preamble to the convention recalls that 'it is prohibited to employ methods and means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment'. The prohibition on incendiary attacks on forests is ecocentric in the subject it is protecting: Protocol III (Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons), Art. 2(4) ('It is prohibited to make forests or other kinds of plant cover the object of attack by incendiary weapons except when such natural elements are used to cover, conceal or camouflage combatants or other military objectives, or are themselves military objectives'); Schmitt, 'Green War: An Assessment of the Environmental Law of International Armed Conflict' (n 49) 89.

intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.¹¹⁴

Since its amendment in 2001, the provisions of the Conventional Weapons Convention apply to non-international and international armed conflicts.¹¹⁵ Although the stated purpose of this convention is to *inter alia* prohibit means and methods of warfare resulting in widespread, long-term, and severe damage to the natural environment, and although it has been adjusted to apply to NIACs, the obligation to exercise criminal jurisdiction over its breaches is limited to cases of anthropocentric harm (wilful killing or serious injury to civilians).¹¹⁶ Because of this, it does not serve as a general basis under which environmental harm could be prosecuted *per se*.

10.4.11 The African Convention on the Conservation of Nature and Natural Resources

The ICRC referred to the African Convention on the Conservation of Nature and Natural Resources of 2003. Article XV of this instrument calls on states parties to 'refrain from employing or threatening to employ methods or means of combat which are intended or may be expected to cause widespread, long-term, or severe harm to the environment and ensure that such means and methods of warfare are not developed, produced, tested or transferred'.¹¹⁷ This provision is not limited to situations of IAC and so could potentially cover NIACs as well. However, the convention addresses states' obligations and does not explicitly refer to individual criminal responsibility.¹¹⁸

¹¹⁴ Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects 1980, ('Convention on certain Conventional Weapons') as amended on 21 December 2001, preamble, para. 4.

¹¹⁵ Amended Art. 1 (to date eighty-two states parties have accepted this amendment, including the United States, the United Kingdom, the Russian Federation, France, and China).

¹¹⁶ In 2006, the states parties decided that '[e]ach High Contracting Party will take all appropriate steps, including legislative and other measures, as required, to prevent and suppress violations of the Convention and any of its annexed Protocols by which it is bound by persons or on territory under its jurisdiction or control'. It was further accorded that such other measures may include, where appropriate, penal sanctions, where in relation to an armed conflict a person violates one or more of the prohibitions of the Conventional Weapons Convention or its Protocols, and wilfully causes the death or serious injury to a civilian. At the Third Review Conference of the Convention, it was decided to establish a compliance mechanism. See Decision on a Compliance Mechanism Applicable to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (adopted on 17 November 2006), numerals 7 and 8.

¹¹⁷ Art. XV of the 2003 African Convention on the Conservation of Nature and Natural Resources provides 'The Parties shall ... refrain from employing or threatening to employ methods or means of combat which are intended or may be expected to cause widespread, long-term, or severe harm to the environment and ensure that such means and methods of warfare are not developed, produced, tested or transferred': African Convention on the Conservation of Nature and Natural Resources (Revised Edition), adopted by the Second Ordinary Session of the African Union in Maputo, Mozambique, 11 July 2003, Art. XV(1)(b).

¹¹⁸ It is also unclear whether Art. XV has attained the required number of state ratifications to enter into force. It does not appear to be the case, as the latest ratification was deposited on 28 March 2014 by Angola, constituting the twelfth deposit of ratifications (the Convention requires a minimum of fifteen to enter into force). Source: AU website 'List of countries which have ratified/accepted to the Convention' as of 7 April 2017, at https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtmsg_no=XXVI-2&chapter=26&lang=en accessed 1 June 2017. It should be further noted that Art. 15, of interest here, was incorporated in the 2003 revision of the 1968 Convention (which entered into force on 16 June 1969).

Consequently, this instrument lends general support to the application of the prohibition to NIACs, but does not lend support to the imposition of criminal liability for engaging in such conduct.

10.4.12 The Draft Code of Crimes Against the Peace and Security of Mankind

Another multilateral source referred to by the ICRC is the 1996 Draft Code of Crimes against the Peace and Security of Mankind. This document, which was produced by the International Law Commission, includes a provision imposing individual criminal responsibility for using methods and means of warfare resulting in widespread, severe, and long-term damage to the environment.¹¹⁹ Significantly, the ILC stated that this prohibition would apply in NIACs, acknowledging that it was extending the application of this substantive prohibition beyond the ambit of Article 35(3) of AP I, on which it was based. The ILC did not provide an explanation for the application to NIACs other than stating that it 'considered that this type of conduct could constitute a war crime covered by the Code when committed during an international or a non-international armed conflict.'¹²⁰ The ILC also acknowledged that there was some ambiguity as to whether this conduct already constituted a war crime, as opposed to a general prohibition, under existing IHL.¹²¹

The 1996 Draft Code is not a primary source of international law as it does not constitute an international treaty or a source of customary international law.¹²² Nonetheless, the views of the ILC, as a body collecting together preeminent publicists, constitute a subsidiary means of determining the rules of international law.¹²³ Although not a substantive instrument of international law, the ILC's draft code provides a limited measure of support for the contention that there is a customary prohibition against disproportionate environmental attacks during NIACs that entails individual criminal responsibility.

¹¹⁹ Art. 20(g) reads: 'In the case of armed conflict, using methods or means of warfare not justified by military necessity with the intent to cause widespread, long-term and severe damage to the natural environment and thereby gravely prejudice the health or survival of the population and such damage occurs.' The ILC also considered the inclusion of a crime of ecocide, which would have applied irrespective of the existence of an armed conflict. There was considerable support for this motion and only three states explicitly opposed it (the United States, the United Kingdom, and the Netherlands). However, the provision was not ultimately included in the code: A/CN.4/448 and Yearbook of the ILC 1993, Vol. II, Pt. 1. Documents of the forty-fifth session. A/CN.4/SER.A/1993/Add.1 (Part 1) (includes A/CN.4/448 and Add.1).

¹²⁰ Draft Code of Crimes against the Peace and Security of Mankind with commentaries 1996; Report of the International Law Commission on the work of its forty-eighth session, 56.

¹²¹ Report of the International Law Commission on the work of its forty-eighth session, 56 ('the opening clause of this sub-paragraph does not include the phrase "in violation of international humanitarian law" to avoid giving the impression that this type of conduct necessarily constitutes a war crime under existing international law in contrast to the preceding paragraph.').

¹²² ICJ Statute, Art. 38(1).

¹²³ ICJ Statute, Art. 38(1)(d). It has been accepted that the ILC's work falls under Art. 38(1)(d), ICJ Statute. See, for example, Thirlway (pointing out that, for instance, in the *Case Concerning the Application of the Genocide Convention*, the ICJ regarded Art. 16 of the ILC's Draft Articles on State Responsibility as 'reflecting a customary rule') in Hugh Thirlway, *The Sources of International Law* (Oxford: Oxford University Press, 2015), 18–19.

10.4.13 Agreement on the Application of International Humanitarian Law between the Parties to the Conflict in Bosnia and Herzegovina

The ICRC referred to the 1992 Agreement on the Application of IHL between the Parties to the Conflict in Bosnia and Herzegovina. Paragraph 2.5 of this agreement requires that hostilities be conducted in accordance with *inter alia* Articles 35(3) and 55 of AP I of 1977, which are the basis of the prohibition against disproportionate environmental attacks. The parties to this agreement included the Bosnian Serbs and their armed forces under Radovan Karadzic, which was in an armed conflict that could be classified as non-international *vis-à-vis* the Bosnian Muslim forces of Alija Izetbegović.¹²⁴ According to the Appeals Chamber of the ICTY, by undertaking to punish those responsible for violations of the substantive provisions in the agreement, the parties envisioned individual criminal responsibility as attaching to these prohibitions, including in relation to a non-international armed conflict.¹²⁵ This agreement constitutes an example of state practice accompanied by *opinio juris* by specifically affected states (or state-like entities) in which environmental damage was subjected to criminal prohibition. This agreement accordingly supports the notion of the war crime of disproportionate environmental attacks applying during NIACs.

10.4.14 UN Secretary-General's Bulletin Concerning Observance of International Humanitarian Law

In analysing the prohibition against excessive environmental damage, the ICRC referred to the 1999 UN Secretary-General's Bulletin Concerning Observance of International Humanitarian Law by Forces under the command and control of the United Nations. Section 6.3 of this instrument provides:

The United Nations force is prohibited from employing methods of warfare which may cause superfluous injury or unnecessary suffering, or which are intended, or may be expected to cause, widespread, long-term and severe damage to the natural environment.

The prohibition applies to UN forces in IACs and NIACs.¹²⁶ Although a statement of the Secretary-General does not constitute state practice *per se*, it is notable that the obligations set out in the Bulletin are imported into the memoranda of understanding signed with troop-contributing countries for UN peacekeeping missions. In this way, the obligations including the requirement of avoiding causing widespread, severe, and long-term damage to the environment flow directly into state practice.¹²⁷ The

¹²⁴ See *Tadić* Jurisdiction Decision (n 1) para. 73. ¹²⁵ See *ibid.* para. 136.

¹²⁶ UN Secretary-General's Bulletin—Observance by the United Nations Forces of International Humanitarian Law, ST/SGB/1999/13, 6 August 1999. Section 1.1: 'United Nations forces when in situations of armed conflict they are actively engaged therein as combatants, to the extent and for the duration of their engagement.'

¹²⁷ Report of the Special Committee on Peacekeeping Operations and its Working Group on the 2007, Resumed Session, 12 June 2007, Doc A/61/19 (part III) (directing that Annex H be included in memoranda of understanding with troop contributing countries: 'We will comply with the Guidelines on International Humanitarian Law for Forces Undertaking United Nations Peacekeeping Operations and the applicable portions of the Universal Declaration of Human Rights as the fundamental basis of our standards').

memoranda also include robust provisions requiring individual responsibility to be imposed for serious crimes committed. In this way, the accompanying memoranda (read together with the Bulletin) constitute state practice supporting the penal punishment of excessive environmental damage committed during armed conflict.

The UN General Assembly Resolution 47/37 of 25 November 1992 also provides broad support for the illegality of grave harm to the environment and does not differentiate between IACs and NIACs.¹²⁸ However, it is unclear whether its reference to ‘destruction of the environment, not justified by military necessity and carried out wantonly’ is a specific legal formulation or merely a means of referring to the existing prohibitions such as that reflected in Article 8(2)(b)(iv) of the Rome Statute.

10.4.15 ICRC Working Paper for the Preparatory Committee for the Establishment of an International Criminal Court

In 1997, the ICRC submitted a working paper to the Preparatory Committee for the Establishment of an International Criminal Court. The working paper included Article 3(viii), which made it a crime ‘to cause wilfully widespread, long-term and severe damage to the natural environment’ in NIACs. No specific justification was given for the applicability of this crime to NIACs, apart from the general quotation of the *Tadić* Jurisdictional Decision that reasoned that ‘what is inhumane, and consequently proscribed, in international wars, cannot but be inhuman and inadmissible in civil strife’.¹²⁹ As pointed out by the ICRC’s Study, an additional condition was added in the criminalization of the conduct under Article 8(2)(b)(iv) Rome Statute, that is ‘which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated’.¹³⁰ Despite being proposed for application to both IACs and NIACs, the crime of disproportionate environmental attacks was not incorporated into the Rome Statute in the context of NIACs. Accordingly, extending the protection to the context of NIACs would require the states parties to adjust their prior position on this issue.

10.4.16 Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques

The Convention on the Prohibition of Environmental Modification Techniques (‘ENMOD’) is also relevant to the assessment.¹³¹ ENMOD aims to exclude the use of

Marten Zwanenburg states in the *Max Planck Encyclopaedia of Public International Law United Nations and International Humanitarian Law* (‘It can be argued that it is a unilateral act of the United Nations comparable to unilateral acts of States in international law. In any event it is an administrative issuance of the UN Secretary-General, a subsidiary instrument elaborating the staff rules issued by the UN Secretary-General as the highest administrative authority of the organization.’).

¹²⁸ UN General Assembly Resolution 47/37, 25 November 1992, Protection of the Environment in Times of Armed Conflict (‘Stressing that destruction of the environment, not justified by military necessity and carried out wantonly, is clearly contrary to existing international law’).

¹²⁹ Statement of the ICRC before the Preparatory Committee for the Establishment of an International Criminal Court, New York, 14 February 1997, quoting *Tadić* Jurisdictional Decision (n 1) para. 119.

¹³⁰ ICRC’s Study (n 101) 153.

¹³¹ Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 18 May 1977, 31 UST 333, TIAS No.9614.

environmental modification techniques as a method or weapon of war.¹³² It prohibits state parties from using hostile environmental modification techniques that result, or could reasonably be expected to result,¹³³ in ‘widespread, long-lasting or severe effects as the means of destruction, damage or injury to another state party’.¹³⁴ It is envisioned to address misuses of the environment through techniques such as unnaturally induced earthquakes, tsunamis, or changes in weather patterns.¹³⁵ ENMOD provides a significantly wider protection for the environment than Article 8(2)(b)(iv) of the Rome Statute and Article 35(3) of AP I, due to the disjunctive nature of the terms ‘widespread’, ‘long-lasting’, and ‘severe’ in ENMOD. Significantly, ENMOD is not limited in application to international armed conflicts.

However, ENMOD is only of indirect relevance to the assessment of individual criminal responsibility, as there are no criminal sanctions for violations of its terms.¹³⁶ Rather, it relies on enforcement through political means.¹³⁷ As an upshot, ENMOD is primarily useful as an interpretive aide for other provisions that do entail individual criminal responsibility.

10.4.17 Military manuals

The ICRC surveyed military manuals. Several military manuals apply the prohibition against causing widespread, long-term, and severe damage to the environment, or a substantively similar prohibition, to both IACs and NIACs, even where they distinguish between IACs and NIACs elsewhere in these instruments.¹³⁸ According to the ICRC, some states’ military manuals have even more robust protections of the environment that are expressly recognized as war crimes. For example, the Instructor’s Manual of Chad of 2006 states that ‘it is prohibited to cause “severe damage to the natural environment” and that to do so is a war crime’.¹³⁹ This is relevant state

¹³² Weinstein (n 7) 700.

¹³³ While Art. 1(1) only employs the term ‘having’, the Understanding relating to Art. 2, that interprets the term ‘environmental modification techniques’, clarifies that prohibited use of environmental modification techniques also extends to situations where widespread, long lasting, or severe environmental harm could reasonably be expected to occur. The Annex to ENMOD notes that while the Understandings were not incorporated into ENMOD, are part of its negotiating record.

¹³⁴ ENMOD, Art. 1. ¹³⁵ ENMOD, Understandings; UNEP Study (2009) (n 9) 12.

¹³⁶ ILC, Draft Statute for an International Criminal Court with commentaries 1994, Annex., 69. John Cohan, ‘Modes of Warfare and Evolving Standards of Environmental Protection Under the International Law of War’ (2002–2003) 15 Florida Journal of International Law, 481–524.

¹³⁷ Weinstein (n 7) 701.

¹³⁸ See, for example, Australian Defence Doctrine Publication 6.4—Law of Armed Conflict, June 2006, para. 5.50 (‘It is prohibited to employ methods or means of war which cause widespread, long term and severe damage to the environment or may be expected to cause such damage and prejudice the health or survival of the population’); Canada’s LOAC Manual (1999) states: ‘83. Care shall be taken in an armed conflict to protect the natural environment against widespread, long-term and severe damage. 84. Attacks which are intended or may be expected to cause damage to the natural environment that prejudices the health or survival of the population are prohibited,’ The Law of Armed Conflict at the Operational and Tactical Level, Office of the Judge Advocate General, 1999, 4-8, 4-9, paras. 8–84.

¹³⁹ Chad, Droit internationale humanitaire, Manuel de l’instructeur en vigueur dans les forces armées et de sécurité, Ministère de la Défense, Présidence de la République, Etat-major des Armées, 2006, 78.

practice, indicating that several states prohibit their armed forces from causing long-term, severe, and widespread environmental damage in the context of any armed conflict.¹⁴⁰

10.4.18 National legislation

The ICRC also surveyed national legislation. Many states criminalize serious harm to the environment. Some states criminalize environmental harm irrespective of the occurrence of armed conflict, under the label of ecocide.¹⁴¹ A large number of states have a criminal provision outlawing widespread, severe, and long-term damage to the environment (or a similar formulation) committed during armed conflict.¹⁴² Whereas some states refer to armed conflict generally, such as Spain,¹⁴³ others expressly including the context of NIACs.¹⁴⁴ Many states' legislation refers to AP I and incorporates by reference Article 8(2)(b)(iv), implying that the provision in question would be limited

¹⁴⁰ The United States disputes the relevance of these instruments, implicitly arguing that military manuals may include these prohibitions for political reasons rather than due to any legal obligation to do so; see Bellinger and Haynes (n 104) 447 ('the United States long has stated that it will apply the rules in its manuals whether the conflict is characterized as international or non-international, but this clearly is not intended to indicate that it is bound to do so as a matter of law in non-international conflicts'). To the extent the United States asserts that it is not acting due to a legal obligation, but rather for political reasons, it is unclear whether other states would attempt to make the same distinction. The domestic criminalization of such conduct in several countries, as discussed below, suggests that the underlying conduct is considered criminal in nature and is not prohibited merely as a matter of political expediency.

¹⁴¹ See ICRC's Study (n 101) referring to Armenia (*Penal Code*, 2003, Art. 394); Belarus (*Criminal Code*, 1999, Art. 131); Kazakhstan (*Penal Code*, 1997, Art. 161); Kyrgyzstan (*Criminal Code*, 1997, Art. 374); Moldova (Republic of) (*Penal Code*, 2002, Art. 136); Russia (Russian Federation, *Criminal Code*, 1996, Art. 358); Tajikistan (*Criminal Code*, 1998, Art. 400); Ukraine (*Criminal Code*, 2001, Art. 441); Vietnam (*Penal Code*, 1999, Art. 342—criminalizes ecocide as a crime against mankind). See also Mongolia (*Criminal Code*, entered into force in 2002, Art. 304. Causing Ecological Imbalance).

¹⁴² See ICRC's Study (n 101) referring to Bosnia (Bosnia and Herzegovina, Federation, *Criminal Code*, 1998, Art. 154(2), Bosnia and Herzegovina (*Criminal Code*, 2003, Art. 173(2)(c)); Colombia (*Penal Code*, 2000, Art. 164); Croatia (*Criminal Code*, 1997, Art. 158(2), *Criminal Code*, 1997, as amended in June 2006, Art. 158(2)); Estonia (*Penal Code*, 2001, Art. 104); Ethiopia (*Criminal Code*, 2004, Art. 270); Mali (*Penal Code*, 2001, Art. 31(4)); Serbia (*Criminal Code*, 2005, Art. 372(2)); Slovenia (*Penal Code*, 1994, Art. 374(2)); Uruguay (*Law on Cooperation with the ICC*, 2006, Art. 26(3)12). See also Swiss *Criminal Code*, Art. 264(g), as amended in 2002. See also Cape Verde (*Criminal Code*, approved by Legislative Decree 4/2003, 18 November 2003—Art. 273); Montenegro (Republic of) (*Criminal Code*, 2004, Art. 428(2)); Philippines (*Act on Crimes against International Humanitarian Law, Genocide, and other Crimes Against Humanity*, 2009, Art. 4(c)(5)).

¹⁴³ Art. 610 of the Spanish Penal Code provides: 'Anyone who, in the context of an armed conflict, uses or orders the use of methods or means of combat that are prohibited or are intended to cause unnecessary suffering or superfluous injury, or that are designed to or can reasonably be expected to cause excessive, lasting and serious damage to the natural environment, thus compromising the health or survival of the population, or who orders that no quarter shall be given, shall be penalized with a term of imprisonment of 10 to 15 years, without prejudice to the penalty imposed for the resulting damage.'

¹⁴⁴ See ICRC's Study (n 101) referring to Azerbaijan (*Criminal Code*, 1999, Art. 116.0.2); Peru (*Code of Military and Police Justice*, 2006, Art. 101), Peru, (*Military and Police Criminal Code*, 2010, Art. 97); Korea (Republic of), (*ICC Act*, 2007, Art. 13(3)); Spain (*Penal Code*, 1995, Art. 610), Spain, (*Penal Code*, 1995, as amended by Law 15/2003, 25 November 2003, Art. 610), Spain, (*Royal Ordinances for the Armed Forces*, 2009, Art. 114). See also Greece (Law No. 3948/2011 on the adaptation of internal law to the provisions of the ICC Statute adopted by Law 3003/2002 (A75), April 2011, Art. 12(1)(c)); Portugal (Adaptation of Criminal Legislation to ICC Statute, Law 31/2004, 22 July 2004, Art. 11(i)). See also Switzerland (*Federal law introducing modifications to federal legislation by virtue of the implementation of the Rome Statute of the ICC*, 18 June 2010, Art. 264(b) and (g)(a)); Panama, (*Criminal Code*, Law No. 14 of 18 May 2007, Art. 436).

to the context of IACs.¹⁴⁵ Other states expressly limit this criminal provision to circumstances of international armed conflict.¹⁴⁶

This above survey of criminal legislation shows that the criminalization of environmental damage caused during armed conflict is not uniform among states. As a baseline, many states have incorporated the prohibition against causing widespread, severe, and long-term harm to the environment during armed conflicts. Several states have criminalized this conduct explicitly in NIACs or in sufficiently broad terms to cover the context of NIACs.

10.4.19 Statements of governments

In response to the work of the International Law Commission's Special Rapporteur on Protection of the Environment during Armed Conflict, the Federated States of Micronesia stated that 'intentional destruction of [the] natural environment for military gain is a type of total warfare that is abhorrent under international law, particularly in situations where the populations depend of that natural environment for its survival'.¹⁴⁷

The US Department of Defense Law of War Manual of 12 June 2015 has explicitly reaffirmed its rejection to the customary law nature of Articles 35(3) and 55 AP I (with respect to both conventional and nuclear weapons), citing the US response to the ICRC's Study which contested the customary law nature of Rule 45. It regards both provisions as 'overly broad and ambiguous'.¹⁴⁸ In its response to the ICRC, the United States argued that Rule 45, as formulated in the ICRC Study, fails to take into account scenarios in which an attack will result in widespread, long-term, and severe damage to the natural environment but is nonetheless necessary because of the presence of a military target.¹⁴⁹ Responding to the ICRC Study, the representative of the United States argued that Rule 45 'would

¹⁴⁵ See ICRC's Study (n 101) referring to Belgium (*Penal Code*, 1867, as amended on 5 August 2003, Chapter III, Title I *bis*, Art. 136 *quater*, § 1(22)), Belgium, (*Law relating to the Repression of Grave Breaches of International Humanitarian Law*, 1993, as amended on 23 April 2003, Art. 1 *ter*, § 1(12)); Canada (*Crimes against Humanity and War Crimes Act*, 2000, Section 4(1) and (4)); Congo (Democratic Republic of the), *Genocide, War Crimes and Crimes against Humanity Act*, Law No. 8-98, 31 October 1998, Art. 4(b)); Denmark (*Military Criminal Code*, 1973, as amended in 1978, § 25(1)), Denmark, *Military Criminal Code*, 2005, § 36(2)); Georgia (Georgia, *Criminal Code*, 1999, Art. 413(d)); Ireland (*Geneva Conventions Act*, 1962, as amended in 1998, Section 4(1) and (4)); New Zealand (*International Crimes and ICC Act*, 2000, Section 11(2)); Norway (*Military Penal Code*, 1902, as amended in 1981, § 108(b)); United Kingdom (*ICC Act*, 2001, Sections 50(1) and 51(1) (England and Wales) and Section 58(1) (Northern Ireland, Schedule 8)).

¹⁴⁶ See ICRC Study (n 101) referring to Australia (*Criminal Code Act*, 1995, as amended to 2007, Chapter 8, § 268.38, 327–8), Australia, *ICC (Consequential Amendments) Act*, 2002, Schedule 1, § 268.38(2)); Burundi (*Law on Genocide, Crimes against Humanity and War Crimes*, 2003, Art. 4(B)(d)); Germany (*Law Introducing the International Crimes Code*, 2002, Art. 1, § 12(3)); Netherlands (*International Crimes Act*, 2003, Art. 5(5)(b)); South Africa (*ICC Act*, 2002, Schedule 1, Part 3, § (b)(iv)). See also Comoros (Decret n°12-022/PR du 04 12 2011 portant promulgation de la loi n°11-020/AU du 13/12/2011 portant mise en oeuvre du Statut de Rome, Art. 20(2) (iv)).

¹⁴⁷ See Third Report on the Protection of the Environment in Relation to Armed Conflicts, (n 62), para. 58.

¹⁴⁸ See Bellinger and Haynes (n 104).

¹⁴⁹ *ibid.* 456 ('An example illustrates why States—particularly those not party to AP I—are unlikely to have supported Rule 45. Suppose that country A has hidden its chemical and biological weapons arsenal in a large rainforest, and plans imminently to launch the arsenal at country B. Under such a rule, country

preclude States from taking into account the principles of military necessity and proportionality'.¹⁵⁰ The American view that military necessity is a necessary element of this prohibition was essentially incorporated into Article 8(2)(b)(iv) of the Rome Statute, which essentially repeats Rule 45 with the added final clause 'which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated'.

10.4.20 Conclusion on the customary status of the criminal prohibition of disproportionate environmental harm

These islands of legal support for the criminalization of environmental harm during NIACs will allay possible concerns that the ICC would be entering completely uncharted territory if its jurisdiction were to be extended to cover disproportionate harm committed during NIACs.¹⁵¹ While the analysis does not definitively show that there exists a virtually uniform practice among states of following this rule, the existence of precedents for this prohibition entailing criminal consequences should reassure the Assembly of States Parties of the ICC that such an extension would not be a radical departure from the existing legal framework, but instead would constitute an important further development in the progression of the law protecting the environment.

Nonetheless, the ICRC's claim that this support reaches the level to amount to customary international law is not immune from criticism. Many of the cited sources do not impact on the analysis whereas the discussion of other sources does not sufficiently explore their impact, which is sometimes significant, on the status of the prohibition under customary international law. Moreover, the ICRC was not looking specifically at the issue of individual criminal responsibility. Accordingly, its conclusions can only be taken as indirect guidance for the customary international law support for a prohibition of disproportionate environmental damage entailing criminal responsibility.

10.5 Accountability for Environmental Harm as a Facet of *Jus Post Bellum*

While international humanitarian law and the war crimes provisions of the Rome Statute apply during armed conflict, it is well documented that environmental damage

B could not launch a strike against that arsenal if it expects that such a strike may cause widespread, long-term, and severe damage to the rainforest, even if it has evidence of country A's imminent launch, and knows that such a launch itself would cause environmental devastation.').

¹⁵⁰ *ibid.* 456.

¹⁵¹ It is likely that such concerns or opposable views may attempt to be grounded on the general treaty rule regarding third states, as set out in Art. 34 Vienna Convention on the Law of Treaties (1969): 'A treaty does not create either obligations or rights for a third State without its consent.' It is accepted, however, 'that the consequences deriving from Art. 12 para. 2 have, arguably, little to do with an alleged third party effect of the Rome Statute.' See Proels, 'Art. 34—General Rule Regarding Third States' in Oliver Dörr and Kirsten Schmalenbach (eds.), *Vienna Convention on the Law of Treaties. A Commentary* (Berlin: Springer, 2012), 617, para. 22 (with reference to a different view). By the same token, if the situation is referred by the Security Council under Art. 13(b), the binding effect of a Security Council Resolution under Chapter VII UN Charter, may diminish the relevance of the role of the rule enshrined in Art. 34 Vienna Convention with respect to non-state parties to the Rome Statute. See, Mark Villiger, *Commentary on the 1969 Vienna Convention on the Law of Treaties* (Leiden: Martinus Nijhoff, 2009), 473, para. 13.

often continues unabated when warfare ends.¹⁵² At this transitional time, prior to the full restoration of peace but after war, the applicability of the various laws relevant to serious environmental harm is an important consideration. States and the international community will have a strong incentive, and in some cases a legal responsibility, to establish responsibility and provide redress for environmental harm caused during armed conflicts. At the same time, leaders of warring factions will often have a strong incentive to seek amnesties and thus insulate themselves from criminal responsibility.¹⁵³ Many treaties imposing liability for environmental harm have exceptions for damage caused by acts of war or exclusions for certain persons from liability for such acts.¹⁵⁴ However, the existence and parameters of specific obligations fitting into the rubric of *jus post bellum* has only recently limited academic treatment and analysis.

It is a trite but important observation that the legal norms and provisions encouraging a just peace are of equal significance to the principles encouraging just war. *Jus post bellum*, which collects the laws and norms relevant to the transition from a state of armed conflict to peace, serves as a fulcrum for the creation of conditions amenable to a lasting and equitable end to hostilities.¹⁵⁵

An area of *jus post bellum* of particular pertinence to the current analysis is that of accountability for atrocity crimes committed during armed conflict, and particularly NIACs.¹⁵⁶ In the immediate aftermath of armed hostilities, the investigation and prosecution of crimes, including environmental crimes, may seem precipitous and distracting from the tenuous peace. However, it is an important aspect of the transition to a complete resolution of the cause and consequences of hostilities. Some peace agreements even designate responsibility for the post-conflict detection and prevention of environmental harm.¹⁵⁷

Larry May argues that '[c]losure is hard to achieve if there is not a public reckoning for those who used the war as an occasion to commit wrongs, or who chose to conduct war in a wrongful way'.¹⁵⁸ Without closure, any peace that is agreed on may be fleeting and may simply suppress and fuel increased animosity between rival groups. In this respect, environmental harm is an important factor to address. The destruction of the environment imperils reconciliation as it removes a potential platform for cooperative endeavours. A ruined or degraded environment jeopardizes the success of post-conflict economic projects across sectarian divides. It means a smaller pool of resources to be used for societal reconstruction, including basic activities such as feeding and hydrating the population. With fewer resources, a return to conflict becomes all the more

¹⁵² UNEP (2009) (n 9).

¹⁵³ Charles Garraway, 'The Relevance of Jus Post Bellum: a Practitioner's Perspective' in Easterday, Iverson, and Stahn (n 5) 159.

¹⁵⁴ See Third Report on the Protection of the Environment in Relation to Armed Conflicts (n 62), paras. 110–12.

¹⁵⁵ See definition of *jus post bellum* above.

¹⁵⁶ See Carsten Stahn, 'The Future of *Jus Post Bellum*' in Carsten Stahn and Jann K. Kleffner (eds.), *Jus Post Bellum: Towards a Law of Transition from Conflict to Peace* (Cambridge: TMC Asser, 2008), 236; Garraway (n 154).

¹⁵⁷ Third Report on the Protection of the Environment in Relation to Armed Conflicts (n 62), paras. 155–8.

¹⁵⁸ Larry May, 'Jus Post Bellum, Grotius and Meionexia' in Easterday, Iverson, and Stahn (n 5) 16.

difficult to avoid. It also limits the possibility to enjoy features that can cross sectarian divides, such as rivers, rare or emblematic species of flora and fauna, and nature recreation areas.¹⁵⁹

Reflecting the significance of environmental protection and rehabilitation in the wake of armed conflict, peace agreements between warring parties in NIACs have sometimes explicitly reflected the need to preserve the environment.¹⁶⁰

Dieter Fleck advocates the prioritization of peacebuilding over retribution in a post-conflict setting.¹⁶¹ It should be noted that international criminal justice is not focused on pure retribution, but also seeks to encourage accountability, truth-telling, reconciliation, and deterrence of atrocity crimes. In light of these broader goals, the oft-decried tension between peacebuilding and criminal justice is to a certain degree a false dichotomy. In many instances, justice and international peacebuilding can be mutually reinforcing, and ‘it is increasingly acknowledged that peace and justice are not contradictory but complementary’.¹⁶²

Establishing individual criminal responsibility for serious environmental harms, and imposing sentences, including custodial sentences, for perpetrators, may assist efforts to break cycles of offending and violence. Larry May argues that ‘it is hard to comprehend what *jus post bellum* justice would involve if it did not have some accounting for the wrongdoers during the war or armed conflict’.¹⁶³ In doing so, he recognizes that while those seeking to rebuild states in such circumstances face a daunting array of challenges, and individual criminal responsibility should not displace the sociological, economic, and security imperatives in the wake of widespread violence and turmoil, rendering justice for grave crimes is a necessary (and sometimes arduous) component of a comprehensive transition to peace and reconciliation of sectarian groups, which is partly reliant on a healthy shared environment.

However, the form of justice that is required is a more nuanced question. Clarifying the relevant provisions and principles that impact this sphere of *jus post bellum* is an ongoing project, which will be informed by experience and retrospective analyses of the success of various justice models, from the well established international criminal tribunal model, to the various forms of truth and reconciliation processes, to hybrid models of justice. For example, a landmark model of transitional justice is that undertaken by South Africa. During the 1990s, South Africa adopted a Truth and Reconciliation Commission to generate an account of the atrocities that had occurred in the apartheid era and a basis for moving towards reconciliation by placing primacy on truth-seeking

¹⁵⁹ See *ibid.* text accompanying footnote, 17 (discussing danger of environmental harm for the viability of a sustainable peace process and for the rejuvenation of the economy).

¹⁶⁰ See, for example, El Salvador Peace Agreement (Chapultepec)—1992, The Government of El Salvador and the Frente Farabundo Martí para la Liberación Nacional (FMLN), Arts. 13 and 17(12), available at <http://theirwords.org/?title=&country=&ansa=&document_type=&year=&__keyword_field=&keyword__0_id=651&keyword__0_type=keyword_value> accessed 30 September 2015; Eastern Sudan Peace Agreement between the Government of Sudan and the Eastern Sudan Front, 2006, available at <http://theirwords.org/?title=&country=&ansa=&document_type=&year=&__keyword_field=&keyword__0_id=651&keyword__0_type=keyword_value> accessed 30 September 2015.

¹⁶¹ See chapter 9 in this volume.

¹⁶² Vincent Chetail, ‘Introduction, Post-conflict, Peacebuilding—Ambiguity and Identity’ in Vincent Chetail (ed.), *Post-Conflict. Peacebuilding: a Lexicon* (Oxford: Oxford University Press, 2009).

¹⁶³ May (n 159) 16.

rather than criminal accountability. Former UN Secretary-General Kofi Annan has heralded the South African Truth and Reconciliation Commission.¹⁶⁴ While valid concerns have been raised that the amnesties granted by the South African Truth and Reconciliation Commission may have curtailed true accountability, the South African approach to transitional justice in 1994 remains an example of a transitional justice process which had a positive impact in a number of respects and provided a contribution towards societal reconciliation.

At the same time, when analysing obligations arising from and continuing after armed conflict, the differences between international criminal law and international humanitarian law and the overlapping field of *jus post bellum* must be borne in mind. Whereas the provisions of international criminal law are designed to be as precise, consistent, and concretely enforceable as possible, the norms and principles that could be categorized as *jus post bellum* constitute a more fluid collection that are often normatively framed and oriented to states rather than to inform individuals of their potential criminal responsibility. Suggestions such as creating protected zones of major ecological importance as a facet of *jus post bellum* are important normative goals,¹⁶⁵ but at present have not been formulated in a manner directly enforceable as a matter of international criminal law.

Following the question of whether to investigate allegations of atrocities, including environmental harm, comes the question of who to investigate. Grotius asserted that 'the soldiers that have participated in some common act, [such] as the burning of a city, are responsible for the total damage'.¹⁶⁶ However, international criminal law seeks to determine not just which soldiers participated in crimes, but also which leaders brought about those crimes through their common plans, orders, or other inducements. To do so, and to differentiate the responsibility for specific crimes, investigation of reported atrocities is required, and the highly developed provisions of international criminal law can be of significant assistance as they distinguish between principle perpetrators, acting individually or in common, those who order, solicit, or induce, those who aid and abet, and various other forms of responsibility, including superior responsibility for military and civilian leaders.¹⁶⁷

Where individual accountability is established in a post-conflict setting for crimes committed during the conflict, the question of compensation and damages naturally follows. It is well established that state responsibility requires reparation for victims of wrongful acts committed during armed conflict.¹⁶⁸ Where criminal conduct is implicated, responsibility may be placed upon the authors of crimes in lieu of state

¹⁶⁴ See United Nations News Centre, at <<http://www.un.org/apps/news/story.asp?NewsID=17800>> accessed 8 January 2016.

¹⁶⁵ Third Report on the Protection of the Environment in Relation to Armed Conflicts (n 62) paras. 31, 50.

¹⁶⁶ May (n 159) 17.

¹⁶⁷ See, for example, Rome Statute of the ICC, Arts. 25 and 28; ICTY Statute, Arts. 7(1) and (3); ICTR Statute, Arts. 6(1) and (3).

¹⁶⁸ Art. 3 of the Hague Convention (IV) Respecting the Laws and Customs of War on Land (18 October 1907) 2 AJIL Supplement 90–117 (1908); Art. 91 AP I; International Law Association, *Declaration of International Law Principles on Reparation for Victims of Armed Conflict* (2010); International Law Association, *Procedural Principles for Reparation Mechanisms* (2014).

authorities, where possible. Article 12 of the United Nations Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law provides that perpetrators should provide compensation to victims and their families or dependents, and if this is not possible states should provide compensation to victims suffering significant physical injury or impairment of mental health, and to the families or dependents of victims who have been killed or physically or mentally incapacitated.¹⁶⁹

The Special Rapporteur of the International Law Commission addressed post-conflict reparations for serious degradation of the environment during armed conflict in her third report on the prevention of environmental damage during armed conflict.¹⁷⁰ While some instances of compensation orders in relation to destruction of people's environments were listed (particularly in human rights courts),¹⁷¹ there were no remedies given for convictions specifically concerning charges of environmental harm (as opposed to violations of human rights perpetrated through actions also causing environmental harm).

10.6 Conclusion

The preceding analysis shows that while environmental harm occurs in armed conflict and while such conflicts are increasingly sectarian and internal in nature, there are essentially no provisions of international criminal law that directly address harm to the environment occurring during NIACs. Contrastingly, there are several instruments of general international law supporting the application of the prohibition on disproportionate environmental damage to the context of NIACs. Moreover, in many domestic jurisdictions an individual causing serious harm to the environment without lawful grounds for doing so would find themselves charged with criminal responsibility for those acts. Between regular peace-time legal regimes in domestic systems and the relatively well developed set of rules applying in IACs, sits the murkier regulatory framework governing NIACs. The gap in coverage over NIACs for environmental harm in the Rome Statute is notable and calls for redress.

Addressing environmental harm indirectly through prohibitions aimed at other crimes presents itself as an available and feasible means of progressing. Anthropocentric provisions, such as crimes against humanity, genocide, and other war crimes can apply during NIACs. This indirect method also has the practical benefit of relying on tested

¹⁶⁹ General Assembly Resolution A/60/509/Add.1, 16 December 2005, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, IX Reparation for Harm Suffered, 15. ('[i]n cases where a person, a legal person or other entity is found liable for reparation to a victim, such party should provide reparation to the victim or compensate the State if the State has already provided reparation to the victim.').

¹⁷⁰ ILC Report of its sixty-seventh session, held in July 2015, where it considered the Second Report of the Special Rapporteur, A/CN.4/685, Chapter IX, Protection of the Environment in Relation to Armed Conflicts, para. 165.

¹⁷¹ Third Report on the Protection of the Environment in Relation to Armed Conflicts (n 62), paras. 198–205.

provisions that have formed the basis of robust trials in international courts previously. However, this is at best a temporary solution and is ultimately unable to fully address environmental harm. International criminal law has a strong symbolic component. Prosecuting environmental damage indirectly under anthropocentric provisions may result in convictions of limited symbolic impact *vis-à-vis* environmental values. This does not convey the opprobrium that serious environmental harm merits. Consequently, if the international community wishes to directly condemn harm to the environment during all armed conflict, the law must be further developed to directly and comprehensively address serious environmental harm in the context of NIACs.

One intermediate step to enhance the protection of the environment would be the adoption of a provision applicable in NIACs that prohibited the conduct set out in Article 8(2)(b)(iv) of the Rome Statute. War crimes prohibitions have been similarly expanded to cover NIACs during previous ICC negotiations.¹⁷² The most appropriate vehicle to achieve this amendment would be through a review conference of the ICC, where the Assembly of State Parties to the Rome Statute could consider whether to adopt a provision prohibiting environmental harm in NIACs.¹⁷³ Such an amendment would not only allow the ICC to prosecute such activity if it occurred, but would also signal a symbolic step towards the international community's recognition of such a prohibition forming part of customary international law, irrespective of whether the harm occurred during an IAC or a NIAC.

The adoption of a prohibition against environmental harm in the context of NIACs would also provide a valuable provision of *jus post bellum*. As the conflict resided and processes are designed to ensure lasting peace, it is important to have clear, *a priori*, markers as to the conduct that is broadly reproached at the international level, and which should result in prosecution. The ending of impunity for the most serious crimes against the environment would send a signal that certain boundaries should not be crossed, even when in the midst of fratricidal warfare. At the same time, care would have to be taken to ensure that the fluid and dynamic parameters of *jus post bellum* were not rendered less useful by the imposition of rigid legal definitions necessary to found fair criminal trials.

¹⁷² See Alamuddin and Webb (n 99) 95.

¹⁷³ UNEP Study (2009) (n 9) 7.

PART III
TENSIONS AND DILEMMAS

Reparation for Environmental Damage in *Jus Post Bellum*

The Problem of Shared Responsibility

*Ilias Plakokefalos**

11.1 Introduction

The problem of environmental damage caused during armed conflict has entered the international legal agenda fairly recently. Awareness over environmental protection in general has spurred an interest in the literature on the threats and harm to the environment posed by armed conflict.¹ It is not a coincidence that the International Law Commission ('ILC') has recently included in its agenda the topic of 'Protection of the Environment in Relation to Armed Conflicts'.² Among the reasons cited by the ILC for including the topic in the agenda was that the perspective of *jus ad bellum* and *jus in bello*, from which the issue was viewed, was too narrow.³

The aim of this chapter is to study the problems that environmental damage in armed conflict pose to the determination of shared responsibility, and especially the determination of reparation, in the context of the *jus post bellum*. When two actors are engaged in armed conflict, there arise no serious issues as to sharing responsibility for violations.⁴ But the fact that modern conflicts involve on many occasions more than two actors (e.g. Libya 2011) complicates the matters arising out of environmental harm (among others), as there may be two or more actors contributing to the same harmful event. This is a typical situation of shared responsibility. Shared responsibility provides that the problem of reparation for environmental harm is to be examined in situations

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¹ Probably the first important piece of literature dealing with the issue was Falk's article on environmental warfare, see Richard A. Falk, 'Environmental Warfare and Ecocide: Facts, Appraisal and Proposals' (1973) *Revue Belge de Droit International* 1.

² Report of the International Law Commission in its Sixty-fifth Session, UN Doc. A/68/10, 6 May–7 June, 8 July–9 August 2013.

³ Report of the International Law Commission in its Sixty-third-?Session, Recommendation of the Working Group on the Long-Term Programme of Work, UN Doc. A/66/10, 26 April–3 June, 4 July–12 August 2011.

⁴ Except maybe for the issue of contribution to damage by both states, an issue that will be discussed in this chapter.

where there is a multiplicity of actors that contribute to a single harmful outcome.⁵ This definition covers the breach of obligations under *jus ad bellum* and *jus in bello*, as well as under international environmental law. The argument of this chapter will be developed by viewing *jus post bellum* regarding environmental harm through the lens of shared responsibility.

Jus post bellum refers to the post-conflict rules and processes that facilitate the transition from war to peace.⁶ *Jus post bellum* has been referred to as one of the three pillars of the law of armed conflict, the other two being *jus ad bellum* and *jus in bello*.⁷ The purpose of defining and refining the legal framework that applies in *jus post bellum* is to address legal challenges that arise after the termination of armed conflict.⁸ Nonetheless, there is significant disagreement over the precise definition of *jus post bellum* and moreover difficulties arise as to the integration of a variety of legal sources under an umbrella concept such as *jus post bellum*.⁹ The problem of definition is relevant in the context of shared responsibility because it contains two different approaches: a temporal approach (i.e. one that sees the relevant applicable *jus post bellum* rules as arising only after the conflict has ceased) and a functional approach (i.e. one that categorizes the relevant rules depending on whether they have a bearing in the post-conflict legal order).¹⁰ Depending on the approach one adopts certain rules fall within or outside the ambit of *jus post bellum*. This problem is particularly relevant in the context of state responsibility and reparation.

State (and shared) responsibility and its consequences, in particular the obligation of the responsible state to provide reparation, refer to an *ex post facto* determination that a state or an international organization ('IO') has breached an international obligation through its conduct (i.e. conduct that is attributable to that state or IO).¹¹ This means that the conduct and the breach in question are situated, temporally speaking, at a time where the rules that permeate the *jus post bellum* are not applicable since the armed conflict has not ceased. This approach could place state responsibility outside the ambit of *jus post bellum* altogether since the latter is anchored to conduct that has taken place when *jus ad bellum*, *jus in bello*, or other obligations are in full operation.¹² It has been argued however, that since the claims for reparation are handled only after the conflict has ceased to exist, at least this aspect of state responsibility (i.e. the question of reparation) is in fact part of *jus post bellum*.¹³ Even if it is not, state responsibility remains

⁵ Andre Nollkaemper and Dov Jacobs, 'Shared Responsibility in International Law: A Conceptual Framework' (2013) 32 Michigan Journal of International Law 359, 360–5.

⁶ Carsten Stahn, 'Jus Ad Bellum', 'Jus in Bello' . . . /'Jus Post Bellum'? Rethinking the Conception of the Law of Armed Force (2007) 17 European Journal of International Law 821, 937.

⁷ Dieter Fleck, 'Jus Post Bellum as a Partly Independent Legal Framework' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 43.

⁸ Carsten Stahn, Jennifer S. Easterday, and Jens Iverson, 'Epilogue' in Stahn, Easterday, and Iverson (n 7) 542.

⁹ *ibid.* 545–50. ¹⁰ *ibid.*

¹¹ Articles on the Responsibility of States for Internationally Wrongful Acts, ILC Yearbook 2001/II (2) (ARSIWA), Art. 31.

¹² Cymie R. Payne, 'The Norm of Environmental Integrity in Post-Conflict Legal Regimes' in Stahn, Easterday, and Iverson (n 7) 502, 514.

¹³ *ibid.* See also Fleck (n 7) 44.

important for *jus post bellum* since one of *jus post bellum*'s functions is to accommodate claims that arise from armed conflict thus contributing to the overall agenda of peace-building and post-conflict arrangements. The latter form the basis of *jus post bellum*.¹⁴

It is therefore apposite to review the applicable primary obligations as the starting point of the research (Section 11.2). This is so because the breadth and depth of primary obligations as well as their diversity play a significant role in the determination of responsibility and, consequently, of any obligation to offer reparation. An analysis of the problems posed at the stage of apportioning reparation in shared responsibility scenarios follows (Section 11.3). Section 11.4 of the chapter sums up the main findings.

11.2 The Bundle of Primary Obligations and their Relevance to Shared Responsibility and Reparation

11.2.1 The primary rules

The obligations that bind participants in an armed conflict, and that may lead to responsibility for environmental damage can be found in a variety of branches of international law. It is important to have at least a cursory look at these obligations. State and shared responsibility do not operate in a normative vacuum. Primary obligations are therefore the necessary starting point.

First and foremost, international environmental law is applicable during armed conflict. This conclusion is not seriously contested. On the contrary, the ILC reaffirmed the continued application of multilateral environmental agreements ('MEAs') during armed conflict in its articles on the Effects of Armed Conflicts on Treaties ('AEACT').¹⁵ Article 7 provides that a number of treaties enjoy continued application in armed conflict due to their subject matter. The ILC Articles go on to provide an indicative list of such treaties in the Annex. The list includes treaties on the protection of the environment. Despite the clear affirmation of the continued applicability of environmental protection treaties during armed conflict, there is some uncertainty as to whether they are all applicable as they stand and, if not, which parts of them continue to apply. No definitive answer has been given to this question so far. There are some MEAs that contain explicit provisions excluding their application in times of armed conflict.¹⁶ Most of the MEAs however are silent on the topic.

The effort to find appropriate criteria for deciding which provisions of which treaties are applicable during armed conflict is frustrated by the lack of guidance from the relevant authorities. The ILC, in its commentary on the AEACT, after quoting at length the International Court of Justice's ('ICJ') advisory opinion on *Nuclear Weapons*,¹⁷

¹⁴ Carsten Stahn, 'Jus Post Bellum: Mapping the Discipline(s)' (2002) 23 *American University International Law Review* 311, 327.

¹⁵ Articles on the Effects of Armed Conflict on Treaties, UN Doc. A/66/10, para. 100, 2011.

¹⁶ See United Nations Convention on the Law of the Sea (LOSC), adopted 10 December 1982, entered into force 16 November 1994, 1833 UNTS 3, Art. 236. The LOSC is a good example of a treaty that explicitly excludes its application in armed conflict. Its provision that excludes the application of the convention on military vessels attests to this view. Nonetheless, it can be argued that the provisions of the treaty that are not applicable on vessels (e.g. Art. 207, that concerns land-based marine pollution) continue to apply.

¹⁷ *Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons*, Judgment of 8 July 1996, ICJ Rep 226.

maintained that there is a 'presumption' of continued application¹⁸ of MEAs, despite the fact that there is no agreement on the issue.¹⁹ A study prepared by the Secretariat of the ILC in 2005 reached an even milder conclusion, stating that despite increasing support from commentators, the view the MEAs continue to apply during armed conflict has received a mixed reaction from states.²⁰ The United Nations Environment Programme ('UNEP') has not clarified things further in its report on environmental protection during armed conflict.²¹ The report suggests rather vague criteria for deciding whether a MEA is still applicable, such as the original intent of the signatories, the type of the agreement, and the context within which it was concluded.²²

The most realistic, and probably safest, guidance can be found in the ICJ's dictum in *Nuclear Weapons*. There, the ICJ struck a balance between competing views, holding that the real question was whether the obligations stemming from the MEAs are 'obligations of total restraint during armed conflict' towards avoiding environmental damage altogether.²³ Necessity and proportionality should follow the assessments of states in respect of their activities in armed conflict that might harm the environment.²⁴ The question then becomes whether the conduct of a state which violates a MEA during armed conflict can be seen as necessary and proportionate in order to achieve its military objective.²⁵ The link between this view and state responsibility has been eloquently described as follows: '[e]ven if it is correct to contend ... that environmental obligations continue to apply during armed conflict, a State will not be responsible for the non-performance of its obligations if there are circumstances precluding the wrongfulness of such non-performance.'²⁶ Therefore, from the view of state responsibility, even if there is agreement on the applicability of international environmental obligations, the existence of a wrongful act would be subject to the exclusion of a circumstance precluding wrongfulness. This is, of course, true for every wrongful act irrespective of the content of the primary obligation that has been breached. In the case of armed conflict, self-defence and necessity seem to be the most relevant ones.²⁷

The same rationale would apply to customary international environmental law. The truth is that the content of customary rules of environmental protection is more abstract and possibly also more lenient. An example of this is the prohibition of transboundary environmental harm.²⁸ This obligation is translated into a series of prevention or procedural obligations (such as exchange of information or the conduct of an

¹⁸ Commentary to the Annex, para. 55. ¹⁹ *ibid.*

²⁰ Memorandum of the Secretariat, *The Effect of Armed Conflict in Treaties: An Examination of Practice and Doctrine*, UN Doc. A/CN.4/550, 1 February 2005, 40, para. 63.

²¹ UNEP, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*, 2009.

²² *ibid.* 55. ²³ *Advisory Opinion on Nuclear Weapons* (n 17) para. 30. ²⁴ *ibid.*

²⁵ Dapo Akande, 'Nuclear Weapons, Unclear Law? Deciphering the Nuclear Weapons Advisory Opinion of the International Court' (1997) 68 (1) *British Yearbook of International Law* 165, 185.

²⁶ *ibid.* ²⁷ *ibid.*; ARSIWA, Arts. 21, 25.

²⁸ Reflected in the Rio Declaration, Principle 3, see Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26. Affirmed by the ICJ in *Pulp Mills*, see *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment of 20 April 2010, at <<http://www.icj-cij.org/docket/files/135/15877.pdf>> accessed 19 June 2017, para. 193.

environmental impact assessment) that states need to fulfil.²⁹ The obligation is an obligation of conduct. If states have taken all preventive measures prescribed by the customary rule then, despite the existence of harm, they are not responsible.³⁰ If, in other words, states show due diligence with respect to their environmental obligations in the context of armed conflict they will not be responsible even if their conduct causes environmental damage. Whether the level of due diligence that states have to exercise during armed conflict is lower compared to any other hazardous activity, remains an open question.³¹

The rules of international humanitarian law ('IHL') pertaining to the protection of the environment are much more precise, at least when compared to the uncertainty surrounding the applicable rules of international environmental law. Articles 35(3) and 55(1) of the first Protocol Additional to the Geneva Conventions³² are the key provisions. Article 35(3) posits that it is prohibited to use methods or means that may cause '*widespread, long-term and severe damage to the environment*'. Article 55(1) adds that care should be taken so as to avoid such damage while at the same time links the damage to the environment with the consequences it may have on the population. The literature discussing the precise meaning of these provisions is vast and it has covered most, if not all, of the angles for interpreting the relevant provisions.³³ Despite some differences in the various analyses, it can be generally inferred from the literature that these two articles are problematic from two points of view. First, the threshold of 'widespread, long-term and severe' damage is almost impossible to reach and therefore lead to the breach of the obligations.³⁴ Second, both obligations seem to be couched in terms that suggest that they are obligations of conduct.³⁵ A way out of the conundrum could be to have recourse to customary international humanitarian law. According to Rule 43 of the International Committee of the Red Cross study on customary humanitarian law no part of the environment can be attacked unless it is a military objective, nor can it be destroyed if such destruction is not required by 'imperative military necessity'.³⁶ Rule 43 also posits that an attack that causes incidental damage to the environment that

²⁹ Ilias Plakokefalos, 'Prevention Obligations in International Environmental Law' (2012) 23(1) Yearbook of International Environmental Law 3.

³⁰ *ibid.* 42.

³¹ For a discussion of the notion of care in *jus in bello* see Karen Hulme, 'Taking Care to Protect the Environment Against Damage: A Meaningless Obligation?' (2010) 92(879) International Review of the Red Cross 675, 679–86.

³² Protocol Additional to the Geneva Conventions of 12 August 1949, adopted 8 June 1977, entered into force 7 December 1978, 1125 UNTS 3.

³³ See among many others, Betsy Baker, 'Legal Protections for the Environment in Times of Armed Conflict' (1993) 33 Virginia Journal of International Law 351, 368–76; Michael N. Schmitt, 'Green War: An Assessment of the Environmental Law of International Armed Conflict' (1997) 22 Yale Journal of International Law 1, 68–81; Yoram Dinstein 'Protection of the Environment in International Armed Conflict' (2001) 5 Max Planck Yearbook of United Nations Law 523, 530–5; Hulme (n 31); Michael Bothe, Carl Bruch, Jordan Diamond, and David Jensen, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92(879) International Review of the Red Cross 579; Cordula Droege and Marie-Louise Tougas, 'The Protection of the Natural Environment in Armed Conflict-Existing Rules and Need for Further Legal Protection' (2013) 82 Nordic Journal of International Law 21.

³⁴ Hulme (n 31) 682; Droege and Tougas (n 33) 26. ³⁵ Hulme (n 31) 679.

³⁶ Jean-Marie Henckaerts and Louise Doswald Beck, *Customary Humanitarian Law*, ICRC (Cambridge: Cambridge University Press, 2005).

would be excessive in relation to the military advantage expected is also prohibited.³⁷ These customary rules contain no definition of environmental damage, rendering the possibility of their breach, at least *prima facie*, more plausible from this perspective. Nonetheless, the balancing between environmental protection and military objectives or advantage may make the protection of the environment take a back seat.

Besides the First Additional Protocol to the Geneva Convention and customary IHL, a number of other treaties applicable as *jus in bello* are relevant. First and foremost the Convention on the Prohibition or any Other Hostile Use of Environmental Modification Techniques ('ENMOD')³⁸ is a convention that deals directly with the manipulation of the environment during hostilities. The focus of the convention, while significant, is not of direct relevance here. ENMOD seems to apply to a very small group of situations with particularly narrow scope (i.e. when parties to the conflict use the environment so as to cause damage).³⁹ Aside from ENMOD, there are other conventions indirectly linked to environmental damage in armed conflict but their primary focus lies in controlling particular weapons whose use might have consequences on the environment, and not in protecting the environment as such.⁴⁰

The third primary obligation relating to the protection of the environment in armed conflict is the prohibition on the use of force itself. This is admittedly a peculiar source of protection of the environment. The reason for this is that the prohibition on the use of force was not designed to tackle the effects of environmental damage. Nonetheless, in terms of state and shared responsibility it is as important as any other primary obligation. This conclusion requires some elaboration.

According to the basic rules of state responsibility, the 'responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act'.⁴¹ The key phrase in this provision is 'injury caused'. The question therefore is whether environmental injury can be seen as having been caused by the breach of the obligation. The United Nations Compensation Commission ('UNCC') has in fact awarded compensation for environmental damage.⁴² The legal basis for this award of compensation must be traced back to the UN Security Council resolution 687 that held Iraq responsible for the 1990–1 Gulf War.⁴³ The resolution reads that Iraq is 'liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources ... as a result of its unlawful invasion and occupation of Kuwait'.⁴⁴ Resolution 687 expressly included environmental damage in the definition of direct loss or damage, thus providing for a precedent to the effect that

³⁷ *ibid.*

³⁸ Adopted 10 December 1976, entered into force 5 October 1978, 1108 UNTS 151.

³⁹ Schmitt (n 33) 85.

⁴⁰ Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, adopted 10 October 1980, entered into force 2 December 1983, 1342 UNTS 137; Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, adopted 3 September 1992, entered into force 29 April 1997, 1974 UNTS 45.

⁴¹ ARSIWA, Art. 31.

⁴² The UNCC awarded compensation for environmental damage under Category 'F4' of its compensation scheme.

⁴³ UN Security Council Resolution, S/RES/687, adopted 3 April 1991..

⁴⁴ *ibid.* para. 16.

environmental damage caused by the violation of *jus ad bellum* is indeed compensable. If this conclusion is valid then every violation of *jus ad bellum* that directly causes environmental damage brings about as a consequence the obligation of the responsible state to make reparation for that damage.

The Eritrea–Ethiopia Claims Commission was faced with a claim by Ethiopia according to which, because Eritrea was responsible under *jus ad bellum*, it should pay compensation for damage to natural resources and the environment.⁴⁵ The Commission rejected the claim because Ethiopia had not presented sufficient evidence to support its allegation of the environmental damage and had many errors in its calculation of damages.⁴⁶ It is important that the Commission did not challenge at all the right of Ethiopia to present a claim for environmental damage caused by a violation of *jus ad bellum*.

It is submitted that, despite the limited practice available, a state that violates *jus ad bellum* is, in principle, under an obligation to make full reparation for the damage it has caused, including environmental damage. The ILC in its Articles on State Responsibility did not provide a list of the types of damage that would be permissible. At the same time it seems that environmental damage, at least after the Gulf War of 1990–1, is considered compensable. Therefore the engagement of the secondary obligation to make reparation seems to depend only on two criteria: the determination of responsibility by a court, tribunal, or through an agreement, and causation which, in the case of mixed claims commissions, is usually referred to as the criterion of directness of damage.⁴⁷ The fact that environmental damage can be compensated for a *jus ad bellum* violation may be seen as having an overriding effect.⁴⁸ It means that the claimant(s) will not have to prove a distinct violation of an obligation stemming from environmental law or from *jus in bello* in order for them to claim compensation.

11.2.2 Relevance of primary rules to shared responsibility and reparation

One problem with the presence of multiple wrongdoing actors in connection to compensation for environmental damage is related to the threshold of the damage. It will be crucial to look back at the obligation breached in order to decide on compensation. If, for example, two parties to the conflict contribute to environmental damage but only one of them is bound by a MEA that remains applicable and sets ‘significant’ harm to the environment as a threshold, then the following problem arises: if the other party is not bound by the environmental obligations that bind the first party and the damage is

⁴⁵ Eritrea–Ethiopia Claims Commission, Damages Claim, Final Award–Ethiopia’s Claims, UNRIAA XXVI 2009, 631, para. 421.

⁴⁶ *ibid.* para. 425.

⁴⁷ See Hessel E. Yntema, ‘The Treaties with Germany and Compensation for War Damage’ (1924) 24 Columbia Law Review 134, 139–41; Ian Brownlie, *System of the Law of Nations: State Responsibility, Part I* (Oxford: Clarendon, 1983), 225; Alexandros Kolliopoulos *La Commission d’indemnisation des Nations Unies et le Droit de la Responsabilité Internationale* (Paris: Librairie Générale de Droit et de Jurisprudence, 2001), 389. See also Pierre d’Argent, *Les Réparations de Guerre en Droit International Public* (Bruxelles: Bruylant, 2002), 492, 650–1.

⁴⁸ Kolliopoulos claims that violation of *jus in bello* as a legal basis for compensation may be seen as having a residual role in certain circumstances, see Kolliopoulos (n 47) 380–6.

not 'widespread, long-term and severe' (which would breach its *jus in bello* obligations), even though both parties will have contributed to the harmful outcome, it seems that it will be only the second party that will have breached its obligations and therefore be under a corresponding obligation to make reparation. A similar problem would arise if two, or more, parties to the conflict contribute to a single instance of environmental damage, breaching the same obligation, but one of them could successfully rely on a circumstance precluding wrongfulness. In case the damage would not have reached the threshold required absent the conduct of either party, but one party's conduct is unlawful and the other's is not, then only one party would be found responsible and would be under an obligation to make reparation, probably for the entire damage.

Some of these problems could be resolved through the adoption of a single threshold for damage resulting from armed conflict. Nonetheless, the problem described in the second example (i.e. one party to the conflict benefiting from a circumstance precluding wrongfulness) would remain, unless resolved through a causal analysis that would show that the damage is causally divisible.⁴⁹

The problem of a single threshold of damage aside, the primary rules form the backdrop for the engagement of state responsibility. The two necessary elements for the determination of responsibility, namely breach and attribution, can be highly problematic in a shared responsibility situation. The identification of a breach of an obligation that can lead to shared responsibility for environmental damage can be problematic because of the diversity of the primary obligations. Not all applicable primary obligations bind all the participants in an armed conflict. Not all states have ratified the same MEAs and not all states are parties to the Geneva Protocols. All states are of course bound by the same customary rules but they may breach different obligations that lead to a single damage to the environment. State A might cause damage to the environment while there is no military necessity and state B may cause damage to the environment through its breach of *jus ad bellum*. Alternatively state A may breach its *jus ad bellum* obligations while it is being aided and/or assisted by state B which breaches the prohibition on aid and assistance in the commission of a wrongful act as laid down by the ILC.⁵⁰ Whether states breach the same or different obligations is important because it may have consequences in the apportionment of reparation.⁵¹

The confusion caused by the presence of multiple actors also has a bearing on attribution. The main issue is to decide which conduct can be attributed to which of the actors involved. If one accepts the possibility of multiple attribution in international law⁵² then a number of scenarios may be envisaged where the wrongful conduct can be attributed to a multiplicity of actors. Cases where a joint organ may breach *jus in bello*⁵³

⁴⁹ Articles on the Responsibility of States for Internationally Wrongful Acts, General Commentary, ILC Yearbook 2001/II (2) 31 ('ARSIWA Commentary') 93, para. 13.

⁵⁰ ARSIWA Art. 16.

⁵¹ Pierre d'Argent, 'Reparation Cessation, Assurances and Guarantees of Non-Repitition' in André Nollkaemper and Ilias Plakokefalos (eds.), *Principles of Shared Responsibility in International Law: An Appraisal of the State of the Art* (Cambridge: Cambridge University Press, 2014), 209.

⁵² See Francesco Messineo, 'Attribution of Conduct' in Nollkaemper and Plakokefalos (n 51) 60.

⁵³ An example could be the Coalition Provisional Authority in Iraq set up by the United States and the United Kingdom, see Stefan Talmon, 'A Plurality of Responsible Actors: International Responsibility for

or where two or more states, through military operations, breach either *jus in bello* or *jus ad bellum*⁵⁴ fall under this category. Even when multiple attribution is not possible because one can identify two different courses of conduct which lead to the same harmful outcome, it is not always clear whether this is a case of a single or multiple courses of conduct breaching an obligation that binds all states involved.

It is important to bear in mind the problems that shared responsibility poses with respect to breach and attribution throughout the discussion on reparation. Both breach and attribution, as constitutive elements of the wrongful act, must be taken into consideration for the award of reparation. Nonetheless, they are fraught with problems that are outside the ambit of this chapter. They will be touched upon only in so far as they have an impact on reparation.

11.3 Shared Responsibility and Reparation

11.3.1 Fundamentals

Shared responsibility for environmental damage in *jus post bellum* refers to the scenario where multiple actors (in this case states or international organizations)⁵⁵ breach an international obligation thus bringing about harm to the environment. Regardless of the primary obligation breached, the responsible actors will have to make full reparation of the injury they have caused.⁵⁶ Full reparation requires the responsible actor to ‘wipe-out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed.’⁵⁷ The form of reparation usually demanded for environmental damage is compensation. Restitution in environmental damage is notoriously difficult to achieve and therefore compensation is seen as more appropriate in most cases. At least this is the form of reparation the UNCC awarded the claimants under category ‘F4’ of the compensation award scheme. This was also the form of reparation requested by Ethiopia before the claims commission in the Eritrea–Ethiopia dispute.⁵⁸

The question is therefore what should compensation cover. In international environmental law compensation usually covers reasonable clean-up costs as well as reasonable costs of reinstatement of the environment.⁵⁹ The UNCC awarded compensation

Acts of the Coalition Provisional Authority in Iraq’ in Phil Shiner and Andrew Williams (eds.), *The Iraq War and International Law* (Oxford: Hart, 2008), 161.

⁵⁴ The joint armed attack against Iraq in 2003, if qualified as illegal, may be such a case.

⁵⁵ Of course IHL would be applicable to a non-state group that is recognized as belligerent. The problems the existence of these groups pose to the issue of reparation for environmental damage will be treated further below in this chapter.

⁵⁶ ARSIWA, Art. 31. This principle reflects the *locus classicus* of international law on the issue, the dictum of the Permanent Court of International Justice in the *Chorzów Factory* case, where it held that ‘[i]t is a principle of international law that the breach of an agreement involves an obligation to make reparation in an adequate form’, see *Case Concerning the Factory at Chorzów (Germany v. Poland)*, Jurisdiction, [1927] PCIJ Reports (Series A, No. 9), 21.

⁵⁷ *Case Concerning the Factory at Chorzów (Germany v. Poland)*, Merits, Claim for Indemnity, Judgment No.13 [1928] PCIJ Reports (Series A, No.17), 47.

⁵⁸ See Eritrea Ethiopia Claims Commission (n 45).

⁵⁹ See, for example, Basel Protocol on Civil Liability to the Basel Convention on the Transboundary Movement of Hazardous Wastes, adopted 10 December 1999, not in force, UN Doc. UNEP-CHW

to states, state agencies, and companies represented by states that engaged in clean-up and response measures but it went even further. According to the relevant UNCC Governing Council Decision, environmental damage also included damage to the environment per se as well as costs incurred for monitoring and assessing the damage that was caused to natural resources and, as a consequence, to the population.⁶⁰

11.3.2 Apportionment of reparation

Given the complexities regarding the primary rules as well as breach and attribution it is not easy to identify the extent of reparation each of the multiple responsible states or each state participating in a joint organ will have to provide. The key to resolving this problem is to distinguish between a multiplicity that commits the same wrongful act and a multiplicity whose members each commit a separate wrongful act leading to a single injury. This solution must be combined with the basic approach of the ILC, which places independent responsibility at the centre of the system.⁶¹ Independent responsibility means that if a state is found responsible then it should cover the whole extent of the damage regardless of the presence of other responsible states or other contributing causes.⁶² The ILC based its conclusion on the *Corfu Channel* case where Albania had to pay for the whole extent of the damage caused to the UK navy despite the fact that the mines causing the damage were probably placed there by a third state.⁶³ Using this principle as the basic rule, the ILC went on to set an exception: whenever the injury caused by multiple states can be causally divisible, compensation may be reduced so as to reflect each state's contribution.⁶⁴

If two states have committed the same wrongful act, the solution seems to be that indeed each state, if found responsible, should pay full compensation.⁶⁵ An example of two states committing the same wrongful act regarding armed conflict would be the United States and the United Kingdom breaching *jus ad bellum* both at the same time when bombing Iraq in 2003.⁶⁶ The wrongful act, towards which both states have contributed, must be seen as a singular causally relevant condition that cannot be separated

1-WG-1-9-2, Art. 2(c)(d); International Convention on Civil Liability for Oil Pollution Damage, adopted 29 November 1969, entered into force 19 June 1975, 973 UNTS 3, as amended in 1992 by the Protocol to Amend the International Convention on Civil Liability for Oil Pollution Damage, adopted 27 November 1992, entered into force 30 May 1996, 1956 UNTS 255, Art. 1(6). The problem with these definitions of recoverable damage is that they do not, usually, include damage to the environment per se (i.e. environmental values). The ILC in its commentary to the ARSIWA noted that '[d]amage to such environmental values (biodiversity, amenity, etc. —sometimes referred to as "non-use values") is, as a matter of principle, no less real and compensable than damage to property, though it may be difficult to quantify' see ARSIWA Commentary 101, para.15. Despite this broad statement it seems that in practice most MEAs do not provide for the ways such damage could be quantified.

⁶⁰ Decision taken by the Governing Council of the United Nations Compensation Commission during its third session, at the eighteenth meeting, held on 28 November 1991, as revised at the twenty-fourth meeting held on 10 March 1992, UN Doc. S/AC.26/1991/7/Rev.1, 17 March 1992, para. 35(e).

⁶¹ ARSIWA Art. 31.

⁶² ARSIWA Commentary (n 49) 124, para. 3.

⁶³ *Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania) Merits* [1949] ICJ Rep 4, 23.

⁶⁴ Third Report on State Responsibility by James Crawford Special Rapporteur, ILC Yearbook 2000/II(1), para. 35

⁶⁵ *ibid.* paras. 31–4.

⁶⁶ d'Argent (n 51) 242.

quantitatively.⁶⁷ The victim of the damage should be able to recover the whole of the compensation owed by either wrongdoing state since the responsibility of each wrongdoing state cannot be diminished because another state has also contributed to the commission of the wrongful act.⁶⁸

The principle of independent responsibility also prevails in cases where two states have committed different wrongful acts but the damage is causally indivisible. A number of examples can be presented that are related to armed conflict. A state might aid and assist (through logistical or financial support) another state so as to commit a wrongful act breaching *jus ad bellum* or *jus in bello*, or two states might breach *jus ad bellum* individually but, because their target is the same, cause a single environmental damage. It must be borne in mind that the ILC, while insisting that each responsible state should pay full compensation, left a window open by stating that when the injury can be causally divisible then reduced compensation may be offered.⁶⁹ The question then is how to ascertain whether the injury is causally divisible and by which criteria. The safest way is to adopt a categorization of cumulative and complementary causation.⁷⁰ Cumulative causation appears where neither of the two breaches (seen here as causes) would be in itself sufficient to bring about the injury.⁷¹ Complementary causation appears where each cause brings about an injury and when these injuries combine they bring about the totality of the injury at hand.⁷²

The prevailing view is that in cases of cumulative causation each wrongdoing state must make full reparation.⁷³ The reason for this is that the totality of the injury cannot be broken down and apportioned to each of the wrongdoing states.⁷⁴ Therefore each of them bears an obligation to pay for the totality and any apportionment should take place at a later stage if the right to recourse exists and it is successfully exercised.⁷⁵ In cases of complementary causation, on the other hand, each contribution can be assessed individually and therefore each wrongdoing state must pay for its own contribution to the injury.⁷⁶ This categorization however is extremely difficult to do in practice. Causation is one of the least studied and developed aspects of international law. No single, unified concept of causal analysis seems to have developed and the courts appear to employ different causal tests in different cases.⁷⁷

11.3.3 The approach in practice

In interpreting the causal standard set by the Governing Council (direct loss), the UNCC has not developed a clear test.⁷⁸ In some instances it has indicated that what is

⁶⁷ *ibid.* 239.

⁶⁸ *ibid.*; ARSIWA Commentary (n 49) 124, para. 1.

⁶⁹ ARSIWA Commentary (n 49).

⁷⁰ This categorization has been propounded by Brigitte Bollecker-Stern in her work *Le préjudice dans la théorie de la responsabilité internationale* (Paris: Pedone, 1973), 267 *et seq.* The same categorization has been adopted by Pierre d'Argent (n 51) 15–23.

⁷¹ d'Argent (n 51) 224.

⁷² *ibid.*

⁷³ *ibid.* 228–33.

⁷⁴ *ibid.* 228.

⁷⁵ *ibid.*

⁷⁶ *ibid.* 226.

⁷⁷ See Bollecker-Stern (n 70) 182–3; Andrea Gattini, 'Breach of International Obligations' in Nollkaemper and Plakokefalos (n 51) 25, 29–30.

⁷⁸ See generally on the directness issue Ucheora Onwuamaegbu and Aïssatou Diop, 'Directness of Claims by Foreign Companies in Remote Relations: Claims of Non-Kuwaiti Corporations' in Timothy J. Feighery,

required is a 'clear causal link'⁷⁹ while in others that the condition in question (i.e. the wrongful act) must be a positive condition, sufficient in itself to bring about the injury.⁸⁰ In other instances it has favoured proximity as the applicable test.⁸¹ The UNCC also took a clear stance against the 'but for' test in the Egyptian Workers claim.⁸² When the UNCC dealt with the environmental claims (most falling under Category 'F4') it was equally unclear as to which causal test it applied, yet the reports do not suffer from a lack of homogeneity.⁸³ Moreover, the UNCC offered a detailed account on its approach to the apportionment of compensation.

The UNCC included a heading 'Parallel or concurrent causes' in its reports without specifying the causal test that it employed in order to reach its conclusions. It posited, however, that 'Iraq is not exonerated from liability for loss or damage that resulted directly from the invasion and occupation simply because other factors might have contributed to the loss or damage.'⁸⁴ It went on to state that Iraq would '[n]ot be liable for damage that was unrelated to its invasion and occupation of Kuwait nor for losses or expenses that are not a direct result of the invasion and occupation.'⁸⁵ The UNCC examined claims based on the evidence before it and was, for the most part, unclear as to the causal criteria it used. A glimpse of its attitude can be found in the Panel Report for the First Part of the Fourth Installment of 'F4' claims which held that when the damage was a result of '[c]auses wholly unconnected with Iraq's invasion and occupation of Kuwait, no compensation is recommended.'⁸⁶ The picture becomes clearer through the Panel's finding that in cases where other causes have contributed to the environmental damage, the level of compensation would be adjusted so as to reflect each contribution accordingly.⁸⁷ Finally, the Panel held that when the proportion of Iraq's participation in the damage cannot be accurately proven then it will recommend no compensation.⁸⁸

Christopher S. Gibson, and Trevor M. Rajah, *War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2015), 259–88; and Timothy J. Feighery, 'The Jurisprudential Legacy of the UNCC: Legal Issues Common to all Claims Categories' in *ibid.* 187, 191–4.

⁷⁹ Report and Recommendations Made by the Panel of Commissioners Concerning the Third Instalment of Individual Claims for Damages Above US \$ 100.000 (Category 'C' Claims), UN Doc. S/AC.26/1999, 24 June 1999, 6, para. 16.

⁸⁰ Report and Recommendations Made by the Panel of Commissioners Concerning Individual Claims for Serious Personal Injury or Death (Category 'B' Claims), UN Doc. S/AC.26/1994/1, 26 May 1994, 25.

⁸¹ Report and Recommendations Made by the Panel of Commissioners Concerning the Third Instalment of Individual Claims for Damages Above US \$ 100.000 (Category 'C' Claims), UN Doc. S/AC.26/1994, UN Doc. S/AC.26/1994/3, 21 December 1994, 21.

⁸² Report and Recommendations Made by the Panel of Commissioners Concerning the Egyptian Workers' Claims, UN Doc. S/AC.26/1997/3, 2 October 1997, para. 214.

⁸³ For the view that the Panel dealing with environmental damage did not face serious problems with causation see José R. Allen, 'Points of Law' in Cymie R. Payne and Peter H. Sand (eds.), *Gulf War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2011), 141, 159–61.

⁸⁴ Report and Recommendations Made by the Panel of Commissioners Concerning the Second Instalment of 'F4' Claims, UN Doc. S/AC.26/2002/26, 3 October 2002, paras. 25–6.

⁸⁵ *ibid.*

⁸⁶ Report and Recommendations Made by the Panel of Commissioners Concerning Part One of the Fourth Instalment of 'F4' Claims, UN Doc. S/AC.26/2004/66, 9 December 2004, para. 40. The Panel reduced, for example the amount of compensation payable by Iraq because other factors contributed to the damage, see 'Report and Recommendations Made by the Panel of Commissioners Concerning Part One of the Third Instalment of "F4" Claims', UN Doc. S/AC.26/2003/31, 18 December 2003, para. 147.

⁸⁷ UNCC 'F4', Fourth Instalment (n 86).

⁸⁸ *ibid.*

These findings of the UNCC refer to causally relevant factors that, in principle, do not amount to a wrongful act of a third state or the contribution to the injury by a third state. The UNCC's attitude on this issue is very important. Regarding contribution to the injury by the coalition forces that bombed the Iraqi army in Kuwait, the UNCC referred to the Governing Council decision on the matter. The Governing Council had decided that compensation would be payable by Iraq due to its unlawful invasion and occupation of Kuwait for any loss as a result of '[m]ilitary operations or threat of military action by either side.'⁸⁹ Therefore, the environmental damage caused by allied bombing was to be compensated by Iraq.

The UNCC seems to have struck a middle ground between the general principle of the obligation to make full reparation laid down by the ILC and the exception according to which reparation may be adjusted when it is shown that the damage can be causally divisible. The UNCC held that it would not recommend compensation in cases where it cannot be proven what proportion of the damage can be reasonably attributed to Iraq. This means that if the proportion of Iraq's contribution can be shown and the other concurrent causes cannot be identified, then, it seems, that it would recommend the payment of compensation by Iraq, presumably for the whole damage, depending also on the contribution to the injury by third parties.

The UNCC's findings regarding contribution to the injury by the allied forces in the conflict raise a number of issues. The legal basis of the Governing Council decision is unclear. It could be that the acts of the coalition forces were seen as lawful since they took place under the authorization of the Security Council. In this case, however, the allied forces are still bound by the provisions of the first Additional Protocol or, alternatively, by customary IHL. It could also be that the Governing Council traced a causal connection to Iraq also for the damage caused by the coalition, since the damage would not have taken place had Iraq not invaded Kuwait. Under this explanation the acts and the effects of the acts of the coalition forces were a direct result of Iraq's invasion and occupation and therefore causally linked to Iraq's wrongful act. If the first explanation is true, then it might be argued that the UNCC should have examined which acts of the coalition forces were necessary so as to give effect to the Security Council resolution. It might be the case that the bombing of oil wells went beyond the scope of the authorization by the Security Council. Again, the bombing could violate IHL even if necessary and proportionate under *jus ad bellum*. If, on the other hand, the Governing Council considered the acts of the coalition as causally linked to the invasion of Iraq it means that the damage caused by these acts was seen as directly stemming from the invasion. The causal link between the invasion and the bombing of oil wells is tenuous at best. A number of political, legal, strategic, and tactical decisions were taken between the initial step of the invasion and the bombing of the particular target. It is doubtful that if the UNCC had employed any test other than a strict form of the but-for test that it would have found the Iraqi invasion as a cause of the bombing of the oil wells. Of

⁸⁹ Decision taken by the Governing Council of the United Nations Compensation Commission during its third session, at the eighteenth meeting, held on 28 November 1991, as revised at the twenty-fourth meeting held on 10 March 1992, UN Doc. S/AC.26/1991/7/Rev.1, 17 March 1992, para. 21(a). See on this point d'Argent (n 47) 385.

course, the explanation for the Governing Council's decision is probably simpler: the practice of peace agreements shows that the aggressor must repair the damage caused by his opponents.⁹⁰ There is nothing novel about such a decision if one looks at the practice of concluding peace agreements. The fact however that the UNCC followed that practice does not render its decision more reasonable, especially if it was to signify a step forward in the tradition of post-war determination of reparation.

The duty of mitigation of environmental damage that is incumbent upon the states that brought claims before the UNCC also had a bearing on reparation. The UNCC acknowledged that claimants had a duty to mitigate environmental damage to the extent that it was possible and reasonable.⁹¹ The relevant test, therefore, was that 'the claimant acted reasonably having regard to all the circumstances with which it was confronted'.⁹² The Panel has for example proposed modifications to the proposed clean-up and remediation plans of the claimant so as to render it reasonable, thus lowering the cost of compensation payable by Iraq.⁹³

Despite its shortcomings the UNCC did in fact manage to handle a large number of environmental damage related claims. The Eritrea–Ethiopia Commission on the other hand, did not discuss the problem of reparation for environmental damage since it dismissed the Ethiopia's environmental claim due to lack of evidence. The Eritrea–Ethiopia Commission also did not offer any guidance as to the causal test that it would generally apply to the rest of the claims. The Eritrea–Ethiopia Commission made a general proposition that the prevalent test in international law is that of proximity, a proposition that is problematic.⁹⁴ A number of tests have been used in international law, including the but-for test.⁹⁵ The test of proximity refers more to the part of the causal inquiry that is informed by policy and normative considerations, such as reasonableness and remoteness, than to a factual causation test.⁹⁶

Despite the undeniable merits of the work of the UNCC, it is true that it is fraught with some problems. The exclusion of the allied forces' contribution to the damage was particular problematic. The unclear criteria for accepting or rejecting the existence of a causal link between invasion and occupation on the one hand and the injury on the other are also a point of concern.⁹⁷ Its mandate also did not allow the UNCC to indicate for each head of damage which particular obligation did Iraq breach so as to render a clear picture of the scope of the primary rules. Everything was decided upon on the basis of the UNSC Resolution 687 that did not offer much detail either. An overall assessment would of course consider the fact that the UNCC did in fact award compensation for environmental damage as a positive step. This, however, is not enough. More steps must be taken so as to clarify further the law of reparation for environmental damage in cases of shared responsibility.

⁹⁰ Kolliopoulos (n 47) 412–13.

⁹¹ UNCC, 'F4' Third Instalment, para. 43. ⁹² *ibid.*

⁹³ UNCC, 'F4' Third Instalment, para. 118.

⁹⁴ Eritrea–Ethiopia Commission, Decision 7 (27 July 2007) Guidance Regarding *Jus Ad Bellum* Liability, para. 13.

⁹⁵ *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro)*, Judgment of 26 February 2007, ICJ Reports 43, para. 462.

⁹⁶ Kolliopoulos (n 47) 387.

⁹⁷ To be fair this is a problem that permeates most decisions of international adjudicatory bodies.

11.3.4 Some further challenges for *jus post bellum*

The ILC articles are designed to apply to states and international organizations. The articles do not capture the conduct of non-state groups that are becoming more and more important in armed conflict. This is of course not a problem of the articles themselves but rather of the majority of primary obligations that are simply not applicable on non-state actors. Even if an analogy could be drawn so as to engage the responsibility of non-state actors for breach of *jus in bello*, this would be possible only because IHL is indeed applicable to belligerent non-state actors.⁹⁸ MEAs do not impose any obligations to non-state actors and it would be challenging to construct an obligation to make reparation stemming from a violation of *jus ad bellum*. Moreover, since in most cases non-state belligerents are engaged in combat in non-international armed conflicts it is somewhat awkward to demand from them reparation for environmental damage. In case they prevail and they take control of the state in question then the damage has been inflicted on the state itself. In the case of a successful separatist movement the obligation to provide reparation would make more sense but it would still be fraught with the above-mentioned problems.

Another question relates to the procedural aspects of awarding reparation. States have historically favoured claims commissions and arbitration over the ICJ for the award of reparation in post-conflict situations.⁹⁹ While these commissions have managed successfully numerous claims, with the UNCC being a prominent example of this practice, they pose some problems. First, their legal basis, as well as their competence and jurisdiction could be challenged.¹⁰⁰ Second, they tend to devise procedural rules that in some instances, such as the UNCC, provide for limited rights for the defeated party in the conflict. These, of course, are wider problems of *jus post bellum* but they have a significant impact on reparation. Unless the process of administering justice in *jus post bellum* is streamlined so as to reflect a more fair attitude towards the defeated side, the law of state responsibility will not be able to be applied so as to effectively resolve most problems. Finally, states seem to refuse to take advantage of the ad hoc nature of the tribunals and commissions that award reparation: they do not extend their jurisdiction so as to cover non-state actors and IOs that are excluded from the ICJ's jurisdictional ambit.

One final question is whose perspective should prevail in assessing reparation for environmental damage. Environmental damage is qualitatively different from other types of harm occurring in armed conflict: its impacts can be felt outside the geographical limits within which armed conflict takes place, therefore the victims might

⁹⁸ Marco Sassóli, 'Taking Armed Groups Seriously: Ways to Improve their Compliance with International Humanitarian Law' (2010) 1(1) *Journal of International Humanitarian Legal Studies* 5, 46–50; Cedric Ryngaert and Anneleen van de Meulebroucke, 'Enhancing and Enforcing Compliance with International Humanitarian Law by Non-State Armed Groups: An Inquiry into Some Mechanisms' (2011) 16(3) *Journal of Conflict and Security Law* 443, 464–6.

⁹⁹ The US–German Mixed Claims Commission as well as numerous other commissions awarding reparation for damage incurred in insurrections (Venezuela, US–Mexico) support this finding.

¹⁰⁰ For a discussion on the UNCC see Andrea Gattini, 'The UN Compensation Commission: Old Rules, New Procedures on War Reparation' (2002) 13(1) *European Journal of International Law* 161.

be unrelated to the conflict both in terms of participation and in terms of geographic proximity.¹⁰¹ If one of the principles of *jus post bellum* is to avoid imposing 'victor's justice' and to reach a humane apportionment of reparation,¹⁰² then the contribution to environmental harm of all participants should be taken into account. It is simply not satisfactory to exclude contribution to the damage on the basis of *jus ad bellum* and even *jus in bello* criteria.

11.4 Concluding Remarks

The problem of reparation in international law is complex. When armed conflict, environmental damage, and a multiplicity of responsible states are added to the equation the problem becomes even more complex. Nonetheless a number of observations that might contribute towards clarity can be made.

The law of state responsibility, and consequently of reparation, does not operate in a vacuum. In order for responsibility to be engaged a primary obligation must be breached. This is a major source of confusion in the realm of *jus post bellum* reparation for shared responsibility. There is no harmonization among the primary rules and there is not a customary rule that can unify the various environmental protection obligations. This means that different actors are bound by different rules regarding the protection of the environment when they engage in armed conflict. The application of *jus ad bellum* could be seen as providing a limited solution to this problem, in the sense that its breach will engage the responsibility of the relevant actors and therefore they will bear the duty to make reparation for the damage they have caused. This solution is limited however since it might apply only to one side of the conflict and it does not account for the discrepancies that might occur if either side may benefit from a circumstance precluding wrongfulness.

Given the fragmented picture of primary rules, the law of responsibility can be of assistance only to the extent that some of these rules have been breached by all parties to the conflict. Then, the duty to make reparation will depend on whether the multiplicity of wrongdoing actors has breached the same or different obligations. In principle if they have breached the same obligation then each member of the multiplicity will be under an obligation to make reparation for the whole damage. The same is true whenever the members of the multiplicity have committed separate wrongful acts contributing to a single harmful outcome. The exception to this rule is when the damage can be causally divisible. In this case the apportionment of reparation should reflect each actor's contribution. Nonetheless, this is easier said than done. The requirements for the establishment of a causal link are not clear in the jurisprudence and therefore it is hard to deduce a unified practice of courts and tribunals regarding this problem.

The practice regarding reparation for environmental damage in armed conflict is also limited. In reality it is only the UNCC that has provided for some insights as to

¹⁰¹ In the 1990–1 Gulf War the damage caused to the oil wells as well as the oil fires affected a large number of states either because they were geographically close, or because they committed resources to the containment of the damage, see UNCC Report 'F4' First and Second Installments.

¹⁰² Stahn (n 14) 338.

how this damage can be compensated. Nonetheless, the UNCC, due to its mandate devised by the Security Council, could not delve into the problem of shared responsibility. It also did not offer much in the limited cases of contribution to the harm by the claimant.

A more in-depth study of the primary rules and an attempt to deduce a unified body of rules relating to environmental protection in armed conflict would be a first step towards resolving some of these problems. The constituent instruments of ad hoc claims commissions should have a wider mandate relating to the number of wrongdoing parties that can be brought before them. A wider mandate would be also useful regarding the applicable law before these judicial or quasi-judicial bodies. At the same time they should develop the appropriate causal standards as well as broader, and more appropriate, secondary rules that can capture the participation of all parties that are engaged in armed conflict. If such, rather improbable, progress is made, then the *jus post bellum* regarding shared responsibility and reparation for environmental damage in armed conflict might indeed better reflect fairness and justice.

Conflict, Cash, and Controversy

Protecting Environmental Rights in Post-Conflict Settings

*Jennifer S. Easterday and Hana Ivanhoe**

12.1 Introduction: Sustainable Development, Environmental Protection, and *Jus Post Bellum*

It is widely accepted that armed conflict can lead to a number of alarming environmental problems.¹ There is also a growing consensus that environmental degradation and mismanagement can lead to, or exacerbate, armed conflict.² This is especially true where a country relies on the extractive industry for a significant portion of its revenue, and where large parts of the population depend on land and renewable resources for their livelihoods.³

The focus of this chapter is on the risks that environmental degradation and mismanagement pose in the post-conflict phase, during the transition from conflict to peace. During this phase, a failure to adequately respond to environmental challenges can lead to a renewal of armed conflict and generally undercut important peacebuilding processes such as reconciliation, establishing strong political institutions, economic development, and creating trust in the government.⁴ Severe environmental degradation also poses a threat to people's enjoyment of their basic human rights (e.g. right to life, water, and self-determination, among others). The deprivation of these human rights can then in turn serve as a destabilizing force to any new government, particularly those of post-conflict countries.

In addition to mitigating a risk of return to conflict, natural resource and environmental management can provide building blocks and opportunities for fostering

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¹ See, for example, UNEP, *Sierra Leone: Environment, Conflict and Peacebuilding Assessment of Sierra Leone* (February 2010), 2 (finding that the conflict there had significantly damaged natural resources such as water and agricultural land).

² See, for example, UN Department of Economic and Social Affairs, Division for Sustainable Development (UNDESA SD), *Developing National Sustainable Development Strategies in Post-Conflict Countries* (June 2011), 20 (arguing that 'Violent conflict can be detrimental to the environment, which can, in turn, exacerbate poverty and have ripple effects on the livelihoods of local populations.')

³ David Jensen and Steve Lonergan, 'Natural Resources and Post-Conflict Assessment, Remediation, Restoration, and Reconstruction: Lessons and Emerging Issues' in David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (London: Earthscan, 2012), 416.

⁴ Ken Conca and Jennifer Wallace, 'Environment and Peacebuilding in War-Torn Societies: Lessons from the UN Environment Programme's Experience with Post-Conflict Assessment' in Jensen and Lonergan (n 3) 63.

sustainable peace.⁵ Natural resources provide opportunities to develop sustainable livelihoods and are critical for the return and integration of refugees and displaced persons. Moreover, high-value natural resources, such as mineral deposits, are used to generate quick income and restart the economy, providing a critical revenue stream for the government.⁶ In many post-conflict situations, there is a severe lack of government institutions that can deal with environmental protection or natural resources management.⁷ The institutions are often non-existent or significantly decimated. The strengthening or establishment of legitimate institutions involves capacity building, bureaucratic reform, and reforming legislative and policy frameworks.⁸

According to UNEP:

Managed well, natural resources can support economic development, create employment and revenues for the government thus supporting peacebuilding and sustainable development. Environmental management can be, for example, perceived as a low profile sector and create opportunities to foster multi-level and multi-group engagement, cooperation and reconciliation.⁹

The pursuit of sustainable development is key to ensuring a peaceful and prosperous transition from conflict. According to the World Commission on Environment and Development (the Brundtland Commission), sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'¹⁰ It aims to achieve a balance between three pillars that are critical in peacebuilding contexts: the need for economic recovery, sources of livelihoods, and long-term environmental and social protections.

Sustainable development is a legal concept that has not achieved the status of binding hard law, but has been reflected in many sources of hard law. These sources include many treaties and conventions (such as the EU treaty, the Climate Change Convention, and the Biodiversity Convention) as well as the jurisprudence of international courts and tribunals. Sustainable development is also frequently invoked in soft law sources, including the Rio Declaration and policy papers of international organizations, such as the International Law Commission's 'Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts.'¹¹ Moreover, it is increasingly found in national constitutions and legislation.¹² Therefore, while it is still too vague and uncertain to be recognized as customary international law, it should be accepted as a

⁵ UNDESA SD (n 2) 13 (Arguing that 'Integrating environment and peacebuilding into national strategies and planning processes fosters the creation of synergies and more effective policies to help prevent relapses into conflict. Especially in countries in which natural resources play a major role in conflict, sustainable development can help overcome legacies of conflict. In other post-conflict countries, sustainable development folds in key elements of building a stable state and helps to identify policies, actions, and strategies that combine economic, social, and environmental goals and at the same time build peace.')

⁶ UNEP, *Integrating Environment in Post-Conflict Needs Assessments* (UNEP, 2009), 14.

⁷ Conca and Wallace (n 4) 70–1. ⁸ UNEP (n 6) 14.

⁹ UNDESA SD (n 2) 35. Internal citations removed.

¹⁰ World Commission on Environment and Development, *Our Common Future* (United Nations, 1987) 41, at <<http://www.un-documents.net/our-common-future.pdf>> accessed 7 May 2015.

¹¹ Marie G. Jacobsson, Special Rapporteur, UN Doc. A/CN.4/674, 30 May 2014, paras. 125–32.

¹² Christopher Jeffords, 'Constitutional Environmental Human Rights: A Descriptive Analysis of 142 National Constitutions' (2011) Working Paper 16, University of Connecticut Economic Rights Working

principle that can influence the development of international law and how it is interpreted and applied.

Sustainable development and environmental protection also provide opportunities to establish dialogue and create inclusive development processes. Effective management of natural resources and environmental protection depend on the participation and buy-in from local populations. Those communities that are directly affected by pollution or the degradation of arable land from extractive industries, for example, should be brought into the debate about how to effectively manage and share the benefits from the use of natural resources. This provides an opportunity to enhance dialogue between the general population and the government, build confidence and reconciliation between divided communities, and mitigate other underlying grievances that might have contributed to the conflict.¹³

Economic stabilization and the regeneration of income are often top priorities of post-conflict states. Peacebuilding is expensive, and donors cannot cover all of the costs for very long. Peace processes related to the economy often focus on structural adjustments and neoliberal reforms, and rely on natural resources—especially the extractive industry, where applicable—as a fast and easy revenue source.¹⁴ However, these reforms are not necessarily undertaken sustainably, especially with regards to environmental quality. Environmental concerns are not a top priority, and as a result there may be inadequate environmental planning in aid and development schemes. In fact, it is often, at least in part, the lack of legislative and regulatory environmental protections in post-conflict countries that incentivizes the very rapid investment by multinational corporations ('MNCs'). This, some argue, is a critical flaw.¹⁵

This chapter argues that sustainable development should be a key element of the *jus post bellum* normative framework. *Jus post bellum* focuses on the laws, norms, and practices applied during the transition from conflict to peace. Its goal is to foster a just and sustainable peace, and the concept can take on several different functions to that end. *Jus post bellum* is comprised of various international norms and also includes principles of interpretation for how to adopt these norms to particular post-conflict contexts and peacebuilding practices.¹⁶ The concept of sustainability links economic development with environmental protection, and requires that economic programmes be undertaken hand in hand with environmental governance in order to protect people's livelihoods and ensure long-term stability.¹⁷

Specifically, this chapter will examine issues of environmental protection as they relate to resource intensive economic development (e.g. via investment in the extractive

Paper Series 22 (noting that the key words 'future, generation, and sustainable development' occurred in thirty-five different constitutions). See also Canada's Federal Sustainable Development Act (S.C. 2008, c 33).

¹³ UNEP (n 6) 14. ¹⁴ Conca and Wallace (n 4) 75. ¹⁵ *ibid.*

¹⁶ For more on the concept of *jus post bellum*, see Carsten Stahn, 'Mapping the Discipline(s)' in Carsten Stahn and Jann K. Kleffner (eds.), *Jus Post Bellum: Towards a Law of Transition from Conflict to Peace* (The Hague: TMC Asser, 2008), 93, 105; Inger Österdahl and Esther van Zadel, 'What Will Jus Post Bellum Mean? Of New Wine and Old Bottles' (2009) 14 *Journal of Conflict and Security Law* 175, 178; but see Kristen Boon, 'Obligations of the New Occupier: The Contours of *Jus Post Bellum*' (2009) 31 *Loyola of Los Angeles International and Comparative Law Review* 57, 76 (defining *jus post bellum* more narrowly to 'apply to the exercise of governmental and public powers by external entities such as IOs and foreign states').

¹⁷ Conca and Wallace (n 4) 75; UNDESA SD (n 2) 97.

industry) post-conflict. It analyses the use of soft law norms in addressing the nexus between environmental challenges and economic development so as to include private actors, such as multinational investors and corporations, in the peacebuilding project. Section 12.2 discusses the connections between corporate social responsibility and environmental degradation. The following section examines the role of private corporations during the transition from conflict to peace. It outlines several normative frameworks governing extraterritorial corporate behaviour and non-judicial forms of enforcement. Section 12.4 discusses how the UN and international financial organizations can incorporate these voluntary frameworks into their peacebuilding projects and loans to organizations working in post-conflict situations. Section 12.5 discusses challenges and gaps in the existing normative frameworks. The chapter concludes by proposing that peacebuilders incorporate soft law norms and standards, in particular corporate social responsibility frameworks, as a part of a holistic *jus post bellum* to meet the challenges of post-conflict sustainable development and environmental protection.

12.2 Corporate Social Responsibility and Environmental Degradation

Given the potential for long-term damage resulting from environmental exploitation and poor natural resource management, it is vital that environmental management standards be part of any large-scale project involving natural resources, particularly those in post-conflict countries. Immediately post-conflict, resource-rich countries often rely on natural resource exploitation to rapidly restart the economy.¹⁸ Effective natural resource management early in the post-conflict transition can help build confidence in the government and the peacebuilding project in general by providing revenues to support peace dividends and create strong, legitimate government institutions. However, it is usually private corporations that undertake large development projects that rely on natural resources. Therefore, it is important for governments to have strong regulations in place to ensure these corporations adhere to sustainable development policies and provide environmental and social safeguards. With weak state institutions, potentially out-of-date legislation, and competing post-conflict priorities, however, this is difficult to guarantee in practice.

There is a need for increased regulation that balances sustainability with development needs. According to UNEP:

The private sector can be a force for development, inject needed capital, and be less constrained than donors and governments. But an under-regulated, low-competition, post-conflict environment can give entrepreneurs significant power which they can misuse. It is important that corporate responsibility takes seriously the legacy of conflict and accompanying social divisions, inequities, and fears. A balance has to be

¹⁸ Oli Brown, Morgan Hauptfleisch, Haddijatou Jallow, and Peter Tarr, 'Environmental Assessment as a Tool for Peacebuilding and Development: Initial Lessons from Capacity Building in Sierra Leone' in Jensen and Lonergan (n 3) 332.

achieved between private sector opportunities to maximize economic growth and ensure that regulation is equitable and sustainable.¹⁹

This regulation needs to be multipronged, coming from both international and domestic law and incorporating both soft and hard law norms. This chapter will focus on the importance of including soft law norms such as corporate social responsibility, in addition to hard law, in post-conflict normative frameworks such as *jus post bellum*.

Corporate social responsibility ('CSR') generally refers to the overall contribution of businesses to sustainable development through measures that ensure that business is operated as sustainably, equitably, and ethically as possible.²⁰ Some references to CSR focus on legal obligations or standards such as 'do no harm'. Others call for a more proactive role, asking businesses to positively contribute to sustainable development or to align their business goals with societal goals.²¹ According to many definitions, CSR requires that companies do more than what is legally required of them by the laws of the countries in which they operate.²²

CSR has a great deal to contribute to the *jus post bellum* framework. In particular, it captures the responsibilities of non-state actors (beyond armed groups) in the peace-building phase in these countries in a way that other *jus post bellum* principles and standards are unable to. As discussed above, MNCs are important players in the post-conflict context, and to be fully holistic, *jus post bellum* cannot be limited to states, armed groups, and international organizations.

CSR initiatives are usually driven by investors, companies, interest groups (including NGOs), and consumers in developed countries. CSR is often transferred to developing countries through trade, investment, or development assistance.²³ For example, in international trade, there are rising international environmental standards that must be met for export to OECD markets, such as the EU. In other cases, companies might require specific environmental certifications for their suppliers.²⁴ With direct investment, some countries (such as Nigeria) might have legislation requiring foreign companies to hire local workers or rely on local services. In addition, some companies initiate partnerships or capacity-building projects aiming to transfer knowledge and expertise to smaller, local companies.²⁵

Many companies have shown great initiative in the area of CSR, but relying solely on private corporations to adopt sustainable procedures would likely be insufficient in the post-conflict context. There have been myriad efforts to promote CSR and develop

¹⁹ UNDESA SD (n 2) 77.

²⁰ This is notably distinct from corporate philanthropy, which encompasses contributions in cash or kind by corporations to local charitable causes in the communities in which they operate. For a more comprehensive definition of CSR and description of the economic factors at play in its development, see John F. Kennedy School of Government, *Corporate Social Responsibility Initiative: Defining Social Responsibility*, at <http://www.hks.harvard.edu/m-rcbg/CSRI/init_define.html> accessed 21 November 2014.

²¹ Halina Ward, Tom Fox, Emma Wilson, and Lyuba Zarsky, 'CSR and Developing Countries: What Scope for Government Action?' (February 2007) UN Sustainable Development Innovation Brief 1.

²² See, for example, Abigail McWilliams, Donald S. Siegel, and Patrick M. Wright, 'Corporate Social Responsibility: International Perspectives' (March 2006), Working Papers in Economics, Rensselaer Polytechnic Institute, at <<http://www.economics.rpi.edu/workingpapers/rpi0604.pdf>> accessed 20 June 2017.

²³ Ward *et al.* (n 21) 1.

²⁴ *ibid.* 4.

²⁵ *ibid.* 3.

productive relationships with private corporations operating in post-conflict societies.²⁶ Other ways to engage with CSR include by incorporating CSR requirements into overarching policy frameworks related to trade, investment, the use of natural resources, and environmental protection. As this chapter will attempt to show, these roles and tools are important not just for the post-conflict government itself but also for international organizations, aid agencies, and donors. To be sure, there are significant implementation challenges, competing priorities, and risks to this approach. However, these are critical connections to foster under a truly holistic conception of *jus post bellum*.

12.3 Ensuring Corporate Social Responsibility and Respect for Human and Environmental Rights in Post-Conflict Countries

This chapter will now turn to an examination of the role of the private sector (primarily MNCs) in post-conflict countries in the peacebuilding and development stage. As the trend towards globalization continues, MNCs consider constant expansion into new and emerging markets as an increasingly necessary component of any successful business model. It is also seen as a necessary tool for development.²⁷ As discussed above, bringing MNCs into the post-conflict development plan has the potential to serve as a positive force for both investors and investees, provided any such investment is made responsibly. Those who deny the role of private sector investment in the development of post-conflict countries notably tend to fail to propose viable alternatives for providing the necessary capital for such investment and development.²⁸

Unfortunately, private sector companies can also, through their actions, degrade the environments of the fragile post-conflict countries in which they operate in a manner that itself contributes to a resurgence of conflict. And while domestic and international stakeholders clamour for increased commercialization and heightened private-sector foreign direct investment (FDI) to support this commercialization, competing voices point to sometimes violent forced evictions, allegations of indigenous land rights violations, and environmental degradation resulting from the effects of mining, oil and gas extraction, and agro-industrialization.²⁹ Private FDI in post-conflict countries is now

²⁶ See, for example, Juliette Bennett, 'Multinational Corporations, Social Responsibility and Conflict' (2002) 55 *Journal of International Affairs* 393.

²⁷ For example, many academics and government officials within Africa are calling loudly for such private sector investment. At a 2013 meeting of the Economic and Monetary Community of Central Africa, the vice president of the Pan African parliament, honorable Roger Nkodo Dang of Cameroon, argued for foreign investment in the 'industrialization of agriculture' in Africa. Ruth Hall, 'Stop Selling off African land—Invest in Farmers Instead', *The Guardian* (23 January 2014), at <<http://www.theguardian.com/global-development-professionals-network/2014/jan/23/land-deals-africa-farming-investment>> accessed 20 June 2017.

²⁸ See, for example, Klaus Deininger and Derek Byerlee with Jonathan Lindsay, Andrew Norton, Harris Selod, and Mercedes Stickler, 'Rising Global Interest in Farmland—Can it Yield Sustainable and Equitable Benefits?' (Agriculture and Rural Development, The World Bank, 2011).

²⁹ For a more thorough analysis of this debate, see Lorenzo Cotula, Sonja Vermeulen, Rebeca Leonard, and James Keeley, *Land Grab or Development Opportunity? Agricultural Investment and International Land*

occurring at an increasing rate and as a result it is necessary to examine the environmental effects of that investment.

Post-conflict countries also tend to lack a well established rule of law and are often grappling with a somewhat tenuous government infrastructure—the legitimacy of which could even be in question at the time new FDI is initiated. Domestic legislation may be out of date or may not include CSR or relevant environmental regulations. This makes it necessary to look for other sources of regulation to help mitigate the risks of a return to conflict from MNC-caused environmental degradation, including international CSR soft law norms.

12.3.1 Normative frameworks governing adverse impacts of extraterritorial corporate behaviour

As discussed, post-conflict countries often lack an established rule of law and therefore fail to legislatively protect against corporate malfeasance or sufficiently enforce such legislation. This is due to a combination of factors, including but not limited to insufficient financial resources and endemic corruption.

It is the prevailing view that existing international legal standards and frameworks governing the protection of environmental and human rights, as well as the courts and tribunals that might ensure the enforcement of those rights, are fairly ineffectual at providing legal remedies in these areas because they impose legal obligations exclusively on states, not corporations.³⁰ These treaties and international courts and tribunals are generally not considered to bind corporations because corporations are not state actors.³¹

The last decade, however, has marked the emergence of a number of voluntary normative frameworks seeking to govern the behaviour of private sector actors in foreign jurisdictions. These normative frameworks share many of the same central tenants which are primarily derived from the Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework (the 'Ruggie Framework' or the 'Framework'), the first of the standards to be discussed below:

- Corporate duty to respect human rights extra-territorially
- Human rights due diligence
- Non-judicial grievance mechanisms

Deals in Africa (FAO, IIED and IFAD, 2009), 100–02, at <<http://www.fao.org/3/a-ak241e.pdf>> accessed 20 June 2017.

³⁰ David Kinley and Junko Tadaki, 'From Talk to Walk: The Emergence of Human Rights Responsibilities for Corporations at International Law' (2004) 44 *Virginia Journal of International Law* 931, 937.

³¹ Emeka Duruigbo, 'Corporate Accountability and Liability for International Human Rights Abuses: Recent Changes and Recurring Challenges' (2008) 6 *Northwestern Journal of International Human Rights* 222. It should be noted that instances in which corporations are complicit in violations of international criminal law as well as certain other occurrences may constitute exceptions to this general rule. The limited scope of this chapter does not allow for a thorough examination of whether corporations may be held liable for violations of international human rights laws in US courts under the Alien Tort Statute or for aiding and abetting human rights violations that amount to a violation of international criminal law. These discussions are beyond the scope of this piece. For a thorough evaluation of these questions, see,

Given their voluntary nature, all such frameworks proposed to date lack judicial enforcement mechanisms and (in many instances) any form of grievance body. As a result, they tend to serve primarily as suggested standards and perhaps lend themselves to efforts at the establishment of agreed upon principles, but do not fulfil the more traditional role of enforceable law. Moreover, none of these standards specifically address the matter of corporate intervention in *jus post bellum* contexts. As will be discussed at length later in this chapter, this represents a significant governance gap in the applicability and coverage of these standards.

The normative frameworks that are most effective and relevant to environmental degradation are discussed below.

A. *UN Guiding Principles on Business and Human Rights Framework*

In the spring of 2008, John Ruggie, the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises (the 'SRSG') proposed a new approach to understanding and enforcing a corporation's duty to respect human rights throughout its global supply chains. Three years later, the UN Human Rights Council endorsed the SRSG's three-pronged Framework.³²

The Framework is premised on three basic tenets: protect, respect, and remedy.³³ Specifically, states have a duty to protect human rights, corporations have a responsibility to respect human rights, and victims of human rights violations have a right to access remedies.³⁴

The linchpin of the Framework, the corporate responsibility to respect human rights, originates from a solid and meaningful foundation.³⁵ It does not create new human rights obligations, but instead articulates existing duties within a cohesive template:

The Guiding Principles' normative contribution lies not in the creation of new international law obligations but in elaborating the implications of existing standards and practices for states and businesses; integrating them within a single, logically coherent

for example, Doug Cassel, 'Corporate Aiding and Abetting of Human Rights Violations: Confusion in the Courts' (2008) 6 *Northwestern Journal of International Human Rights* 304.

³² See UN Human Rights Council, Report of the SRSG: Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework. A/HRC/17/31, 21 March 2011.

³³ UN Office Human Rights Council, Promotion and Protection of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development: Protect, Respect and Remedy: a Framework for Business and Human Rights, Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises. A/HRC/8/5, 7 April 2008.

³⁴ *ibid.*

³⁵ See, for example, David Bilchitz, 'The Ruggie Framework: An Adequate Rubric for Corporate Human Rights Obligations?' (2010) 7 *Sur International Journal on Human Rights* 199; Robert C. Blitt, 'Beyond Ruggie's Guiding Principles on Business and Human Rights: Charting an Embracive Approach to Corporate Human Rights Compliance' (2013) 48 *Texas International Law Journal* 34, 52–6; UN Office Human Rights Council, Promotion of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development: Protect, Respect and Remedy: a Framework for Business and Human

and comprehensive template; and identifying where the current regime falls short and how it could be improved.³⁶

The duty borne by all businesses to respect human rights means that they must (i) avoid infringing on human rights, and (ii) address adverse human rights impacts in which they are involved in any way.³⁷ These duties to respect and address human rights apply not only to the direct acts of the parent company, but also to the acts and actions of all of its subsidiaries, suppliers, and employees. This is the case even where the company has not directly contributed to the adverse impacts, thereby effectively requiring that a company take proactive and preventative responsibility for affirmatively respecting human rights throughout its supply chain.³⁸

Although the corporate respect requirement codified in the Framework is often viewed as a ‘do no harm’ standard, it also gives rise to a number of active duties. Among these, the due diligence requirement by which companies must ‘manage human rights harm with a view to avoiding it’ is perhaps most noteworthy.³⁹ The due diligence duty requires that companies take tangible and measurable steps to ‘become aware of, address and prevent human rights impacts.’⁴⁰ It may also be deemed to mandate the adoption of grievance mechanisms by which affected parties can lodge complaints and seek redress for rights infringements.⁴¹

While there are still significant governance gaps in the protection of human rights *vis-à-vis* MNC behaviour, under the Framework corporations are complying with human rights standards in a way that they were not doing before the introduction of the Framework’s guidelines.⁴² The Framework has also influenced the drafting of several similar normative guidelines, which are discussed below.

B. Guidelines on the Responsible Governance of Tenure

In 2012, the United Nations Food and Agriculture Organization endorsed the Voluntary Guidelines on the Responsible Governance of Tenure (the ‘Tenure Guidelines’).⁴³ Similar to the Ruggie Framework, the Tenure Guidelines are not hard law and are entirely voluntary. Additionally, the Tenure Guidelines refer exclusively to matters of land tenure and therefore are limited in their application to protecting human and

Rights, Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, A/HRC/11/13, 22 April 2009, para. 46.

³⁶ John Ruggie, ‘Presentation of Report to United Nations Human Rights Council, Geneva’ 30 May 2011, at <http://business-humanrights.org/media/documents/ruggie-statement-to-un-human-rights-council-30-may-2011.pdf> accessed 7 March 2014.

³⁷ *ibid.* para. 11. ³⁸ *ibid.* para. 13.

³⁹ UN Office Human Rights Council (n 35) para. 59; UN Office Human Rights Council (n 33) para. 25.

⁴⁰ UN Office Human Rights Council (n 35) para. 56.

⁴¹ UN Office Human Rights Council (n 35) para. 59.

⁴² For a more in depth discussion of the argument that voluntary private sector regulations of corporate conduct are not a sufficient substitute for state-based regulatory enforcement, see David Vogel, ‘The Private Regulation of Global Corporate Conduct: Achievement and Limitations’ (2010) 49 *Business & Society* 68.

⁴³ Food and Agriculture Organization of the United Nations, *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (2012).

environmental rights to instances in which such rights are threatened as a result of land misuse or management.

They are, however, significant in that they address ‘non-state actors’ generally and MNCs specifically.⁴⁴ While referencing ‘non-state’ actors eleven times, the Tenure Guidelines primarily focus on what states can and should do to ensure adherence to proper tenure practices in land acquisitions. ‘Business enterprises’ are explicitly addressed only once:

3.2 Non-state actors including business enterprises have a responsibility to respect human rights and legitimate tenure rights. Business enterprises should act with due diligence to avoid infringing on the human rights and legitimate tenure rights of others. They should include appropriate risk management systems to prevent and address adverse impacts on human rights and legitimate tenure rights. Business enterprises should provide for and cooperate in non-judicial mechanisms to provide remedy, including effective operational-level grievance mechanisms, where appropriate, where they have caused or contributed to adverse impacts on human rights and legitimate tenure rights. Business enterprises should identify and assess any actual or potential impacts on human rights and legitimate tenure rights in which they may be involved.

As one author has observed, there is a tension inherent in the Tenure Guidelines’ provisions constraining corporate actors: the Guidelines have been drafted so as to both maximize foreign investment in developing countries as well as ensure the protection and valid use of the land and resources and safeguard against environmental damage.⁴⁵

The provisions prescribed in the Tenure Guidelines and the application of the corporate duty to respect strongly echo the Ruggie Framework. The references to due diligence, risk management systems, and (non-judicial) grievance mechanisms are particularly noteworthy in this regard. In fact, in many ways the Tenure Guidelines excerpt and apply more specifically to matters of land use the corporate responsibilities already outlined in the Ruggie Framework.

C. Principles for Responsible Agricultural Investment in the Context of Food Security and Nutrition

Much like the Tenure Guidelines, the Principles for Responsible Agricultural Investment in the Context of Food Security and Nutrition⁴⁶ (the ‘Principles for Responsible Ag’) include provisions prescribing the behaviour of business enterprises that clearly draw upon the concepts and principles of the Ruggie Framework. Again, like with the Tenure Guidelines, and as indicated by the highly specified name, the Principles for Responsible Ag are limited in scope to agricultural companies and sustainability. They too seem to take the language of business’ responsibility to respect introduced in the

⁴⁴ *ibid.*

⁴⁵ Jared Wigginton, ‘Large Scale Land Investment in Africa: an Issue of Self-Help and Self-Determination’ (2013) 20 UC Davis Journal of International Law and Policy 105.

⁴⁶ Committee on World Food Security, FAO, Principles for Responsible Agricultural Investment (RAI) in the context of food security and nutrition Zero Draft (2013).

Ruggie Framework and apply it in a more specified context. They also build on and supplement the Tenure Guidelines.⁴⁷

The Principles for Responsible Ag outline the explicit role and responsibilities of business enterprises (as compared to other stakeholders) with respect to foreign agricultural investment advising that businesses ‘apply the Principles with a focus on mitigating and managing risks to maximize positive and avoid negative impacts on food security and nutrition’ which are threatened in the long-term by the propagation of unsustainable farming practices.⁴⁸

The language, however, is not particularly strong. It requires MNCs to comply with the domestic laws of the countries in which they are doing business, which is of course already required as a matter of basic compliance and is additionally legally enforceable, and ‘any applicable international law’. It is entirely unclear what this would refer to since the question of whether and which international law(s) apply to business enterprises is highly debated and largely undecided.

Like the Tenure Guidelines, the Principles also restate companies’ responsibility to act with due diligence to avoid human rights violations first posited in the Ruggie Framework.⁴⁹ The Principles also ‘encourage’ companies to transact their operations equitably and transparently and ‘support efforts to track the supply chain.’⁵⁰

Very little has been written to date regarding the effect or effectiveness of the Principles for Responsible Ag. This is primarily because the Principles were only very recently (15 October 2014) finalized and approved by the Committee on World Food Security of the FAO (CFS), demonstrative of the evolving nature of the field of business and human rights.⁵¹

D. OECD Guidelines

The Organisation for Economic Cooperation and Development’s Guidelines for Multinational Enterprises (the ‘OECD Guidelines’) again adopts much of the same language as the Ruggie Framework. In particular, the OECD Guidelines encourage MNCs to respect human rights throughout their supply chains regardless of the laws of the jurisdictions in which they operate, conduct risk-based due diligence, and prevent or mitigate an adverse impact where that impact is ‘directly linked to their operations, products or services by a business relationship’ even when they have not caused that impact.⁵²

With respect to environmental responsibility, the OECD Guidelines state that MNCs should contribute to economic progress ‘with a view to achieving sustainable development.’⁵³ Even more rigorously, the OECD Guidelines encourage companies to establish

⁴⁷ Food and Agriculture Organization of the United Nations, Principles for responsible agriculture and food investments are approved (2014), at <<http://www.fao.org/news/story/en/item/260518/icode/>> accessed 20 June 2017.

⁴⁸ Committee on World Food Security, FAO, Principles (n 46) para. 50. ⁴⁹ *ibid.*

⁵⁰ *ibid.* para. 51.

⁵¹ Smita Narula, ‘The Global Land Rush: Markets, Rights and the Politics of Food’ (2013) 49 *Stanford Journal of International Law* 101.

⁵² OECD, *OECD Guidelines for Multinational Enterprises* (OECD Publishing, 2013). ⁵³ *ibid.*

and maintain systems of environmental management and formulate plans for the prevention, mitigation, and control of serious environmental damage resulting from their operations with the goal of avoiding adverse environmental impacts where possible.⁵⁴ The OECD Guidelines also encourage environmental impact assessments.⁵⁵

The OECD Guidelines, as compared to the other normative frameworks discussed in this section, are particularly noteworthy for the manner in which they seek to establish an independent monitoring and implementation mechanism in the form of the OECD National Contact Points ('NCPs'). The NCPs provide a 'mediation and conciliation platform' for resolving disputes under the Guidelines as they arise.⁵⁶ Upon hearing complaints from interested parties, the NCP seeks advice from informed stakeholders and mediates the dispute. The NCP then produces a report with the terms of the agreement if the parties agree or with recommendations for resolution of the dispute if the parties do not agree.⁵⁷ Unfortunately, there is no mechanism for legal enforcement of the agreement or the NCP's recommendations, so it is up to the parties to voluntarily determine whether they will constrain themselves by the terms of the agreement or recommendations. The NCPs, however, still present a more robust mechanism for hearing human and environmental rights grievances than exists under any of the other frameworks to date.

There is, however, a good deal of uncertainty as to the NCPs' accountability and transparency. The NCPs are housed in the respective nations' party to the OECD Guidelines, but as international legal bodies, they are not governed by those nations' governments. In addition, the NCPs do not provide universal or comprehensive coverage; only parties to the OECD Guidelines have NCPs and many if not most of the developing countries effected by environmental degradation resulting from MNC investment are not parties to the OECD Guidelines. By way of example, only two African nations have NCPs: Egypt and Morocco.⁵⁸

12.3.2 Non-judicial enforcement of these frameworks

Precisely because the various normative frameworks discussed above lack sufficient enforcement mechanisms, the CSR movement has emerged as a viable, if not ideal, alternative to traditional legal or judicial enforcement. CSR plays an important role here not only for the potential that it offers to improve the level of environmental sustainability of MNCs' operations in foreign jurisdictions, but because, for better or worse, it's all there is.

As discussed above, companies have many reasons (including profit motivation) for acting in a responsible manner.⁵⁹ In the absence of an enforceable, hard-law framework for preventing and, where necessary, adjudicating instances of corporate aggression or complicity in the perpetration of environmental degradation and related human rights abuses, therefore, CSR may be viewed as a potential tool or mechanism for non-judicial enforcement of the voluntary normative frameworks for protecting human and environmental rights in investee countries outlined above.

⁵⁴ *ibid.* ⁵⁵ *ibid.* Chapter VI, para. 3. ⁵⁶ *ibid.* Chapter I, para. 1.

⁵⁷ Wigginton (n 45). ⁵⁸ *ibid.*

⁵⁹ See, for example, Archie B. Carroll and Kareem M. Shabana, 'The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice' (2010) *International Journal of Management Reviews* 85.

In the four years since its endorsement, the Ruggie Framework has become widely known and subscribed to, in large part as a result of voluntary compliance by some of the world's largest and most powerful companies.⁶⁰ Companies are increasingly creating human rights policies that heavily draw on the recommendations in the Framework.⁶¹

Indeed, many feel that the UN consensus around the Framework, combined with the tacit agreement by certain (if not the majority of) major multinational firms to comply with and operationalize its principles, is giving rise to the emergence of recognized 'global standards on business and human rights' whereby companies have an affirmative duty to respect human rights through appropriate due diligence measures that include some sort of grievance mechanism.⁶²

The same trend has been observed, albeit to a lesser degree, specifically in the realm of environmental impact. In 2014, the *New York Times* highlighted the 'greening' of major US companies' manufacturing facilities in Vietnam and throughout Asia.⁶³ Foreign corporations operating in the region have begun voluntarily adopting more stringent standards than required by domestic law for a range of environmental indicators, including water consumption, wastewater management, energy efficiency, and carbon dioxide emissions offsets.⁶⁴ The companies credit economic efficiencies, risk mitigation, and public relations considerations (i.e. consumer image) for the changing trend.⁶⁵ The article demonstrates the increased recognition and awareness of the Framework's duty to respect human rights (including the due diligence and grievance mechanism requirements) as applied to environmental matters and the different ways in which the duty has been operationalized at the corporate level.

As mentioned above, none of the existing voluntary frameworks governing corporate malfeasance in extraterritorial environmental degradation address instances of such degradation in specifically post-conflict contexts. Similarly, NGOs and activists monitoring and effectively regulating this space have to date failed to sufficiently draw attention to the special circumstances of corporate investment in post-conflict contexts. This topic will be further taken up in the next section.

12.3.3 Corporate social responsibility and normative frameworks governing corporate behaviour in recently post-conflict settings

Given that the focus of this chapter is primarily on duties when actors are intervening in post-conflict countries, it is important to examine the application of these normative frameworks

⁶⁰ For one prominent illustrative example of voluntary corporate compliance by a large multinational company, see the Coca-Cola example. Coca-Cola Company, Human and Workplace Rights, at <<http://www.coca-colacompany.com/our-company/human-workplace-rights>> accessed 7 March 2014.

⁶¹ Ilse Griek, 'UN Forum on Human Rights: Assessing the Ruggie Framework' (February 2013) *Sustainalytics Reporter*, Issue No. 13.

⁶² See, for example, Chris Jochnick and Nina Rabaeus, 'Business and Human Rights Revitalized: A New UN Framework Meets Texaco in the Amazon' (2010) 33 *Suffolk University Law Review* 413.

⁶³ Mike Ives, 'Slowly, Asia's Factories Begin to Turn Green' (*New York Times*, 7 January 2014), at <http://www.nytimes.com/2014/01/08/business/international/asian-factories-see-sense-and-savings-in-environmental-certification.html> accessed 20 June 2017.

⁶⁴ *ibid.*

⁶⁵ *ibid.*

to instances of environmental rights violations in recently post-conflict settings. As one author aptly surmised, 'while governments have the primary concern in preventing violent conflict, businesses and financial institutions have an important role to play in avoiding or resolving conflicts that are associated with economic production.'⁶⁶ Unfortunately, as noted throughout the previous section, very few of the existing frameworks for business and human and environmental rights provide for conflict-specific measures.

The Ruggie Framework acknowledges the uniquely high-stakes circumstances presented by conflict and post-conflict settings for the protection of human rights, but considers the effects of conflict only in the context of state, not corporate duties.⁶⁷ The Framework states in pertinent part 'because the risk of gross human rights abuses is heightened in conflict-affected areas, States should help ensure that business enterprises operating in those contexts are not involved with such abuses.'⁶⁸ Although this protection references the role of business in high-risk conflict-affected areas, it fails to establish a corporate duty to protect against such abuses in line with the other more explicit corporate duties outlined in the Framework, given that the language is directed exclusively towards state actors. In addition, the due diligence requirement could also come into play in operationalizing the respect duty in conflict settings. As explored above, companies should complete basic due diligence (e.g. complete environmental risk assessments) before they enter new markets to ensure that their investment and operations there will not adversely affect the environment. However, although not specified in the Framework, these assessments should explicitly address risks specific to the transition from conflict to peace.

At least in part because the framework fails to comprehensively address the issue of the corporate duty to respect in post-conflict settings, voluntary standards designed to address these issues have begun cropping up. These voluntary standards, however, more closely resemble public-private sector (or just private sector) multi-stakeholder initiatives than normative frameworks. Multi-stakeholder initiatives ('MSIs') can be any sort of collaborative initiative that brings together (often disparate) interests with a shared objective. Such initiatives may draft sets of standards/provisions that guide the actions of their members (i.e. a corporate code of conduct), but they are just as likely to be loose affiliations of stakeholders that meet on a regular basis to debate and deliberate about a chosen subject. The most successful MSIs generally include members of both the for- and not-for-profit communities. MSIs in the area of responsible supply chains and business operations abroad may or may not give rise to independent third-party certification schemes that serve as assurance mechanisms. But many do not, in which case their utility for constraining corporate malfeasance is highly questionable.⁶⁹ Two relevant MSIs are discussed below.

⁶⁶ Juliette Bennett, 'Multinational Corporations, Social Responsibility and Conflict' (2002) 55(2) *Journal of International Affairs* Columbia University 393–414.

⁶⁷ John Ruggie, 'United Nations Guiding Principles on Business and Human Rights,' 21 March 2011, para. 11, at <http://www.business-humanrights.org/media/documents/ruggie/ruggie-guiding-principles-21-mar-2011.pdf> accessed June 2017.

⁶⁸ *ibid.*

⁶⁹ See generally Justine Nolan, 'With Power Comes Responsibility: Human Rights and Corporate Accountability' (2010) University of New South Wales Faculty of Law Research Series 2010, Working Paper

A. *The Equator Principles*

Drafted by a group of commercial banks engaged in project finance, the Equator Principles is a framework for 'determining, assessing and managing environmental and social risk in projects' with the objective of setting a minimum baseline for due diligence and responsible decision-making.⁷⁰

The Equator Principles contain a number of sustainable development standards. For example, they require development project sponsors for high-risk (e.g. conflict-affected) projects to conduct and publically disclose, in a culturally appropriate manner, an environmental and social impact assessment ('ESIA'); demonstrate effective stakeholder engagement; establish a grievance mechanism for complaints by affected communities; and openly and transparently submit public reports on the ESIA and Equator Principle financial transactions.⁷¹ These voluntary standards are applicable to projects in any sector and have gained significant traction since their creation.⁷² Although the standards are voluntary, some commercial banks have made compliance a condition of project loans.⁷³

The standards can ensure that predictable risks associated with natural resource use, including environmental damage and social harm, are identified and mitigated. Adopting and adhering to these types of soft law standards could help to improve the companies' reputations and bottom lines or trigger a cultural change within them.⁷⁴ Due to their voluntary nature, however, the extent to which they are able to promote meaningful environmental and social change is fully dependent on the discretion of the banks and is therefore suspect.

B. *The Voluntary Principles on Security and Human Rights*

The Voluntary Principles on Security and Human Rights (the 'Voluntary Principles') are a voluntary set of standards and guidelines for extractives industry companies

11, 589–90. Some supplier codes of conduct are legally enforceable against the supplier parties (i.e. where those codes are incorporated into the contracts between company and supplier). See also, Muhammad Azizul Islam and Ken McPhail, 'Regulating for Corporate Human Rights Abuses: The Emergence of Corporate Reporting on the ILO's Human Rights Standards within the Global Garment Manufacturing and Retail Industry' (2011) 22 *Critical Perspectives on Accounting* 790, 806.

⁷⁰ Equator Principles Website, at <<http://www.equator-principles.com>> accessed 1 May 2015.

⁷¹ The Equator Principles, June 2013, at <http://www.equator-principles.com/resources/equator_principles_III.pdf> accessed 31 August 2014.

⁷² For example, as of 2014 there were eighty Equator Principles Financial Institutions in thirty-four countries, covering an estimated 70 per cent of project finance debt in emerging markets. Equator Principles website, at <<http://www.equator-principles.com/index.php/about-ep/about-ep>> accessed 31 August 2014. See also Christopher Wright, 'Global Banks, the Environment, and Human Rights: The Impact of the Equator Principles on Lending Policies and Practices' (2012) 12 *Global Environmental Politics* 56, 62; Bank Track, 'Close the Gap: Benchmarking Credit Policies of International Banks (June 2010).

⁷³ Jill Shankleman, 'Mitigating Risks and Realizing Opportunities: Environmental and Social Standards for Foreign Direct Investment in High-Value Natural Resources' in Päivi Lujala and Siri Aas Rustad, *High-Value Natural Resources and Peacebuilding* (Abingdon, UK: Earthscan, 2012), 49, 50.

⁷⁴ Cynthia A. Williams, 'Regulating the Impacts of International Project Financing: the Equator Principles' (2013) 107 *American Society of International Law Proceedings* 303, 306.

created by an industry MSI. Among other things, the Voluntary Principles require rigorous and comprehensive risk assessments for potential security risks, human rights violations, and violence.⁷⁵

The Voluntary Principles are particularly noteworthy in that they refer explicitly to conflict scenarios and related security issues. However, the emphasis of the Voluntary Principles is on corporate use and employment of security forces to protect their investments and staff safety; human rights protections related to their operations are addressed only secondarily in the Voluntary Principles. For example, the Voluntary Principles provide that companies should support government transparency regarding their security forces and ‘communicate their policies regarding ethical conduct and human rights to public security providers.’⁷⁶

Perhaps most relevantly, the Voluntary Principles encourage companies to promote the following principles:

- (a) individuals credibly implicated in human rights abuses should not provide security services for Companies; (b) force should be used only when strictly necessary and to an extent proportional to the threat; and (c) the rights of individuals should not be violated while exercising the right to exercise freedom of association and peaceful assembly, the right to engage in collective bargaining, or other related rights of Company employees as recognized by the Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work.⁷⁷

The Voluntary Principles are certainly notable in that they address the interaction between corporate investment on the one hand and conflict and security on the other, but they are severely limited in that they (i) apply exclusively to extractive companies, and (ii) are oriented around the protection and security of the MNCs’ interests as their primary objective.

C. *The International Finance Corporation Social and Environmental Performance Standards*

The International Finance Corporation Social and Environmental Performance Standards (‘IFC-PS’) were established in 2006 by the IFC in consultation with MNCs, donor countries, donor agencies, and other entities. They create a comprehensive system for identifying social and environmental risks of IFC projects. The IFC-PS require a four-step process of assessment, defining actions, monitoring, and reassessment.⁷⁸ The assessment requires identification of the potential impacts of the project, risks to the environment and local communities, and risks that the environment and social situation pose to the project. The IFC-PS also incorporate elements of dialogue and consultation: recipients of IFC financing must engage with affected communities through consultation and disclosure, and must develop and implement a Stakeholder

⁷⁵ Voluntary Principles on Security and Human Rights Website, at <http://www.voluntaryprinciples.org/what-are-the-voluntary-principles/> accessed 1 May 2015.

⁷⁶ *ibid.* ⁷⁷ *ibid.* ⁷⁸ Shankleman (n 73) 59.

Engagement Plan.⁷⁹ Further, companies must establish a monitoring and measurement programme and provide periodic progress reports to affected communities, and in some circumstances, compensate or offset risks and impacts to affected communities and the environment.⁸⁰ The IFC-PS place responsibility for some aspects of the assessment and management of environmental and social risks on the government or other third parties, where the recipient of the financing does not have control or influence.⁸¹ Although the standards address several possible conflict triggers, such as acquiring land, pollution, natural resource access, and community safety, they do not require proactive steps to improve projects' benefits to local communities.⁸²

12.4 UN and International Financial Organizations

Beyond international normative (but voluntary) frameworks and domestic legal reform incorporating CSR standards (but often lacking sufficient resources or will for enforcement), there are several methods to ensure sustainable development and environmental protection in the post-conflict phase. We propose that international actors—specifically the UN and international financial organizations (IFOs)—incorporate an expanded application of the CSR standards discussed above into their peacebuilding policies and loan agreements with MNCs and domestic governments.

Sometimes the UN can provide a critical entry point for CSR—for example, through a UN multi-donor trust fund or UN work plans. Sensitizing UN agencies working in a variety of sectors, including the extractive industries, agriculture, and livelihood recovery, about CSR can lead to positive results and future effects, although they also depend on the political will of the domestic government to carry them forward. In addition, increased environmental awareness can impact UN development assistance frameworks, priorities, and budgets.

According to one study, successfully incorporating CSR into the work of UN agencies requires:

1. Consistent categorization of environmental impacts from the outset, including a clear allocation of responsibility. The categorization of environmental issues should, whenever possible, be undertaken directly by project implementers as opposed to third parties.
2. Environmental screening applied to all projects, including humanitarian and development. This will help identify sectors that pose the biggest risks to the environment.
3. Project information records should include more data, including geographic locations, in order to facilitate review and analysis of environmental impacts and cumulative effects.

⁷⁹ IFC, 'Performance Standards on Environmental and Social Sustainability' (2012) 13 (Performance Standard 1).

⁸⁰ *ibid.* 3.

⁸¹ *ibid.* 5.

⁸² Shankleman (n 73) 60.

4. Capacity-building assistance should be provided as appropriate to domestic stakeholders in order to support the identification and mitigation of environmental threats in particularly risky sectors.⁸³

Beyond the UN and other large donor and aid agencies, there are other opportunities to enforce standards of sustainable development and environmental protection. International pressure, including through UN Security Council sanctions, to meet minimum standards is one. International programmes that give privilege to export markets that comply with minimum standards is another option. Financial institutions provide another option for requiring minimum CSR standards, and will be the focus of this section.

One scholar has noted that:

While financial institutions have tended to oppose new financial regulations that restrict or impose costs on their own financial activities, many have issued public support for international environmental policies and regulations that aim to regulate the activities of the companies they are invested in. This suggests that long-term investors represent a nascent environmental policy constituency that could play an increasingly influential role in shaping global environmental governance through their financing activities and engagement with policy-makers and standard-setters.⁸⁴

Indeed, many aid agencies and financing institutions have developed environmental and social standards as requirements for funding.⁸⁵ The World Bank, for example, required countries to develop National Environmental Action Plans in order to receive soft loans, although this policy was later relaxed. These helped identify and prioritize environmental problems and specified different solutions, whether institutional, policy, or investment-related.⁸⁶ Unfortunately, however, many environmental and human rights advocates have criticized the World Bank's policies as inconsistently applied and inadequate for the protection of environmental and human rights.⁸⁷

Financial institutions can influence both the public and private sectors. For example, national debts can be cancelled or reduced to relieve pressure on post-conflict governments to hastily generate income through natural resource exploitation.⁸⁸ Financial institutions can also implement minimum standards in loan agreements both with states and with private companies. Through donor conditionality agreements, donors

⁸³ Jensen and Lonergan (n 3) 440–1.

⁸⁴ Christopher Wright, 'Global Finance and the Environment' in Robert Falkner (ed.), *The Handbook of Global Climate and Environmental Policy* (Hoboken: Wiley, 2013), 428, 442.

⁸⁵ Siri Aas Rustad, Päivi Lujala, and Philippe Le Billon, 'Building or Spoiling peace? Lessons from the Management of High-value Natural Resources' in Lujala and Rustad (n 73) 571, 604; Shankleman (n 73).

⁸⁶ UNDESA SD (n 2) 104–5.

⁸⁷ See, for example, 'OXFAM, World Bank Safeguards Review—Oxfam Submission to Phase 1,' at <https://consultations.worldbank.org/Data/hub/files/oxfamsubmissiontoworldbanksafeguardsreview_phase1_final.pdf> accessed 3 May 2015; Peter Bosshard, Janneke Bruil, Korinna Horta, Shannon Lawrence, and Carol Welch, 'Gambling with People's Lives: What the World Bank's New "High-Risk/High-Reward" Strategy Means for the Poor and the Environment' (Report, Environmental Defense, Friends of the Earth and International Rivers Network, 2003), at <<http://siteresources.worldbank.org/CSO/Resources/EDhighrisk.pdf>> accessed 3 May 2015.

⁸⁸ Rustad *et al.* (n 85) 593.

can exert significant policy influence on post-conflict states that are dependent on aid. This might include pressure to review existing extractive industry contracts; take steps to increase transparency, accountability, and public participation; or may include direct assistance to government institutions. As the government starts to earn greater revenues by natural resource exploitation, however, the leverage these donors possess might start to decline.⁸⁹ It is therefore important for donor conditionality to focus on long-term goals and provide assistance for the government to undertake legal reforms and institution building.⁹⁰ The conditionality must also be neutral, and not favour private corporations from the donor state. This last issue is complicated by the differing approaches of various donor states, which might compete among each other depending on their commercial interests or have distinct approaches to local governance issues, such as China's non-interference policy.⁹¹

Because of the high cost of natural resource extraction in particular, private companies often require external financing (equity investors and/or loans) to begin operations. The loans often come from a mix of multilateral or bilateral development banks and commercial banks. These banks undertake extensive due diligence to ensure the viability of the proposed project. The due diligence often includes assessment of environmental and social risks, based on the recognition that environmental damage and social conflict can pose risks to projects and the banks. This puts banks in a key position to promote higher environmental and social standards for natural resource extraction projects in post-conflict situations.⁹²

Financers of the private sector have implemented various voluntary standards in loan condition agreements, including the IFC-PS and the Equator Principles, both discussed above. Although these standards are voluntary as such, they can become enforceable when compliance is a condition of project loans.⁹³

The good practices developed by the implementation of these standards can have positive influence on developing standards in other sectors, amongst small- and medium-sized businesses, and on developing government policies.⁹⁴ The standards could also ensure that predictable risks associated with natural resource extraction, including environmental damage and social harm, are identified and mitigated. But in actuality the standards are seldom sufficiently robust to result in meaningful changes in corporate behaviour.⁹⁵

One author notes that:

On the one hand, the standards are a useful tool for helping to make foreign direct investment in the natural resource sector a stronger contributor to post-conflict peace-building: they provide a framework that enables firms to be more aware of the complexities of post-conflict environments and to behave more responsibly than might otherwise be the case. On the other hand, because of their voluntary nature and the absence of requirements for systematic follow up on implementation, the standards

⁸⁹ *ibid.* 599.

⁹⁰ *ibid.* 600 (noting that 'Although bilateral agencies have large budgets, little of that money is directed toward strengthening government: in Sierra Leone, for example, less than 10 percent of the US\$13 million spent by US and UK aid agencies on diamond reform was used to directly improve government capacity').

⁹¹ *ibid.* 600.

⁹² Shankleman (n 73) 55.

⁹³ *ibid.* 50.

⁹⁴ *ibid.* 64–5.

⁹⁵ *ibid.* 64.

have not been as effective as they might otherwise have been. In order to have greater impact, the standards should be revised to require companies to publish regular and detailed progress reports. Further, environmental regulations in most developing countries, especially those emerging from conflict, need to be revised and updated to incorporate the social, labor, health, and security requirements included in the voluntary standards.⁹⁶

The standards are limited to the extent that they are voluntary and not all banks or financiers require their application. Given that environmental and social conditions are generally viewed as secondary to the bottom line (i.e. likelihood of the loan recipient to pay back in full), they are often not allocated sufficient financial and human resources by the banks to ensure robust compliance. They are also not created specifically for post-conflict situations, and therefore do not directly address important post-conflict issues such as reintegration of soldiers, sensitive conflict triggers, or community-specific development needs.⁹⁷ This suggests a need to broaden the standards for post-conflict situations and/or to apply them in a way that is consistent with the goal of achieving sustainable peace. This would require cooperation between governments, financiers, and other donors and aid agencies working across sectors during the transition to peace. These stakeholders will need to understand, apply, and enforce these and other post-conflict standards for private companies.

12.5 Challenges and Gaps in Existing Frameworks Addressing Environmental Degradation Resulting from External Involvement in Post-Conflict Settings

There are many important challenges to consider with an approach to sustainable development and environmental protection that relies on external actors, in particular MNCs and the financial industry. This section will discuss some general practical challenges to relying on voluntary standards as well as gaps in the current normative framework. Practical challenges include limited resources and time; working in unstable environments; corruption; political considerations; deciding on a normative framework; and ensuring local ownership while also supporting fair negotiations between governments and MNCs. Gaps in current normative frameworks include a lack of enforcement and a failure to explicitly or acutely address environmental harms or post-conflict contexts.

12.5.1 Practical challenges

Practical challenges to addressing sustainable development and environmental protection during the transition to peace include tight deadlines and limited resources for conducting due diligence and ESIA. Adequately understanding the conflict context as well as the environmental and social dynamics of development projects requires in-depth consultation with a wide range of stakeholders. It also requires understanding

⁹⁶ *ibid.* 50.

⁹⁷ *ibid.* 65.

current good practices and new or developing standards, as well as a consensus among stakeholders for the best approach in a given situation. This is time and labour intensive, and a disincentive for adhering to voluntary standards or other good practices for external actors working in post-conflict situations.

Soft law norms for corporations rely on a level of trust and good faith on the part of the corporation. However, immediately post-conflict, the instability of the state and the chaotic environment may even attract companies that generally have lower standards for corporate responsibility.⁹⁸ Combined with low pay rates, complicated bureaucracy for businesses, and high levels of corruption, accountability and transparency are at risk.⁹⁹ Indeed, according to UNEP, it is easy for corruption to become the norm in these situations. As a result, this attracts companies that ‘thrive under conditions of poor transparency, corruption, non-competitive bidding, and so on.’¹⁰⁰ Other, more socially responsible and above-the-board companies are driven out, sometimes through threats and intimidation. This creates a systemic lack of transparency and accountability, which can then allow natural resource revenues to feed into other illicit activities, such as drugs or smuggling.¹⁰¹

Political considerations are also a significant challenge. Often, contracts with large corporations working in the extractive industry will include certain social provisions, such as provision of education and health services. However, if corporations take over the provision of these services, this can undermine the legitimacy of the government and trust in its ability to provide necessary services.¹⁰² The UN and other international agencies depend on government support and buy-in, which raises its own set of challenges. Implementing programmes and policies that will ultimately be later overturned due to a future lack of government support is a waste of time and resources. Therefore, in drafting assistance agreements or creating country assistance plans, such organizations might be torn between using discreet language—which might pacify government stakeholders and ensure their buy-in—and stronger language that will ensure more attention and support from the donor community.¹⁰³ The result might be a balance between the two that does not adequately capture the attention or support of either.

Striking the right balance can be exacerbated in situations where there is little trust between domestic entities. In such environments, suspicion and exclusion are common, leading to challenges in developing agreements and collecting the necessary information to monitor implementation.¹⁰⁴ International organizations must be strategic in order to avoid increasing these tensions and distrust. This can lead to such organizations taking neutral or technical approaches and avoiding contentious policy issues. This, for example, has often been the approach taken by UNEP.¹⁰⁵ Providing neutral, reliable, scientific information about the environment can fill an important knowledge gap. But it can also mean missing an opportunity to strengthen institutions and policies

⁹⁸ Note that this is not a general rule and in fact is not always the case. See, for example, Coca-Cola’s entry into Myanmar and the anticipatory, preventative measures they were required to take in order to do so. The Coca-Cola Company, ‘Responsible Investment in Myanmar Report’ (2013).

⁹⁹ Brown *et al.* (n 18) 332–3.

¹⁰⁰ UNEP (n 1) 60.

¹⁰¹ *ibid.*

¹⁰² Brown *et al.* (n 18) 332.

¹⁰³ UNDESA SD (n 2) 94.

¹⁰⁴ Conca and Wallace (n 4) 73.

¹⁰⁵ *ibid.* 74.

when it is necessary to decide what to do about environmental risks. In addition, as one study has noted:

In divided societies ravaged by violent conflict, actors will bring to the table many different ways of knowing and historical reference points; the technical-rational discourse of modern science will be inaccessible to a wide swath of the population; and 'facts' will be widely understood to be political things. Under these circumstances, efforts to depoliticize knowledge entail a clear trade-off: they make it more feasible to work under very difficult circumstances but at the risk of reducing the scope of potential ownership in the results.¹⁰⁶

Given the need for coordination between the large body of domestic and international stakeholders involved in peacebuilding, these trade-offs and politics will become increasingly complicated and burdensome. It could risk stagnating efforts for positive change.

There are other important trade-offs as well. International organizations will have to decide between relying on national legal frameworks or following international best practices. While the national legal framework might in some ways be inadequate to effectively deal with sustainable development and environmental protection, relying on it could ensure greater domestic buy-in and increase the legitimacy of the international intervention. On the other hand, this approach could slow progress as capacity is built.¹⁰⁷

As with any international intervention, it is important to have the approval and support of domestic authorities. Such interventions depend on local input and ownership, and should not be viewed as imposed or self-serving. This is important to ensuring the effectiveness of programmes in the long term as well as promoting better handover when, as inevitably happens, donors and aid organizations leave the country.¹⁰⁸

In addition to including the views and positions of the domestic government in approaching environmental integrity in post-conflict situations, the approaches of international organizations need to include MNCs. As a country transitions to peace, donors will often promote foreign investment to help restart the economy so that MNCs can become active players in post-conflict economies.¹⁰⁹ It is therefore necessary to include such actors in discussions about natural resource management. In addition, there should be measures put in place to ensure that negotiations between MNCs and post-conflict governments are fair and transparent. In the aftermath of conflict, states are typically weak and therefore at a disadvantage when negotiating with MNCs. If the resulting agreements are unfair or do not require adequate environmental and social safeguards, there could be longstanding negative repercussions.

12.5.2 Gaps in existing frameworks

The most significant gap in the existing frameworks for ensuring that corporations protect the environments in which they are operating is the enforcement gap. As discussed

¹⁰⁶ *ibid.* 75.

¹⁰⁷ *ibid.* 78.

¹⁰⁸ Rustad *et al.* (n 85) 592.

¹⁰⁹ *ibid.* 601.

at length above, even where domestic legislation exists for these purposes, it is frequently insufficiently enforced. In addition, the non-binding international frameworks in place fail to specifically proscribe corporate acts that damage the environment and distinguish such acts from violations of human rights. The private sector MSIs designed for these purposes also lack mechanisms for independent enforcement. Assuming that one normatively believes that corporations should have the same or similar duties and responsibilities when operating in a foreign jurisdiction as they would when operating in their home country, therefore, it is necessary to envisage an approach for ensuring such duty or responsibility is met that is both effective at providing harmed individuals some sort of (even indirect) recourse and practically feasible. This is necessary to ensure not only justice for those harmed, but also to encourage compliance such that those harms might be avoided in the first place. We argue that the extent to which companies feel the threat of recourse in the form of some sort of enforcement mechanism effectively determines whether normative guidelines will have any preventative influence.

The greatest potential source of enforcement therefore seems to be in the form of media and NGO naming and shaming. Taking advantage of the momentum behind the global CSR movement in recent years, human rights and environmental NGOs and activists have begun treating the principles codified in the Ruggie Framework and other normative frameworks as concrete standards by which to hold companies and governments accountable, thereby creating a unified baseline. This allows concerned stakeholders to be more cohesive and directed in their efforts at naming and shaming companies that fail to abide by recognized standards for business and environmental and human rights, making them more effective watchdogs.¹¹⁰ As a result, the media and the activist/advocacy NGO community now effectively constitute an enforcement mechanism for the normative frameworks that lack a judicial court or tribunal.¹¹¹

In addition, the voluntary frameworks discussed here fail to explicitly or acutely address environmental wrongs and adverse environmental impacts of corporate malfeasance on local populations—this is a second gap in the existing frameworks in this area. The majority of the language used is instead focused on human rights abuses. Although there is now arguably consensus around the concept of environmental rights which must be protected by the international community at the same level as human rights, and that certain environmental harms in fact effectively constitute deprivations of human rights (i.e. the right to health and a healthy environment, the right to food and water, among many others), it would likely be advantageous to efforts at increasing corporate environmental responsibility to expand existing soft law frameworks for the enforcement of international norms via corporations such that those norms come to explicitly and acutely incorporate environmental issues.

Third and finally, with the exception of the Voluntary Principles on Security and Human Rights, the frameworks and initiatives explored here seldom mention the need

¹¹⁰ Jochnick and Rabaeus (n 62) 438.

¹¹¹ For more on this, see Hana Ivanhoe, 'The Next Generation of "Fair Trade": A Human Rights Framework for Combating Corporate Corruption in Global Supply Chains' in Bård A. Andreassen and Võ Khánh Vinh (eds.), *Duties Across Borders. Advancing Human Rights in Transnational Business* (Intersentia, forthcoming 2017).

for heightened scrutiny regarding human rights violations and protections in post-conflict countries. The Ruggie Framework references the need for such heightened scrutiny, but only in the context of the state duty to protect such human rights; it fails to couch this requirement explicitly in terms of additional obligations for human (and/or environmental) rights protections to be borne by companies when entering newly post-conflict markets.

We therefore propose a more robust application of the principles enshrined in the Ruggie Framework and related normative frameworks and private sector guidelines, in a manner that explicitly and acutely addresses issues of environmental degradation in post-conflict settings. NGOs and activists could then use such an expanded application of the Framework and its standards, in concert with the growing CSR movement, to provide some sort of means of enforcement. This would pull MNCs into the *jus post bellum* framework and offer an accountability mechanism for currently un- or under-regulated MNCs operating in fragile post-conflict states.

Requiring MNCs to adhere to these norms and good practices in their operations in post-conflict states could also have a spillover effect as they incorporate them into their business practices more generally. As part of the *jus post bellum* framework, these norms could also contribute to a more holistic approach to peacebuilding and sustainable peace. Moreover, incorporating soft law standards into peacebuilding plans and priorities could strengthen their normative value and enforceability and establish good practices following the Frameworks. If they are incorporated into the domestic legislation of post-conflict states, they could eventually become part of customary international law.

MNCs should also be encouraged to see the business gain from complying with voluntary standards and government legal frameworks. Voluntary standards that include environmental and social safeguards can assist the MNCs and their financiers to play a constructive post-conflict role and ensure the success of their venture. MNCs have been motivated to comply with such standards when there are (1) requirements imposed by financial institutions or their home-country legislation and (2) an impetus to ensure long-term profitability by developing a reputation as a 'reputable' company.¹¹²

12.6 Conclusions

Addressing environmental concerns in a post-conflict setting is a difficult undertaking; yet addressing these concerns is vital to ensuring that post-conflict countries develop sustainably. Given the inadequacy of existing post-conflict country domestic and international hard law governing environmental protections, voluntary and soft law norms and the corporate social responsibility movement are critical to ensuring that multinational investment in post-conflict countries is in line with sustainable development principles and the long-term economic and environmental prosperity of those countries. Thus, they constitute an important source of norms for a holistic *jus post bellum* framework.

¹¹² Rustad *et al.* (n 85) 602.

Peacebuilders must take the opportunity to work with private corporations to secure environmental and social safeguards in development projects that could otherwise lead to resurgence of conflict. This should be done through both domestic and international regulation. One part of this is an expansion and imposition of soft law norms for the protection of human and environmental rights by MNCs, specifically in post-conflict countries. This will require the expansion of the Ruggie Framework so as to explicitly refer to peacebuilding environments—or at the very least—its expanded application as well as effective enforcement (by monitoring NGOs and media). CSR standards as codified in international soft law should also be more comprehensively included in international loan and financing agreements where the recipient is or is operating in a recently post-conflict country. Such initiatives and standards also need to be adapted to be context and conflict specific.¹¹³ Any agreements related to land acquisition or use must also be made with the consensus of the affected community.

At a minimum, these norms must include the following fundamental tenants of corporate responsibility, as articulated in the Ruggie Framework and subsequent guidelines:

- Corporate duty to respect human rights extra-territorially;
- Human rights due diligence; and
- Non-judicial grievance mechanisms.

The study of environmental protection and sustainable development shows important challenges *for jus post bellum*. In particular, it shows the need to incorporate soft law norms and standards as a part of a holistic *jus post bellum*. These standards provide a critical opportunity to harness the power of private corporations and direct investments to ensure sustainable development in post-conflict states, resulting in a smoother and more durable transition to peace.

¹¹³ Additional research will evaluate existing standards and propose areas for potential improvement with respect to post-conflict situations.

Private Security Companies and Other Private Security Service Providers (PSCs) and Environmental Protection in *Jus Post Bellum* Policy and Regulatory Challenges

*Onita Das and Aneaka Kellay**

13.1 Introduction

The need for better environmental protection has been highlighted as a key issue within the regulation of armed conflict, particularly at the *jus post bellum*¹ stage. As Payne notes, '[i]nternational legal instruments do not address the normal operational damage to the environment that is left after hostilities cease, from sources such as the use of tracked vehicles on fragile desert surfaces; disposal of solid, toxic, and medical waste; depletion of scarce water resources; and incomplete recovery of ordnance.'² Nevertheless, the issue of environmental protection in *jus post bellum* including challenges associated with 'toxic remnants of war' ('TRW'), is gaining prominence. TRW describes 'any toxic or radiological substance resulting from military activities that forms a hazard to humans and ecosystems.'³ The term was coined to facilitate greater awareness of the impact of military pollution and conflict-based activities on the environment and public health.

Another challenge to environmental protection as part of the *jus post bellum* framework is the huge rise in the use of private security companies, private military security contractors, and private security service providers (collectively, 'PSCs')⁴ in recent years. PSCs have, in recent conflicts, played a key role, not only during conflict, but

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¹ '[T]he set of norms applicable at the end of armed conflict—whether internal or international—with a view to establishing sustainable peace.' See Vincent Chetail, 'Introduction: Post-Conflict Peacebuilding—Ambiguity and Identity' in Vincent Chetail (ed.), *Post-Conflict Peacebuilding: A Lexicon* (Oxford: Oxford University Press, 2009), 18.

² Cymie Payne, 'The Norm of Environmental Integrity in Post-Conflict Legal Regimes' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 511.

³ TRW Project, 'Pollution Politics: Power, Accountability and Toxic Remnants of War' (2014) accessed at <www.toxicremnantsofwar.info/report-pollution-politics-power-accountability-and-toxic-remnants-of-war> accessed 9 February 2017.

⁴ This abbreviation PSC encompassing private security companies and private security service providers is adopted by the 2010 International Code of Conduct for Private Security Service Providers (ICoC). We use the abbreviation PSC to include the terms Private Security Companies and Private Military Companies as well.

also during the withdrawal phase of official troops, in managing the disposal of huge amounts of military waste and conflict debris. This stage sees the prominent presence of PSCs in fragile states like Iraq and Afghanistan,⁵ undertaking training and reconstruction work.⁶ There is also a trend for states involved in international conflicts seeking to maintain a presence in unstable regions, utilizing the services of PSCs in the face of waning domestic support for providing troops and supplies. It is at this transitional phase that PSCs are most prominent and their activities raise environmental concerns.

During the US-led occupation of Iraq (2003–11) for example, significant operational, logistical, and reconstruction work was outsourced to companies like Halliburton and former subsidiary Kellogg Brown & Root ('KBR'). Much of this work involved the handling and disposal of hazardous waste, reconstruction work, and the disposal of conflict debris. Controversy around the use of open burning techniques such as burn pits by Halliburton and KBR⁷ as a primary means of waste disposal on US bases in Iraq and Afghanistan has brought to light issues on the environmental implications of PSC activity. Environmental implications that can have a negative effect on the war-torn country achieving sustainable peace. However, a detailed assessment of the regulation of PSCs in specific reference to their environmental responsibilities is yet to be conducted. This chapter reviews this topical area with a focus on PSC activities post-conflict.⁸ Using the recent Iraq and Afghanistan conflicts as examples, with a focus on US use of PSCs, this chapter first explores the growth of PSCs and their influence on the creation and management of environmental issues, including TRW, and secondly reviews the applicable legal and policy frameworks within which this takes place. The current regulation of PSCs is explored, alongside the question of whether the existing framework is adequate to the task of protecting the environment during the transition from conflict to sustainable peace.

13.2 PSCs and Environmental Issues: An Overview

13.2.1 The rise of PSCs

PSCs are defined by the International Committee of the Red Cross ('ICRC') as 'private business concerns that provide military and/or security services'.⁹ During the Cold

⁵ Nicholas Tsagourias and Nigel White, *Collective Security: Theory, Law and Practice* (Cambridge University Press, 2013), 138.

⁶ Scott Hickie, Chris Abbott, and Raphaël Zaffran, 'Trends in Remote Control Warfare' in 'New Ways of War: Is Remote Control Warfare Effective?' *The Remote Control Digest* (October 2014), at <<http://oxfordresearchgroup.org.uk/sites/default/files/Remote%20Control%20Digest.pdf>> accessed 9 February 2017.

⁷ A majority of contracts since 2001 have been implemented by KBR (a subsidiary of Halliburton until 2007). This chapter refers only to KBR in relation to these contracts.

⁸ *Jus post bellum* covers the post-conflict phase. See, for example, Roxana Vatanparast, 'Waging Peace: Ambiguities, Contradictions, and Problems of a *Jus Post Bellum* Legal Framework' in Stahn, Easterday, and Iverson (n 2) 144 (argues that 'a legal jus post bellum framework can consolidate the current piecemeal approaches to the post-conflict phase in international human rights law, international criminal law, and international humanitarian law, fill in any gaps, and define the way these various laws ought to interplay with each other' (footnote omitted)).

⁹ ICRC, *International Humanitarian Law and Private Military/Security Companies* (ICRC, 2013), at <<https://www.icrc.org/eng/resources/documents/faq/pmssc-faq-150908.htm#header>> accessed 9 February 2017.

War, there was a realization in the United States that despite its economic and military strength, it would not be able to respond to multiple large threats simultaneously.¹⁰ A key issue was US ability to sustain supply lines across the world. Out of this concern, the Logistics Civilian Augmentation Program ('LOGCAP') emerged.¹¹ LOGCAP awarded contracts for logistical work to civilian contractors, which allowed the army's influence to extend without significantly expanding recruitment.

It is widely recognized that the global war on terror, particularly US foreign policy in Iraq and Afghanistan, has a strong correlation with the post-9/11 growth in the private security industry.¹² The Iraq and Afghanistan conflicts over the last two decades saw the most significant use of PSCs yet, with a majority of support services¹³ outsourced to KBR, DynCorp, and Fluor.¹⁴ While exact figures are difficult to establish, Avant and Nevers note that during the 1991 Gulf conflict, the ratio of troops to contractors was approximately ten to one, and in the 2003 Iraq conflict the ratio was approximately one to one.¹⁵ In April 2014, the ratio of private contractors to US soldiers in Afghanistan was two to one.¹⁶ As we are witnessing the drawdown of troops in Afghanistan at present, it is likely that significant numbers of PSCs will remain.¹⁷ While popular support for the Iraq and Afghanistan conflicts has waned, the use of PSCs allows the United States to maintain a strong presence in both countries.

The subsequent section explores PSC activities at the post-conflict phase and their impact on the environment and human health.

¹⁰ Pratap Chatterjee, *Halliburton's Army: How a Well-Connected Texas Oil Company Revolutionized the Way America Makes War* (New York: Nation Book, 2010).

¹¹ *ibid.*

¹² Nikolaos Tzifakis, 'Contracting Out to Private Military and Security Companies' (2012) Centre for European Studies 1; Sam Perlo-Freeman and Elisabeth Sköns, 'The Private Military Services Industry' (2008) 1 SIPRI Insights on Peace and Security 1.

¹³ 'Contractors provide a wide range of services, from transportation, construction, and base support, to intelligence analysis and private security. The benefits of using contractors include freeing up uniformed personnel to conduct combat operations; providing expertise in specialized fields such as linguistics or weapons systems maintenance; providing a surge capability, quickly delivering critical support capabilities tailored to specific military needs. Because contractors can be hired when a particular need arises and released when their services are no longer needed, contractors can be less expensive in the long run than maintaining a permanent in house capability.' See Moshe Schwartz and Jennifer Church, 'Department of Defense's Use of Contractors to Support Military Operations: Background, Analysis, and Issues of Congress' (2013) CRS Report for Congress (Congressional Research Service), Summary.

¹⁴ LOGCAP III (2001–2007) was awarded to KBR. LOGCAP IV (2007–present) was awarded to three companies: KBR, DynCorp, and Fluor.

¹⁵ Deborah Avant and Renée de Nevers, 'Military Contractors & the American Way of War' (2011) 140(3) *Journal of the American Academy of Arts & Sciences* 1, at <http://www.academia.edu/2870854/Military_Contractors_and_the_American_Way_of_War> accessed 9 February 2017.

¹⁶ 61,452 contractors and 30,000 US troops. See Ian Livingston and Michael O'Hanlon, 'Afghanistan Index' (Brookings, 2014), at <<https://www.brookings.edu/wp-content/uploads/2016/07/index20150210.pdf>> accessed 9 February 2017. In 2016, there were roughly 25,197 contractors to 9,800 US troops. See Ian Livingston and Michael O'Hanlon, 'Afghanistan Index' (Brookings, 2016), at <https://www.brookings.edu/wp-content/uploads/2016/07/21csi_20161031_afghanistan_index.pdf> accessed 9 February 2017.

¹⁷ Hickie, Abbott, and Zaffran (n 6). See also Leo Shane III, 'Report: Contractors Outnumber U.S. Troops in Afghanistan 3-to-1' (*Military Times*, 2016), at <<http://www.militarytimes.com/articles/crs-report-afghanistan-contractors>> accessed 9 February 2017.

13.2.2 PSCs and environmental harm

There are many situations in which environmental harm occurs during the transition from conflict to peace. These instances, which take place outside the period of violent conflict, occur as a result of poor environmental management practices or the breakdown of environmental governance. These incidents differ from most environmental damage that takes place during violent conflict, which is usually the result of targeting decisions of military forces or armed groups. In contrast, post-conflict environmental harm can result for example from the mishandling and improper disposal of hazardous military waste or the mismanagement of war debris.

PSCs undertake a variety of work that supports the back end of military operations during this transitory *jus post bellum* period. The services that are of most relevance to post-conflict environmental issues are waste management, munitions, and military materials disposal. Military operations produce huge amounts of waste, including: designated hazardous waste—batteries, fuels, oils and solvents as well as ‘domestic’ waste generated from military bases and general conflict detritus such as building rubble, damaged vehicles, abandoned munitions, landmines, and other unexploded ordinance (‘UXO’). According to one military source there were an estimated 11 million pounds of hazardous military waste in Iraq in 2008.¹⁸ HALO Trust, a demining agency, estimates that up to 640,000 mines have been laid in Afghanistan since 1979.¹⁹ There is also a substantial UXO problem, in both battle areas and on abandoned International Security Assistance Force (‘ISAF’) ranges. In addition, a substantial volume of ex-regime arms and munitions have been destroyed in Iraq. The US Army and its PSCs are said to have disposed of 215,000 tonnes with a further 92,000 stockpiled.²⁰ Given the vast amounts of harmful materials involved, the careful management of waste is of central importance after the cessation of hostilities, particularly for the effective transition to sustainable peace.

Unfortunately there are numerous reports of PSC malpractice in Iraq and Afghanistan.²¹ The fast-growing and largely unregulated PSC industry has allowed for contractor malpractice in three ways: the sector has overwhelmed the US Department of Defense’s (‘DoD’) capacity to adequately oversee and manage contractors; the proliferation in sub-contractor use has widened the management and accountability gap; and the use of prime contractors and no-bid contracts has encouraged a culture of impunity within the PSC industry.

According to the Commission on Wartime Contracting in Iraq and Afghanistan, the number of contract specialists (critical for the proper management of contracts) only

¹⁸ David Botti, ‘The Challenge of Making Iraq and Afghanistan’s Battlefields Green’ *Newsweek* (10 March 2008), at <<http://www.newsweek.com/challenge-making-iraq-and-afghanistan-battlefields-green-223158>> accessed 9 February 2017.

¹⁹ The Halo Trust, ‘Afghanistan’, at <<http://www.halotrust.org/where-we-work/afghanistan>> accessed 9 February 2017.

²⁰ UNEP, *Assessment of Environmental ‘Hot Spots’ in Iraq* (UNEP, 2005) 50.

²¹ See, for example, Blake Mobley, ‘Outsourcing in Post-conflict Operations: Designing a System for Contract Management and Oversight’ (2004) 15 *Journal of Public and International Affairs* 21, 29–30; David Mosher *et al.*, ‘Green Warriors: Army Environmental Considerations for Contingency Operations from Planning through Post-conflict’ (2008) RAND Corporation 2008, 132–3.

rose by 3 per cent across the US government between 1992 and 2009, while the use of PSCs increased enormously, outpacing contract specialists in the same period.²² This lack of contract management in Washington, alongside the lack of contracting officers managing PSCs on the ground in Iraq and Afghanistan has led to an extremely unregulated environment. This failure to oversee contracts involving PSCs has led to waste, fraud, and abuse.²³

Secondly, the common use of sub-contractors or local contractors, without restriction on the contract chain and the lack of transparency surrounding such sub-contracting,²⁴ has made it harder to ensure proper oversight over their activities. The hiring of local contractors by larger companies such as KBR to undertake waste disposal services, has had both positive and negative effects. While hiring local companies is seen as beneficial in efforts to develop positive local relations as well as making use of local knowledge, in a number of cases, local sub-contractors have mishandled harmful waste products.²⁵

Thirdly, the structure in which PSCs operate, is one in which there are a small number of very large corporations such as Halliburton, KBR, and DynCorp, who dominate the market and have repeatedly been offered no-bid contracts through the DoD's LOGCAP policy. The DoD is fully reliant on these companies for any overseas military operations which leads to a dangerous dynamic in which it is easy for companies to act without regard for contractual agreements or the law, as the following testimony from a former KBR logistics contract manager illustrates:

management would brag that they could get away with doing anything they wanted because the Army could not function without them. KBR figured that even if they did get caught, they had already made more than enough money to pay any fines and still make a profit.²⁶

These problems have resulted in a number of reported cases where PSC conduct has led to environmental damage that has endangered the health of contracted workers, soldiers, and civilians.

The issue that first brought environmental and health concerns to light was the controversy around the misuse of burn pits by KBR in Iraq and Afghanistan.²⁷ Burn pits are open-air waste combustion pits in which waste is burned, creating high levels of air pollution that may result in harmful health impacts on those exposed.²⁸ Particular problems arise when prohibited items such as plastic, batteries, oil products, and

²² Commission on Wartime Contracting in Iraq and Afghanistan, *Transforming Wartime Contracting: Controlling Costs, Reducing Risks*, Final Report to Congress (2011).

²³ Avant and de Nevers (n 15).

²⁴ UN Human Rights Council, Second Session of the Open-Ended Intergovernmental Working Group to Consider the Possibility of Elaborating an International Regulatory Framework on the Regulation, Monitoring and Oversight of the Activities of Private Military and Security Companies, UN Doc. A/HRC/15/25, UNGA, 2 July 2010, 6.

²⁵ Mosher *et al.* (n 21) 133.

²⁶ *Jobes v KBR*, United States District Court for the District of Maryland (5 April 2010) 7, para. 23.

²⁷ US Government Accountability Office, 'Afghanistan and Iraq, DoD Should Improve Adherence to Its Guidance on Open Pit Burning and Solid Waste Management' (US Government, 2010), 1.

²⁸ *ibid.*

medical waste are burned, emitting toxic aerial compounds and particulates into the surrounding environment. While burn pits are only meant to be used during military operations when no other means of waste disposal are available, their use was extensive in Iraq and Afghanistan. The US Central Command ('CENTCOM') estimates that in August 2010 there were 251 burn pits in Afghanistan and twenty-two in Iraq.²⁹ A US Government Accountability Office investigation reveals that burn pits had been used throughout the conflicts due to their 'expedience'.³⁰ US base Joint Base Ballad in Iraq, is suspected of having burned 240 tonnes of waste a day at its peak of operations.³¹ While many Iraq and Afghanistan veterans have returned to the US and reported ill health and death as a result of burn pit exposure,³² as of yet, there has been little information available as to the impact of burn pits on civilians and the surrounding environment.

Another key issue is the management of hazardous waste. The spillage or improper disposal of hazardous waste is identified as one of the most common environmental incidents in military operations.³³ Problems related to the lack of facilities in host countries for hazardous waste disposal and the difficulties associated with transporting waste across borders means that waste often builds up.³⁴ Reports note the improper disposal of hazardous waste in Iraq.³⁵ In one case, an unsubstantiated report states that several hundred thousand lead-acid batteries were sold for lead, whilst the acid was improperly discarded.³⁶ While accurate information is hard to find, a US government funded think tank the RAND Corporation, has reported similar incidents. It notes that:

[o]n more than one occasion in recent operations, contractors have removed hazardous wastes from base camps and, without Army knowledge, dumped them along the side of a road or in other inappropriate locations, sometimes to avoid disposing of them properly or to sell the drums that hold the wastes.³⁷

Such harmful environmental practices not only cause environmental damage but also cause harm to the civilian population.

Alongside the cases of PSC malpractice, there are also questions about whether commercial imperatives can be a driver of environmentally harmful practices. For example, in Iraq, a substantial volume of ex-regime arms and munitions have been destroyed. UNEP found that many commonly used disposal practices ensure that 'contamination of munitions disposal sites is inevitable'.³⁸ Where financial constraints

²⁹ *ibid.* ³⁰ *ibid.*

³¹ Kate Kurera, 'Military Burn Pits in Iraq and Afghanistan: Considerations and Obstacles for Emerging Litigation' (2011) 28(1) *Pace Environmental Law Review* 288.

³² Matthew Gault 'The Human Cost of the Military's Toxic Burn Pits: Taxpayers Wasted Millions to Replace Open-air Burning, but the Damage was Done' *War is Boring* (12 February 2015), at <<https://war-isboring.com/the-human-cost-of-the-militarys-toxic-burn-pits-d9111eb3e2cc#.e4be3ojcd>> accessed 9 February 2017.

³³ Mosher *et al.* (n 21) 24. ³⁴ *ibid.*

³⁵ See, for example, Botti (n 18); Adam Levine, 'Halliburton, KBR Sued for Alleged Ill Effects of "Burn Pits"' *CNN* (28 April 2009), at <<http://edition.cnn.com/2009/US/04/28/burn.pits/>> accessed 9 February 2017.

³⁶ Ms Sparky 'US Army Recycling Program is Destroying Iraq Environment Claim Iraqis' (1 December 2009), at <<http://mssparky.com/2009/12/us-army-recycling-program-is-destroying-iraq-environment-claim-iraqis/>> accessed 9 February 2017.

³⁷ Mosher *et al.* (n 21) 7–8

³⁸ UNEP (n 20) 50.

and to a degree the security of stockpiles require massive destruction of munitions, the most common method of disposal is controlled explosion or burning.³⁹ This form of disposal creates environmental pollution, primarily as a result of the incomplete detonation of energetic materials and the dispersal of particulate, which may also contain heavy metals.⁴⁰ Detonation causes soil compaction and explosive compounds and metals result in soil and air pollution. Contaminants can be reduced through technical measures aimed at ensuring the complete detonation of compounds but these may not be properly implemented. Similarly, guidelines⁴¹ have been developed to reduce the impact of mine clearance operations on the environment but these represent best practice and are not legally binding. The extent to which PSCs follow best practice guidelines on munitions disposal and landmine clearance depends on their weighting of financial, strategic, and humanitarian concerns. As Bolton notes, ‘strategic’ as opposed to ‘humanitarian’ demining as is often undertaken by PSCs (as opposed to non-governmental organizations (‘NGOs’)) has typically emphasized speed and cost-efficiency over quality and safety.⁴²

It is clear that a lack of oversight and regulation combined with the cost-efficiency concerns of PSCs have led to a situation where environmental diligence has not been prioritized, resulting in environmental and human harm. Problems that could have been avoided were not, illustrating a failure in PSC governance. Thus strengthening environmental governance, particularly in relation to PSCs, is a key aspect of increasing post-conflict environmental protection and contributing effectively to the transition from conflict to sustainable peace. The extent to which PSCs and their environmental responsibilities are covered by existing international law is explored in the remainder of this chapter.

13.3 PSCs: Law and Policy and its Relevance to Environmental Protection—an Overview

Assertions have been put forward that PSCs lack control, transparency, and accountability.⁴³ Many commentators argue that such problems are consequences of a lack of domestic and international regulation of PSCs.⁴⁴ In addition, there have been various incidents involving PSCs and their personnel over the years, allegations of operating outside the law—from reports of excessive use of force on civilians to other human rights abuses.⁴⁵ To combat these issues, regulatory efforts have taken place at various

³⁹ *ibid.* ⁴⁰ *ibid.*

⁴¹ IMAS 10.70, *First Edition, Safety & Occupational Health—Protection of the Environment*, United Nations Mine Action Service (1 October 2007).

⁴² Matthew Bolton, *Foreign Aid and Landmine Clearance: Governance, Politics and Security in Afghanistan, Bosnia and Sudan* (London: I.B.Tauris & Co, 2010), 174

⁴³ Elke Krahnemann, ‘Private Military Services in the UK and Germany: Between Partnership and Regulation’ (2005) 14 *European Security* 277.

⁴⁴ *ibid.* 277.

⁴⁵ Irene Pietropaoli, ‘Private Military & Security Companies and their Impact on Human Rights’ (2013) 5 *PMSC Bulletin* 1, 1–2.

levels within the international community—from international, national, to industry.⁴⁶ Because these efforts have taken place at multiple levels, with no cohesion, this has led to a fragmented regulatory framework for the governance of PSCs.⁴⁷ In addition, regulations differ from country to country, further contributing to the disorganized and decentralized PSC regulatory framework.⁴⁸

This section explores regulations governing PSCs, focusing on international law, and assesses whether these international frameworks are adequate to the task of protecting the environment during the transition to sustainable peace.

13.3.1 PSCs and IHL

In armed conflict, the underlying premise of international law is ‘that states are the primary actors on the battlefield.’⁴⁹ In modern conflicts, PSCs have changed the status quo—challenging primary international law principles in this field.⁵⁰

The ICRC confirms that the status of PSC personnel is determined by International Humanitarian Law (‘IHL’) in armed conflicts ‘on a case-by-case basis, in particular according to the nature and circumstances of the functions in which they are involved.’⁵¹ Unless PSC personnel ‘are incorporated in the armed forces’⁵² of a state or have combat functions for an organized armed group belonging to a party to the conflict, the staff of PMSCs are civilians.⁵³ The ICRC also states that ‘[i]f PMSCs are operating in situations of armed conflict the staff of PMSCs must respect IHL and may be held criminally responsible for any violations they may commit.’⁵⁴ This is the position regardless of whether PSCs and their personnel are hired by states, international organizations (‘IOs’), or by private companies.⁵⁵ Therefore any activities or actions by PSC personnel relevant to armed conflict are governed by IHL. It is worth making clear however, that while PSC employees as individuals working for the company could be bound by IHL depending on their role in the conflict,⁵⁶ as companies, PSCs per se are not legally bound to respect IHL ‘which is binding only on parties to a conflict and individuals, not corporate entities.’⁵⁷ However, PSCs are obliged to comply and uphold IHL if such

⁴⁶ Daphné Richemond-Barak, ‘Regulating War: A Taxonomy in Global Administrative Law’ (2011) 22(4) *European Journal of International Law* 1027, 1027–8.

⁴⁷ *ibid.*

⁴⁸ Francesco Francioni and Natalino Ronzitti, ‘Introduction’ in Francesco Francioni and Natalino Ronzitti (eds.), *War by Contract: Human Rights, Humanitarian Law and Private Contractors* (Oxford: Oxford University Press, 2011), 2.

⁴⁹ Chia Lehnhardt, ‘Private Military Companies’ in Nigel White and Christian Henderson, *Research Handbook on International Conflict and Security Law: Jus ad Bellum, Jus in Bello, and Jus post Bellum* (Cheltenham : Edward Elgar, 2013), 422.

⁵⁰ *ibid.* ⁵¹ ICRC (n 9).

⁵² Many military manuals (citing military manuals from Argentina, Australia, Canada, Germany, Netherlands, etc.) and scholars recognize ‘that the armed forces of a party to the conflict consist of all organised armed groups which are under a command responsible to that party for the conduct of its subordinates.’ See Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law: Volume I: Rules* (Cambridge: Cambridge University Press, 2005), 14 (footnote omitted).

⁵³ ICRC (n 9) . ⁵⁴ *ibid.* ⁵⁵ *ibid.* ⁵⁶ *ibid.*

⁵⁷ Montreux Document (Swiss Federal Department of Foreign Affairs/ICRC 2009), 36 (in reference to Statement 22).

laws are integrated into national law. This obligation extends to all national law,⁵⁸ which would include domestic environmental law of the host state.

While scholarship in this area focuses primarily on the regulation of PSCs during conflict, there appears to be a dearth of research on how PSCs are regulated post-conflict. As one commentator aptly notes, '[a]rmed conflict is the easy part ... [i]nternational humanitarian law at least provides a framework for addressing the armed conflict settings.'⁵⁹ However, what happens when armed conflict is in the grey area of not quite having ceased or when it is in the post-conflict stage.

According to Jinks, the general rule under the Geneva Conventions is that IHL applies until the 'general close of military operations.'⁶⁰ Jinks also notes that:

many commentators have suggested that the 'general close of military operations' standard is distinct from the 'cessation of active hostilities' standard. The latter refers to the termination of hostilities—the silencing of the guns—whereas the former refers to the complete cessation of all aggressive military maneuvers. On this reading, an 'armed conflict' might persist beyond the 'cessation of active hostilities.'⁶¹

In fact, the International Law Commission ('ILC') argues that IHL 'is also applicable before and after an armed conflict since it contains rules relating to measures taken before and after an armed conflict.'⁶² If this is the case, it could be argued that PSC personnel have to respect IHL even at the post-conflict stage that is, at least until the general close of military operations and if the relevant IHL is incorporated into domestic law, so does the PSC as a company. However, it would still be problematic to determine when the general close of military operations is in many conflict situations.

Nevertheless, if IHL is still applicable after an armed conflict, this could mean that PSCs would have some obligation to protect the environment post-conflict. This could include protection from IHL rules such as Articles 35(3) and 55 of the First Additional Protocol (1977) to the 1949 Geneva Conventions ('AP I')—specifically formulated to protect the environment⁶³ as well as other rules under the 1949 Geneva Convention that are relevant to PSC activities. For example, Article 147 considers grave breaches to include 'extensive destruction and appropriation of property not justified by military necessity and carried out unlawfully and wantonly'. In the context of occupation, Article 53 provides that 'any destruction by the Occupying Power of real or personal

⁵⁸ *ibid.*

⁵⁹ Ian Ralby, 'Regulation of Private Military Security Companies', Meeting Summary: International Law Programme (Chatham House, 7 October 2011), 12.

⁶⁰ Derek Jinks, 'The Temporal Scope of Application of International Humanitarian Law in Contemporary Conflicts' Background Paper prepared for the Informal High-Level Expert Meeting on the Reaffirmation and Development of International Humanitarian Law (Cambridge, 27–29 January 2003), 3.

⁶¹ *ibid.*

⁶² See UN, Report of the International Law Commission, Sixty-third Session (26 April–3 June and 4 July–12 August 2011), Annex E, 'Protection of the Environment in relation to Armed Conflicts' Supplement No. 10, A/66/10, 357.

⁶³ Although there is voluminous literature on the weaknesses and difficulties of actually implementing these particular rules. See, for example, Onita Das, *Environmental Protection, Security and Armed Conflict: A Sustainable Development Perspective* (Cheltenham: Edward Elgar, 2013), 132–42; UNEP, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP, 2009).

property belonging individually or collectively to individuals, or to the state, or to other public authorities, or to social or cooperative organizations, is prohibited, except where such destruction is rendered absolutely necessary by military operations.⁶⁴ These provisions could therefore extend to PSC activities that destroy property and subsequently cause harm to the environment and civilians. For example, it could be argued that dumping toxic waste into a river which leads to the contamination of a water source could be interpreted as destroying civilian property. However, it is worth pointing out that these direct and indirect environmental protection provisions within IHL are difficult to apply in relation to regular state armed forces, and that it is unlikely that applying these provisions to PSCs would be any easier.⁶⁵

13.3.2 PSCs and IHRL

As with IHL, PSCs as companies and therefore non-state actors, are not bound by international human rights law ('IHRL'), only states are.⁶⁶ However, PSCs are obliged to comply and uphold IHRL if such laws are integrated into national law.⁶⁷ The Montreux Document⁶⁸ and the International Code of Conduct for Private Security Service Providers ('ICoC'),⁶⁹ are international instruments that provide guidance on regulation and best practices for PSCs globally. Both documents provide that PSCs and their personnel should respect IHRL in conduct of their activities.⁷⁰

IHRL is relevant in the context of protecting the environment as damage to the environment could adversely affect the human rights of affected populations. As UN Special Rapporteur on Toxic Waste, Ibeanu notes, '[a]lthough war has always had an adverse effect on the environment, the voluntary or incidental release of toxic and dangerous products in contemporary conflicts has an important adverse effect on the enjoyment of human rights.'⁷¹ Harm and 'contamination of the environment, through soil, water, air or the food chain can lead to the denial of enjoyment of basic rights, such as the right to life, to health, to food, to safe and decent housing, etc.'⁷² Such effects on the environment and population creates additional problems to achieving sustainable peace. Ibeanu goes on to argue that, 'corporations must be held liable for their direct involvement in the violation of human rights, or for supplying toxic or dangerous products in the knowledge that their use will lead to a violation of human rights.'⁷³

⁶⁴ This provision provides a similar scope of protection to property as Article 55 of the Hague Regulations.

⁶⁵ Michael Bothe *et al.*, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92 *International Review of the Red Cross* 569 (on gaps of IHL environmental protection in armed conflict).

⁶⁶ Montreux Document (n 57) 36 (in reference to Statement 22) . ⁶⁷ *ibid.* ⁶⁸ *ibid.*

⁶⁹ ICoC website, 'About the ICoC Association', at <<https://icoca.ch/en/icoc-association>> accessed 10 February 2017.

⁷⁰ See, for example, Art. 22, Section E, Montreux Document; Arts. 3, 4, 6, Preamble and Art. 21, Section E, ICoC.

⁷¹ Okechukwu Ibeanu, Special Rapporteur, Adverse Effects of the Illicit Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights UNGA, A/HRC/5/5, 5 May 2007, 1

⁷² *ibid.* 11.

⁷³ *ibid.* 18.

There are a number of IHRL principles that may be relevant to PSC post-conflict activities that causes harm to the environment. For example, individuals may be able to invoke the ‘right to life’ under Article 3 of the Universal Declaration of Human Rights and Article 6 of the International Covenant on Civil and Political Rights (‘ICCPR’) ‘in cases in which death results from the release of toxic products into the environment, as long as responsibility of the state is established.’⁷⁴ This could include cases where PSC post-conflict activities cause environmental harm from toxicity released into the environment which as a result, causes serious injury or death. This right could thus be invoked against the state and possible PSC and its employees—the state by virtue of state responsibility and the PSC, if the relevant IHRL principle is already part of the national law of the state.⁷⁵ Even though the state may not be responsible for the activities that caused the release of toxic chemicals into the environment, leading to harm to the population, it could be argued that state responsibility may be established in that ‘the state may be subject to an obligation to take all possible measures to ensure the safety of the local population in the aftermath of the incident. These may include inter alia evacuation, assessment of contamination and a clean-up and remediation programme.’⁷⁶ In a post-conflict situation however, establishing the responsibility of the host state (in particular) for violations committed by the PSC may be difficult as the war-torn host state may be in a weak and vulnerable position.⁷⁷ The responsibility of states and other organizations hiring PSCs is considered later in this chapter.

The state could also be found in violation of the right to life by harm to the environment itself. For instance, the state could be found liable via state responsibility for PSC activities that cause such harm and extensive damage to the environment, that as a consequence it violates the right to life of the affected population, adversely affecting their living environment and livelihood resources. This is illustrated by the Ogoni case⁷⁸ where action by Nigerian military forces and oil companies resulting in destruction of the environment and living resources of the Ogoni community in Nigeria was found by the African Commission on Human and People’s Rights (‘ACoMHPR’) to be a violation of right to life.⁷⁹ According to ACoMHPR:

Given the widespread violations perpetrated by the government of Nigeria and private actors (be it with its blessing or not), the most fundamental of all human rights, the right to life has been violated ... The pollution and environmental degradation to a level humanly unacceptable has made living in Ogoniland a nightmare. The survival of the Ogonis depended on their land and farms that were destroyed by the direct involvement of the government. These and similar atrocities not only persecuted

⁷⁴ *ibid.* 14. ⁷⁵ Montreux Document (n 57) 36 (in reference to Statement 22).

⁷⁶ Ibeanu (n 71) 14.

⁷⁷ Iraq for example, does not regulate PSCs operating in its territory. See Emanuela-Chiara Gillard, ‘Private Military/Security Companies: the Status of their Staff and their Obligations under International Humanitarian Law and the Responsibilities of States in Relation to their Operations’ ICRC Third Expert Meeting on the Notion of Direct Participation in Hostilities (Geneva, October 2005), 1.

⁷⁸ Communication No 155/96, *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria* (AHLRL 60, 27 October 2001).

⁷⁹ See also Frederico Lenzerini and Francesco Francioni, ‘The Role of Human Rights in the Regulation of Private Military and Security Companies’ in Francioni and Ronzitti (n 48) 62–3 (for a discussion on PSCs and right to life).

individuals in Ogoniland but also the Ogoni community as a whole. They affected the life of the whole of the Ogoni society.⁸⁰

This case demonstrates that severe environmental destruction, where a community's access to resources and living space is disrupted—from a health, livelihood, and environmental perspective, could be considered a violation of right to life and in the post-conflict context, negatively affecting the transition to sustainable peace. Unfortunately, the Ogoni case, as per traditional IHRL liability, only established liability for the state, Nigeria, and not private actors involved. Therefore, PSCs conducting activities such as uncontrolled dumping of toxic post-conflict waste, for example, that could cause the environment to become significantly hazardous in that it interferes with the 'right to life' of the local population, would require the victims to look towards the state for liability. This demonstrates the difficulty of non-state entities being held responsible for potential violations of IHRL.

Another relevant IHRL right is the right to health which the Committee on Economic, Social and Cultural Rights ('CESCR') has recognized as being interrelated to other IHRL rights.⁸¹ In its General Comment no 14 (2000) on Article 12, International Covenant on Economic, Social and Cultural rights ('ICESR'), the CESCR recognized that realizing the right to health requires states to:

refrain from unlawfully polluting air, water and soil, e.g., through industrial waste from state-owned facilities, from using or testing nuclear, biological or chemical weapons if such testing results in the release of substances harmful to human health.⁸²

With regard to PSCs, it is the state that would be liable under IHRL if it fails to ensure that non-state actors do not violate the populations' right to health. As Lenzerini and Francioni state, '[f]rom this perspective, the PMSC operations might well interfere with the enjoyment of the right to health, given that the types of interferences to this right listed by the CESCR—or at least some of them—can certainly be committed by these companies in carrying out their usual mandate.'⁸³ In the context of PSCs and environmental protection within the *jus post bellum* framework, this means the state must take appropriate measures to limit or prevent post-conflict activities that release toxic substances into the environment that could adversely affect the health of the human population. For example, activities such as burn pits and other forms of waste disposal that releases harmful toxins into the environment, leading to serious health risks, may interfere with the 'right to health' of the local population and PSC personnel involved. Mitigating such activities to realize the right to health could indirectly protect the environment.

Other IHRL principles that may be applicable to PSC activities at the peacebuilding stage include the right to food which could tie in with PSC activities that contaminate the environment as a consequence of toxic exposure and disrupt the food chain as a

⁸⁰ Communication No 155/96 (n 78) para. 70.

⁸¹ For example, right to life, right to food, etc.

⁸² See General Comment No. 14, The Right to the Highest Attainable Standard of Health (Article 12 of the International Covenant on Economic, Social and Cultural Rights, UN Doc. E/C12/2000/4, 11 August 2000, para. 34.

⁸³ Lenzerini and Francioni (n 79) 65.

result. Contaminated soil and water could 'render agricultural goods unsafe for human consumption'.⁸⁴ Also, Article 17 of the ICCPR 'has been interpreted as prohibiting environmental damage that negatively affects family and home life'.⁸⁵ PSC actions causing such environmental damage could thus be prohibited by the state. Failure to do so may attach liability to the state for the PSC's violation of IHRL.

Although IHRL is a useful framework of guidance in the context of PSCs and protection of the environment that is, guidance as to what environmentally harmful activities may violate IHRL, the flaw is that IHRL only binds states. This limits environmental protection in such situations as respecting IHRL is discretionary on the part of PSCs. International soft law regulation on PSC best practices require the respect and adherence to IHRL⁸⁶ but again, it is not binding. Therefore the only way PSCs as a non-state entity would be bound by IHRL is if the relevant IHRL laws were part of the domestic law of the host state.⁸⁷ This illustrates the difficulties in holding non-state entities accountable for IHRL breaches and as a result, 'PMSCs are rarely held accountable for violations of human rights'.⁸⁸

13.3.3 PSCs: International efforts on binding legislation and soft law

At international level there have been significant developments regarding PSC regulation. These efforts have involved attempts to develop binding legislation as well as soft law. The strongest attempt at creating binding legislation was put forward by the UN Working Group on the Use of Mercenaries as a Means of Violating Human Rights and Impeding the Exercise of the Right of Peoples to Self-determination ('Working Group').⁸⁹ Their efforts led to the formulation of a Draft of a Possible Convention on Private Military and Security Companies ('UN Draft'),⁹⁰ which was presented to the Human Rights Council ('HRC') in July 2010.

This work, while significant, needs development in regard to its environmental protection provisions. In its current form the document reflects IHL's weak form of environmental protection, noting Article 35 of AP I, which prohibits means and methods of warfare which causes 'widespread, long-term and severe' damage to the natural environment. This IHL provision has been widely criticized for its high threshold of harm which permits a majority of environmental damage in conflict.⁹¹ The UN draft document is also limited in its call for a limitation on weapons that might cause harm, as opposed to taking a wider view of military activity, including military waste disposal that can also cause severe harm to civilians and combatants alike. For example, Article 10(2) provides that each state party should take the necessary measures 'to prevent PMSCs and their personnel from using weapons likely to adversely and/or irreversibly

⁸⁴ Ibeanu (n 71) 15 (referring to CESCR, General Comment No. 12 (1999), para. 8).

⁸⁵ UNEP (n 63) 48.

⁸⁶ See, for example, Art. 22, Section E, Montreux Document; Arts. 3, 4, 6, Preamble and Art. 21, Section E, ICoC.

⁸⁷ See Montreux Document (n 57) 36 (in reference to Statement 22).

⁸⁸ UNHRC (n 24) 6.

⁸⁹ HRC Res 2005/2. See UN Working Group website, at <<http://www.ohchr.org/EN/Issues/Mercenaries/WGMercenaries/Pages/WGMercenariesIndex.aspx>> accessed 10 February 2017.

⁹⁰ UNHRC (n 24).

⁹¹ UNEP (n 63) 11.

damage the environment on a massive scale'. On the other hand, Article 10(3) sets out that states parties should take necessary measures 'to ensure that PMSCs and their personnel under no circumstances use, threaten to use and/or engage in any activities related to nuclear weapons, chemical weapons, biological and toxin weapons, their components and carriers.' This could be interpreted to include PSC post-conflict activities that engage in military waste and conflict disposal involving the disposal of such toxic weapons and its components. However, this provision is still narrow in that it does not cover non-weapon-related toxic materials.

By not taking a wider view of military activity, this document missed the opportunity to create more specific legislation that could provide environmental protection within the *jus post bellum* framework. The Draft does however, state that 'the Convention applies to all situations whether or not the situation is defined as an armed conflict.'⁹² This could be interpreted to apply to all stages of a conflict including in- and post-conflict. Unfortunately, the draft convention was not adopted by the HRC. Instead, the HRC passed a resolution establishing 'an open-ended intergovernmental group' to assess and 'consider the possibility of elaborating an international regulatory framework, including, inter alia, the option of elaborating a legally binding instrument.'⁹³

International efforts are also evident in the formulation of various soft law instruments to provide guidance on PSC regulation. The Montreux Document On Pertinent International Legal Obligations and Good Practices for States Related to Operations of Private Military and Security Companies During Armed Conflict ('Montreux Document') sets out guidance on pertinent international legal obligations and good practices for states related to operations of PSCs during armed conflict.⁹⁴ The Montreux Document, produced in 2008, is widely regarded as a template for acceptable practices in engaging and monitoring PSC services. It is the first document of international significance to define how international law applies to PSCs operating in an armed conflict zone. The document also specifies that the existing obligations and good practices contained within it may also provide guidance to PSCs on activities in post-conflict situations.⁹⁵

The good practices set out in the document are also designed to help states take measures nationally in order to fulfil their obligations under international law.⁹⁶ It aims to address legal questions raised by PSC activities without creating new obligations. It has been criticized that the provisions are very broad, setting out that states must respect IHL and adhere to their obligations under IHRL without explicitly specifying which provisions within IHL and IHRL.⁹⁷ It is not a legally binding instrument and although the Montreux Document is only a best practice guide, it can be helpful to hiring parties in formulating their own internal policies relating to PSCs. Moreover, though directed to states, the document can provide guidance to non-state actors (IOs, private companies, NGOs) hiring PSCs.

⁹² Art. 3 (3), Draft of a Possible Convention on Private Military and Security Companies.

⁹³ UNHRC, UN Doc. A/HRC/RES/15/26, adopted 1 October 2010.

⁹⁴ Montreux Document (n 57).

⁹⁵ *ibid.* 9.

⁹⁶ Ralby (n 59) 10.

⁹⁷ Part 1, Section E, Montreux Document (n 57).

Du Plessis sums this up, stating that

[t]he list of best practices in the Montreux Document includes recommendations that clients determine which services they want to outsource and they clearly set out how they will select and contract companies, including the criteria they will apply in making their selection. There are also recommendations regarding clauses that should be included in contracts and ways that clients can monitor compliance with the contract and ensure that companies are held accountable for any breaches.⁹⁸

Therefore the Montreux Document provides additional guidance on the formulation of contracts between the hiring party and PSC. However, how it works in practice differs, with reports⁹⁹ showing that state efforts to adhere to the commitments within the document are mixed, with some states finding the document of value in developing the relevant laws and policies while others finding it of limited relevance.¹⁰⁰ These reports include evidence that the human rights impact of PSC activities are often not adequately addressed,¹⁰¹ illustrating a failure to respect IHRL obligations as required by the document.

Although the title of the Montreux Document indicates it applying ‘during armed conflict’, it has been suggested that the document can also be used to provide post-conflict guidance on PSC regulation. As Beerli notes, ‘[t]hough the Montreux Document explicitly focuses on armed conflict situations, it can serve to guide and inspire States in the development of regulations and policies aimed at preventing violations of international law by PSCs in post-conflict and in other, comparable situations.’¹⁰² Therefore guidance for post-conflict PSC activities can be found in this document.

Though welcomed by key NGOs involved in the process, there have been criticisms levelled at the document—one being ‘that some relevant and well-established propositions of IHRL were not fully reflected in the text, including the state’s obligation to protect and apply the standard of due diligence.’¹⁰³ Such gaps in the guidance, where important IHRL principles are relevant to post-conflict PSC activities could further lead to a lack of respect of IHRL and as a consequence, contribute to adverse human rights impacts and indirectly, negative environmental impacts, of PSC post-conflict activities.¹⁰⁴ Another criticism is that there is no specific guidance on any

⁹⁸ André du Plessis, ‘The Global Code of Conduct for Private Security Companies: Why It Matters to Humanitarian Organisations’ 47 *Humanitarian Exchange* (June 2010), at <<http://www.odihpn.org/humanitarian-exchange-magazine/issue-47/the-global-code-of-conduct-for-private-security-companies-why-it-matters-to-humanitarian-organisations>> accessed 10 February 2017.

⁹⁹ For a review of the Montreux Document in practice, see Rebecca De Winter-Schmitt (ed.), ‘Montreux Five Years On: An Analysis of State Efforts to Implement Montreux Legal Obligations and Good Practices’ (Washington College of Law, 2013).

¹⁰⁰ *ibid.* 19. ¹⁰¹ *ibid.*

¹⁰² ‘Private Military/Security Companies: Rules Should be Implemented’ Keynote address by Christine Beerli, Vice-president of the ICRC, Montreux +5 Conference, Montreux, Switzerland, 11–13 December 2013, at <<http://www.icrc.org/eng/resources/documents/statement/2013/12-11-privatization-of-war-montreux-plus-5-beerli.htm>> accessed 10 February 2017.

¹⁰³ Scott Jerbi *et al.*, ‘The International Code of Conduct for Private Security Service Providers’ Academy Briefing No. 4 (Geneva Academy of International Humanitarian Law and Human Rights 2013) 6 (footnote omitted) (referring to a statement by Amnesty International).

¹⁰⁴ *ibid.* 6–7 (for further discussion on the lack of reflection of pertinent human rights principles in the Montréal Document).

environmentally-related obligations. Nevertheless, there is no doubt that the Montreux Document has been gaining acceptance. Originally supported in 2008 by seventeen states and the EU, currently fifty-four states, the EU, and two additional international organizations (NATO and OSCE) participate in the process.

Another relevant international soft law document is the ICoC, a multi-stakeholder initiative following on from the Montreux Document. By 2013 the ICoC had 708 signatories.¹⁰⁵ The code is considered the next step in international PSC regulation. The code sets out human-rights-based principles for more accountable provision of PSC services.¹⁰⁶ For example, the first section of the code sets out the norms and standards PSCs should adhere to. This covers a range of issues from the use of force to defend people and property, to requiring PSCs to adopt and implement broader management policies to ensure that they are operating in compliance with IHRL, including appropriate training for PSC personnel. This section also includes an undertaking by PSCs to set up both personnel and third-party complaint and grievance procedures. The next section of the code aims to establish an international accountability mechanism ('IAM') to ensure that the standards set out in the first section are met. Du Plessis comments that, 'it is anticipated that this will include some form of international certification of private security companies, and a complaints mechanism for third parties.'¹⁰⁷ Du Plessis further notes that the overall aim of the ICoC 'is to clarify the standards according to which private security companies should operate, thereby encouraging an overall improvement in the quality of services they provide and minimising any adverse human rights impacts.'¹⁰⁸

Though limited, the relevant sections which could contribute towards environmental protection in light of PSC duties within the *jus post bellum* framework include for example, Article 62 which provides guidance on policies and procedures for the management, storage, and proper disposal of hazardous materials and munitions—including adhering to principles of 'due care'.¹⁰⁹ Article 64 requires a safe and healthy working environment and Article 69 addresses the requirement that PSCs have sufficient financial capacity to meet potential liabilities arising from death, personal injury, and damage to property. Though not specifically environmental, these guidelines on regulating such activities could indirectly provide some protection to the environment, civilian population, and PSC employees involved.

With regard to international soft law efforts by the international community as a whole, Richemond-Barak argues that 'multi-stakeholder initiatives of this kind offer highly promising avenues in enhancing the regulation of the industry—in particular in terms of participation, transparency, and harmonization.'¹¹⁰ Although these soft law instruments do not provide specific guidance for environmental best practices, the best practice provisions within these documents that are based on human rights obligations,

¹⁰⁵ ICoC, 'Signatory Companies', at <http://www.icoc-psp.org/uploads/Signatory_Companies_-_September_2013_-_Composite_List_SHORT_VERSION-1.pdf> 18 August 2015.

¹⁰⁶ James Cockayne, 'Private Military and Security Companies' in Andrew Clapham and Paola Gaeta (eds.), *The Oxford Handbook of International Law in Armed Conflict* (Oxford: Oxford University Press, 2014), 654.

¹⁰⁷ du Plessis (n 98) . ¹⁰⁸ *ibid.*

¹⁰⁹ Art. 62, ICoC. For commentary on the Articles, see Jerbi (n 103) 47–8.

¹¹⁰ Richemond-Barak (n 46) 1055–6.

could perhaps be used by hiring parties or PSCs themselves to provide some guidance on acceptable PSC activity that is, guidance on avoiding or mitigating PSC activity that could cause harm to human health and indirectly, the environment.

As these documents are non-binding, parties cannot be held liable for breach of any best practice provision. Regardless, these documents do have some effect, as evidenced by the increasing number of states, IOs, and PSCs that have signed up to them which illustrates their voluntary intentions to use these best practices. Although some argue that voluntary soft law agreements such as the ICoC have undermined UN efforts to create binding legislation,¹¹¹ overall, these soft law documents, though in need of improvement and clarity, are welcome achievements in filling the gaps of PSC regulation in conflict-related situations, making the situations they operate in less opaque and in the context of *jus post bellum*, assisting in the transition to sustainable peace.

13.4 Law and Policy in Practice: Attaching Liability for PSC Wrongdoing

Having explored international regulations applicable to PSC activities, particularly at the post-conflict stage, noting that international law can be difficult to enforce and that PSC specific regulation at present is predominantly soft law, the next question is, how can such regulation attach liability to PSC and PSC personnel wrongdoing that may harm the environment? We explore contract litigation, corporate liability, and responsibility of states and other non-state actors in hiring PSCs in this context.

13.4.1 Contract litigation

This section covers two aspects: first, how stronger environmental provisions could be included into PSC contracts, and second, how contract litigation can be utilized to hold PSCs accountable for environmental harm as well as human health impacts as a result of such harm.

In the case of LOGCAP contracts,¹¹² broad environmental protection provisions were written into the ‘Statement of Work’, ‘Task Orders’, and Standard Operating Procedures which dictate the parameters of how PSCs fulfil their responsibilities. These provisions in the LOGCAP contracts note that contractors must adhere to the US Environment Protection Agency and host nation guidelines,¹¹³ that KBR ‘take all possible and reasonable actions to protect human health and preserve the environment’,¹¹⁴ and that while in contingency operations the environment is subordinate to the mission, ‘this does not mean the preservation of the environment is ignored in the execution of orders.’¹¹⁵

¹¹¹ ‘Charity Slams Conduct Code for Private Military and Security Companies’ *War on Want* (19 September 2013), at <<http://www.waronwant.org/media/charity-slams-conduct-code-private-military-and-security-companies>> accessed 10 February 2017.

¹¹² See Section 13.3.1 above.

¹¹³ *Jobes* (n 26) 4, para. 15.

¹¹⁴ *ibid.* para. 16.

¹¹⁵ *ibid.* 4, para. 17.

While these broad provisions are useful and have provided the basis of legal challenge to PSC practice that have caused harm to the environment and human health, the inclusion of more specific environmental responsibilities within contracts has thus far been limited and complicated by structural factors and expertise gaps. Throughout the Iraq and Afghan wars there were no standard contracts for base camps.¹¹⁶ Each camp drafted its own.¹¹⁷ Drafting an environmentally sound contract requires specific expertise on the part of engineering officers and base camp staff, which in most cases has been lacking. This has meant that contracts have not been clearly drafted to include standards of conduct that would ensure environmental protection.¹¹⁸ The lack of environmental guidelines within PSC contracts has been a part of a wider problem within the US military in which there is no comprehensive approach to environmental considerations within contingency operations.¹¹⁹ It is illustrative that it was only after widespread media attention over the burn pit controversy in 2009, leading to PSC waste mismanagement becoming a political problem, did the DoD develop comprehensive guidance for burn pit management.¹²⁰

One means of improving environmental protection in relation to PSC activities is to encourage PSCs to sign up to ICoC (which does provide indirect environmental protection)¹²¹ and integrate the ICoC into their contracts. Although the ICoC is a non-binding code, Creutz argues that it has the possibility of becoming legally binding via incorporation into service contracts.¹²² Moreover, by signing up to the ICoC, signatory companies make general commitments to operate in accordance with the principles within the code, 'mak[ing] compliance with this Code an integral part of contractual agreements'¹²³ and adhering to the code even when it is not included in service contracts.¹²⁴ As Rosemann (a government representative involved in drafting the ICoC) aptly notes:

[s]uggesting that these codes of conduct are "soft law" wrongly indicates that they are not binding on those involved and that violations have no consequences ... Once the ICoC is included into a contract, the violation of human rights becomes a reason for contract litigation.¹²⁵

Ultimately, this means that IHRL violations by PSCs and their personnel could constitute a breach of contract and result in contract litigation. This includes IHRL breaches resulting in or from TRW-related activity or environmental damage in general at both the in-conflict and post-conflict stages. Opportunity can also be taken to incorporate specific environmental obligations in these service contracts. With regard to the ICoC, it is worth noting that in addition to the UK and the United States having stated their intention to incorporate ICoC provisions into their own PSC service provider agreements, the ICoC has gained credibility by being signed up to by major PSC providers

¹¹⁶ Mosher *et al.* (n 21) 107. ¹¹⁷ *ibid.* ¹¹⁸ *ibid.* ¹¹⁹ *ibid.*

¹²⁰ US Government Accountability Office (n 27).

¹²¹ See, for example, Arts. 62, 64, and 69, ICoC.

¹²² Katja Creutz, 'Law versus Codes of Conduct: Between Convergence and Conflict' in Jan Klabbers and Touko Piiparinen (eds.), *Normative Pluralism and International Law: Exploring Global Governance* (Cambridge: Cambridge University Press, 2013), 195.

¹²³ Arts. 16 and 17, ICoC.

¹²⁴ Art. 19, ICoC, paras. 16, 18, 19.

¹²⁵ Cited in Creutz (n 122) 195.

in the industry ‘making it look and feel like law, despite not being law, formally speaking’.¹²⁶ Such laws incorporated into PSC contracts providing some form of environmental and human rights protection could go a long way to assisting the transition to sustainable peace.

On the question of how contract litigation can be utilized to hold PSCs accountable for environmental harm, *Jobes v. KBR*¹²⁷ is explored. In this case, over 200 former military and contractor personnel (who died allegedly from exposure to burn pit fumes) and their families filed lawsuits in a US district court in 2010 against KBR and its former parent company Halliburton. The plaintiffs claim that exposure to burn pit fumes ‘are causing a host of serious diseases to Plaintiffs, increased risk of serious disease in the future, and death’.¹²⁸ The plaintiffs argued that KBR has contractual agreements that include protecting human health and the environment within the confines of operational requirements and that these agreements were breached by KBR’s actions.¹²⁹

KBR argued that it is entitled to derivative sovereign immunity under the Federal Tort Claims Act’s (‘FTCA’) discretionary function exemption. The United States is generally immune from lawsuits¹³⁰ and KBR argued that as an agent of the state carrying out the will of the state, it too should be immune from suit. In 2013, the US District Court for the District of Maryland ruled in favour of KBR and dismissed the burn pit lawsuit concluding that:

The critical interests of the United States could be compromised if military contractors were left “holding the bag” for claims made by military and other personnel that could not be made against the military itself. The ability of the military to recruit contractors and their willingness to assist the military in time of war could be called into serious question if they did not enjoy the same protections as does the United States for combat activities.¹³¹

However in 2014 the US Court of Appeals overruled the District Court, stating that KBR was only entitled to derivative sovereign immunity if it had adhered to the terms of its contract. The Court of Appeals vacated the District Court’s judgment on the grounds that the Court did not have enough evidence to judge whether KBR had kept to its original contract with the government.¹³² Six years since filing suit, the case is ongoing, with a full hearing yet to take place.¹³³

¹²⁶ *ibid.* ¹²⁷ *Jobes* (n 26) 7, para. 23. ¹²⁸ *ibid.* para. 1. ¹²⁹ *ibid.* para. 1.

¹³⁰ The US Federal government is immune from lawsuits unless it waives that immunity or a case is bought forward by an individual through the Federal Tort Claims Act. ‘Sovereign immunity’, Legal Information Institute, Cornell University Law School, at <http://www.law.cornell.edu/wex/sovereign_immunity> accessed 10 February 2017.

¹³¹ *Re: KBR, Inc. Burn Pit Litigation*, United States District Court for the District of Maryland, No. 8:09-md-02083-RWT 8 September 2010, 32.

¹³² *KBR, Inc. Burn Pit Litigation*, United States Court of Appeals for the Fourth Circuit, No. 13-143, Judgment of 7 March 2014, 39–40.

¹³³ Patricia Kime, ‘Burn-Pit, Electrocution Lawsuits to Continue’ *Military Times* (27 January 2015), at <<http://www.militarytimes.com/story/military/pentagon/2015/01/22/kbr-iraq-lawsuits-supreme-court/22158399/>> accessed 10 February 2017. See also Jon L. Gelman, ‘Burn Pit Lawsuit Hearing Rescheduled to March 2017’ (*Burn Pit Claims Blog*, 8 February 2017), <<http://burnpitclaims.blogspot.co.uk/2016/12/burn-pit-lawsuit-hearing-rescheduled-to.html>> accessed 10 February 2017.

This case shows that contract litigation has the potential to provide a forum for accountability for PSC misconduct. The general environmental protection and human health provisions in existing contracts (before initiatives such as the ICoC) have been useful in making the case for contractor misconduct. Nevertheless, increased environmental and human health provisions in contracts is still crucial in transforming PSCs into environmentally responsible actors. Contract litigation also has value in acting as a deterrent to PSC malpractice,¹³⁴ which may eventually lead to a change in norms of acceptable behaviour in wartime.

In addition, recent US court proceedings reveal that while PSCs fall within the ambit of US state immunity from lawsuits, they lose this immunity if they breach their contracts. Thus the onus of responsibility for contractor malpractice is on PSCs themselves. Yet, as noted earlier, PSCs are aware that they can 'get away with doing anything they want'¹³⁵ and pay any fines that result from their malpractice. Malpractice that has been encouraged by a weak regulatory setting. Thus, the question is whether accountability for PSC malpractice should not be left to PSCs alone but also sought from hiring or home states, who are responsible for wider regulatory settings that PSCs act within. Finally, while contract litigation can provide accountability for people impacted by environmental damage, the environment by itself is not protected. Stronger, more environmental specific regulatory restraint and an alternative form accountability is needed, to better protect the environment and affected population as well as contribute to the establishment of sustainable peace.

13.4.2 Corporate liability

Modern PSCs are generally companies with individuals employed to work for them, thus they are like any other corporation. They are registered corporate entities 'with legal personalities and hierarchical management structures.'¹³⁶ Therefore, the question arises whether PSCs can be found liable through corporate civil liability.

Although traditionally international law exclusively addressed states and their agents, the rise of non-state actors and the evolution of IHL and international criminal law in particular have demonstrated that international law also applies to non-state entities and individuals. This essentially means that '[t]he idea that international law applies to non-state actors, and hence to companies, and that they have duties and responsibilities under that law consequently does not pose a conceptual problem.'¹³⁷ Therefore, a company could in theory be found liable for its own actions as demonstrated after the Second World War in the US Nuremberg Military Tribunal judgment of *I.G. Farben*¹³⁸

¹³⁴ Heath Druzin, 'Supreme Court Allows Lawsuits Over Burn Pits, Electrocutions' (*Stars and Stripes*, 20 January 2015), at <<http://www.stripes.com/news/us/supreme-court-allows-lawsuits-over-burn-pits-electrocutions-1.324782#.VMDh6kmQaQ8.twitter>> accessed 10 February 2017.

¹³⁵ *Jobs* (n 26) 7, para. 23.

¹³⁶ Hannah Tonkin, *State Control over Private Military and Security Companies in Armed Conflict* (Cambridge: Cambridge University Press, 2011), 2.

¹³⁷ Eric Mongelard, 'Corporate Civil Liability for Violations of International Humanitarian Law' (2006) 88 *International Review of the Red Cross* 665, 670 (Mongelard also sets out conventions that explicitly create obligations for companies in specific areas of international law).

¹³⁸ *The I.G. Farben Trial, Trial of Carl Krauch and Twenty-two Others*, US Military Tribunal, Nuremberg, 14 August 1947–29 July 1948, *Law Reports of the Trials of War Criminals*, Vol. X, 1–68.

where twenty-three board members of the German chemical and pharmaceutical company were accused of various war crimes, including plundering public and private property in occupied territory. A number of the Tribunal's findings were based on Farben as a corporate body. Moreover, the Tribunal held that the company itself was responsible for specifically violating Article 47 of the Hague Regulations, which prohibits pillage and, although the Tribunal did not have jurisdiction over legal persons, it did come to the conclusion that the war crime of pillage could be directly imputed to IG Farben as a company. This case demonstrates that companies can commit and potentially be held responsible for violations of IHL.¹³⁹

In more recent cases, civil claims for violations of IHL and IHRL seem to be brought under US law via the US Alien Tort Claims Act ('ATCA') by application of the 'aiding and abetting standard'.¹⁴⁰ In *Doe v. Unocal Corp.*,¹⁴¹ Myanmar citizens sued the company Unocal for aiding and abetting Myanmar military forces in committing grave human rights violations, 'in the context of oil and gas extraction operations and building of a pipeline'.¹⁴² In *Talisman*,¹⁴³ the New York District Court applied the aiding and abetting standard, where a Canadian oil company, Talisman, was sued by the Presbyterian Church of Sudan for collaborating with the Sudanese government in violation of human rights and war crimes committed in the context of international armed conflict in Sudan. While the US Court of Appeals in *Talisman* dismissed the case on the grounds that the plaintiffs had not 'established Talisman's purposeful complicity in human rights abuses',¹⁴⁴ the Court of Appeals in the *Unocal* case on the other hand, found that on grounds of the aiding and abetting theory and the fact that Unocal had knowledge of the human right breaches committed by the government of Myanmar before becoming a party to the joint venture between Unocal and the Myanmar government, that there was sufficient evidence to hold *Unocal* liable under ATCA. These recent cases further confirm the possibility of holding companies liable for violations of IHL as well as IHRL but also highlight the legal complexities in achieving such accountability.¹⁴⁵

Corporate civil liability may therefore be a good route for victims of PSC violations during and post-conflict as they may be able to hold PSCs accountable as well as have the possibility of obtaining financial compensation for their suffering.¹⁴⁶ Arguably

¹³⁹ See also *The Krupp Trial, Trial of Alfred Felix Alwyn Krupp von Bohlen und Halbach and Eleven Others*, US Military Tribunal, Nuremberg, 14 August 1947–29 July 1948, Law Reports of the Trials of War Criminals, Vol. X, 69–181. For detailed analysis on this case, see Mongelard (n 137) 674–6.

¹⁴⁰ Mongelard (n 137) 681.

¹⁴¹ *Doe v. Unocal Corporation*, US Federal District Court, 110F. Supp. 2d. 1294 (C.D. Cal. 2000) Judgment of 31 August 2000.

¹⁴² Mongelard (n 137) 679–80.

¹⁴³ *Presbyterian Church of Sudan v. Talisman Energy*, US District Court for the Southern District of New York, 224 f. Supp. 2d289, 19 March 2003.

¹⁴⁴ *Presbyterian Church of Sudan v. Talisman Energy*, US Court of Appeals for the Second Circuit, 582 F.3d 244, 2 October 2009, 2.

¹⁴⁵ See Mongelard (n 137) 678–81 (for detailed analysis of these cases).

¹⁴⁶ *ibid.* 667. See also UN Office of the High Commissioner for Human Rights, 'Corporations Must be Held Accountable for Human Rights Violations' (20 February 2012), at <http://www.ohchr.org/EN/NewsEvents/Pages/CorporationsMustBeHeldAccountableForHRViolations.aspx> accessed 10 February 2017 (High Commissioner Pillay argues that 'holding corporations liable for human rights violations is fully consistent with international law').

this could also apply in situations where PSC activities generate TRW or environmental damage that causes harm to the environment and human health. Moreover, as Mongelard points out,

[i]f civil actions are brought against companies and the courts award large sums of money in damages and interest against them, this could make them more accountable and induce them to change their corporate culture; shareholders, too, would become more aware of their responsibilities on seeing their profits thus dwindle and fearing the loss of their investments.¹⁴⁷

In theory, national law provides the possibility of enforcing corporate liability for IHL breaches.¹⁴⁸ However, in practice, domestic judges 'are rarely open to cases based on international humanitarian law'.¹⁴⁹ Thus the reality is that while corporate civil liability exists, it is difficult to enforce.

13.4.3 International legal obligations of states and non-state actors in relation to PSCs

State responsibility is another way to attach accountability for PSC actions.¹⁵⁰ Essentially, 'States have legal obligations to control PSCs and ensure that they are held accountable for misconduct.'¹⁵¹ States that are identified as having possible responsibility (regardless of being party to a conflict) are categorized as either the hiring state (state that hired the PSC), the host state (state on whose territory the PSC is operating in), or the home state (state where the PSC is registered and based). Out of the three categories, host states that is, states where the conflict has taken place, are generally considered weak and vulnerable. As one commentator notes, 'one cannot realistically rely on the effective control of PSCs by the host state, whose inability or incapacity to provide security and governance is the *raison d'être* [sic] of the resort to private contractors.'¹⁵² Thus, using principles of state responsibility¹⁵³ to hold the hiring state or home state responsible is particularly useful when the host state is unable or unwilling to hold the PSC accountable for violations of international law. For example, the hiring state could be held responsible if the PSC was an agent of that state, therefore any misconduct by the PSC is attributable to the hiring state.¹⁵⁴ The home state has particular relevance in trying to attach accountability for PSC activities, particularly 'because of the paramount importance attributed by international law to the exclusive territorial control exercised

¹⁴⁷ Mongelard (n 137) 666–7 ¹⁴⁸ *ibid.* 691. ¹⁴⁹ *ibid.* 691.

¹⁵⁰ Lindsey Cameron and Vincent Chetail, *Privatizing War* (Cambridge: Cambridge University Press, 2013) 134.

¹⁵¹ Tonkin (n 136) 6.

¹⁵² Francesco Francioni, 'The Responsibility of the PSC'S Home State for Human Rights Violations Arising from the Export of Private Military and Security Service, s EUJ Working Papers, AEL 2009/18, Academy of European Law, PRIV-WAR Project (2009) 2.

¹⁵³ See Arts. 4, 5, and 8, Draft Articles on Responsibility of States for Internationally Wrongful Acts (2001).

¹⁵⁴ Tonkin (n 136) 7.

over the company by the state where the company has been legally created or where the centre of gravity of its management and operations.¹⁵⁵

Commentators argue that states (including states not party to a conflict)¹⁵⁶ have 'positive obligations to control PSCs and ensure accountability' under IHL and IHRL.¹⁵⁷ International law imposes clear obligations on states to ensure respect for IHL; this includes protecting the civilian population and preventing IHL breaches. It follows that states, through state responsibility, also have a duty to ensure that PSCs comply with IHL rules as well as to 'take action to prevent and punish misconduct by PSCs'.¹⁵⁸ Tonkin argues that there are also positive obligations for states under IHRL, from obligations 'to plan and control security operations to minimise risk to life'¹⁵⁹ to an 'obligation to protect individuals whose lives are at risk'.¹⁶⁰ Arguably, these positive obligations could apply in situations in which there is a risk of TRW generation or any PSC action in violation of IHL, IHRL, or other international law obligations leading to environmental damage that could also in turn cause harm or the risk of harm to human health. Such violations by PSCs could interfere with States' positive obligations under international law and thus incur state responsibility.¹⁶¹ State responsibility therefore provides some form of control and deterrent for PSC behaviour, which at the post-conflict stage could greatly contribute to the establishment of sustainable peace.

While hiring states not party to a conflict can incur responsibility if the PSC's violation of international law can be attributed to the state, with regard to non-state actors (IOs, corporations, NGOs) hiring PSCs on the other hand, there are limits to the reach of responsibility under international law. For example, the position of IOs regarding responsibility for violations by PSCs hired is still uncertain. As Lehnardt notes,

[w]hile it is accepted that international organizations can in principle incur international responsibility, the efforts of the International Law Commission ('ILC') to formulate rules on the responsibilities of international organizations are complicated by the facts that there is much less case law and practice from which principles can be drawn than in the context of state responsibility.¹⁶²

However, Lenhardt argues (in the context of the UN), that an IO may be responsible if the PSC personnel hired can be considered agents of the IO that is, an agent being 'any official and other persons or entities through whom the organizations acts'.¹⁶³ Therefore PSC violations of IHL, IHRL, or international law obligations that causes harm to the

¹⁵⁵ Francioni (n 152) 2. See also Ibeanu (n 71) 17–19.

¹⁵⁶ ICRC confirms that the obligation to 'ensure respect' of IHL is not limited parties to a conflict. See ICRC Customary IHL, 'Rule 144', at <https://www.icrc.org/customary-ihl/eng/docs/v1_rul_rule144> accessed 10 February 2017.

¹⁵⁷ Tonkin (n 136) 6–8. ¹⁵⁸ *ibid.* 6–8. ¹⁵⁹ *ibid.* 7. ¹⁶⁰ *ibid.*

¹⁶¹ For further discussion on state responsibility for PSC actions, see Cameron and Chetail (n 150) 134–287.

¹⁶² Chia Lehnardt, 'Peacekeeping' in Simon Chesterman and Angelina Fisher (eds.), *Private Security, Public Order: The Outsourcing of Public Services and Its Limits* (New York: Oxford University Press, 2009), 210 (footnote omitted).

¹⁶³ Art. 4(2), Draft Articles on Responsibility of International Organizations, ILC, UN Doc. A/CN.4/L.648, 27 May 2004.

environment or wellbeing of the population *jus post bellum* could in theory incur the responsibility of the hiring IO. Interestingly, further guidance can be found in the UN Draft Convention which goes beyond responsibility of states and also addresses the obligations of IOs exercising their due diligence under international law with regard to hiring PSCs.¹⁶⁴ Unfortunately, the UN Draft makes no mention of any responsibility or obligations on the part of corporations or NGOs hiring PSCs.

As discussed above, it is difficult to hold corporations liable for breaches under international law as the ILC Articles of Responsibility do not apply to them nor are there any rules under international law for the attribution of private actor wrongdoing to other private entities.¹⁶⁵ As Perrin points out, '[i]n many national jurisdictions, there are legal barriers to holding corporate clients criminally liable for the conduct of private security and military companies they hire'¹⁶⁶ However, as mentioned earlier, corporate clients hiring PSCs could theoretically be held civilly liable for PSC violations of IHL or IHRL for example, under ATCA, but it is not easy to do so. As Perrin notes, 'there has yet to be a case of a corporation being held liable under the Alien Tort Claims Act for the violations of a private military and security company that it has hired'.¹⁶⁷ Obligations to prevent or redress violations of IHL or IHRL in this case would fall not on the hiring party (corporation) but on the host and home states.¹⁶⁸ This is similarly the case for NGOs hiring PSCs. The ILC Articles of Responsibility also do not apply to NGOs, and international law does not provide for the attribution of PSC wrongdoing to NGOs. This poses a problem for accountability of PSC actions when hired by non-state actors. Nevertheless, while there are no legally binding obligations at international level, non-state actors do have the option to look towards non-binding guidance in the form of the Montreux Document and ICoC in hiring PSCs and in that vein, ensure PSC responsibility through contracts that is, incorporating the soft law guidance or international law provisions protecting the environment into the service contracts between the hiring NGO and the PSC.

Due to the difficulties in attaching responsibility to PSCs for environmental damage including violations under IHL and IHRL, and the even more complex nature of attaching responsibility to hiring non-state actors for PSC violations, an alternative solution may be to look towards the principle of shared responsibility. According to Plakokefalos, shared responsibility for environmental damage could be triggered when environmental harm is brought about by a breach in an international obligation by multiple actors—requiring the responsible actors to make full reparation for the damage

¹⁶⁴ Art. 3(1), Draft of a Possible Convention on Private Military and Security Companies.

¹⁶⁵ Leonard Stenner, 'Private Military and Security Companies: Security Actors Without Accountability' Occasional Paper No. 36 (Kofi Annan International Peacekeeping Training Centre, July 2014), 11, at <<http://www.kaiptc.org/Publications/Occasional-Papers/Documents/Stenner-KAIPTC-Occasional-Paper-2014.aspx>> accessed 10 February 2017.

¹⁶⁶ Benjamin Perrin, 'Promoting Compliance of Private Security and Military Companies with International Humanitarian Law' (2006) 88(863) *International Review of the Red Cross* 613, 623 (footnote omitted).

¹⁶⁷ *ibid.* 626.

¹⁶⁸ Giulia Pinzauti, 'Adjudicating Human Rights Violations Committed by Private Contractors in Conflict Situations before the European Court of Human Rights' in Francioni and Ronzitti (n 48) 167.

caused.¹⁶⁹ In this case, it is the PSC and not multiple actors breaching an international obligation. However, in light of the difficulty in establishing liability to PSCs for violations in international law, it is argued that in the spirit of shared responsibility, multiple actors in a situation of PSC violation could be interpreted to include the hiring party (state or non-state), host state, and home state if the PSC violation could be attributed to either or all parties. Therefore, in the absence of holding the PSC responsible, shared responsibility provides an avenue for other responsible actors to take responsibility in mitigating or fixing the environmental damage caused.¹⁷⁰ This ensures that the PSC violation causing damage does not go unheeded and will go a long way towards contributing to the *jus post bellum* aim of achieving sustainable peace. However, shared responsibility is not without its problems—one of the downsides being that ‘international law provides little or no guidance as to exactly how responsibility (or reparation) is to be allocated between multiple actors’¹⁷¹ and with regard to hiring non-state actors, the issue of attribution of PSC wrongdoing to non-state actors under international law arises. Illustrating once again the complexities associated with holding PSCs and other parties associated with them accountable for PSC violations in international law.

13.5 Conclusion

The increasing use of PSCs particularly during the peacebuilding stage poses significant challenges to transparency, oversight, and accountability. It is clear that a lack of PSC oversight and regulation have led to situations where environmental diligence has not been prioritized, resulting in environmental and human harm. Unfortunately, PSCs do not fall neatly into the existing legal framework. An examination of international law reveals that the basis for some environmental protection exists within both IHL and IHRL—from environmentally specific provisions within IHL to indirect environmental protection through human centred concerns under IHRL. However, IHL and IHRL are laws primarily applicable to states, making it very difficult to apply to PSC actions.

In terms of PSC regulation specifically, there has been some movement to create binding and non-binding legislation. These documents, primarily the UN Draft, ICoC, and Montreux Document, include aspects (to varying degrees) that could be interpreted or tailored to reflect environmental issues. However, there is space to take a stronger stance on environmental protection. In addition, while soft law instruments such as the ICoC have merit in their wide acceptance by states and PSCs, and particularly in their contribution to creating norms around responsible PSC behaviour, there is an argument for whether these norms could be strengthened if states supported UN efforts to create binding legislation.

¹⁶⁹ See chapter 11 in this volume.

¹⁷⁰ See *ibid.* (for analysis of reparations for environmental damage under international law).

¹⁷¹ André Nollkaemper, ‘Introduction’ in André Nollkaemper and Ilias Plakokefalos (eds.), *Principles of Shared Responsibility in International Law* (Cambridge: Cambridge University Press, 2014) 13 (footnote omitted). See also chapter 11 in this volume (on problems of shared responsibility with regard to breach and attribution).

Whilst regulatory frameworks have been developed, contract litigation, corporate liability, state and shared responsibility are viable avenues by which victims of PSC violations could hold PSCs or other relevant parties accountable for their actions. However, contract litigation only works if the relevant law violated is incorporated into the PSCs' contracts, while corporate liability can be difficult to enforce in situations involving PSCs. In addition, through contract litigation and corporate liability, there have been parallel attempts to hold PSCs liable for malpractice within US courtrooms. This has proved to be a difficult route in most cases. It remains to be seen how these cases before the US courts will develop and whether successful outcomes for the plaintiffs may shift norms around PSC practice to better respect IHL and IHRL in conflict-related situations. With regard to accountability for PSC violations by hiring non-state actors, the position under international law remains unclear. While in theory IOs could bear some responsibility for violations by PSCs hired, in practice this position is still uncertain under international law and with regard to other hiring non-state actors like corporations and NGOs, there are no rules under international law for the attribution of private actor (PSC) wrongdoing to other private entities. Therefore, in situations involving PSC violations of international obligations and in the absence of PSC responsibility under international law, state responsibility though not easy to achieve, remains the most promising avenue to providing some accountability for PSC wrongdoing. Whilst shared responsibility for PSC violations is another avenue to provide accountability, it too can be problematic to apply.

It is obvious from the discussion above that there is a lack of clear regulations relating to PSC obligations as well as PSC misconduct for not only PSCs but also state and other hiring non-state parties. The international community (states, NGOs, PSC industry) thus has a part to play in creating clearer accountability and liability options. These could work as a deterrent to PSCs with regard to violating IHL, IHRL, other international law obligations, or even breaching their contractual obligations. For example, more stringent fines—fines that could be turned into compensation, contributed to a PSC compensation fund that is used for restitution, that is, to restore the environment or mitigate the damage done or provide compensation for victims harmed due to PSC actions. The PSC compensation could perhaps be administered through the ICoC, in that each signatory to the ICoC pays into a global PSC compensation fund. In addition, to enhance accountability for PSC actions in breach of IHL and IHRL, criminal accountability for PSC personnel could be developed further that is, enforcing criminal consequences for grave breaches of international law by its personnel.

Further work must also be done to ensure transparency of PSC activities, to ensure that they are respecting the laws during and after conflict as well as to make it easier to hold them accountable for any violations of those laws. This could also prove to be a preventative measure to signal that PSCs are not above the law. Finally, the environmental protection issues explored here have relevance for wider questions around environmental protection and conflict. Should more be done to address the diverse nature of conflict pollution events that occur throughout the life cycle of conflict and are related not only to military targeting decisions but also to military base waste management, contaminated conflict debris, and more? Environmental protection will be

limited if current IHL provisions are used as a guide. Therefore, the *jus post bellum* framework that applies during the transition from conflict to peace should integrate key principles enshrined in IHRL as well as other legal frameworks such as international criminal law and international environmental law into regulations (binding or non-binding) for PSCs. This could contribute to a more rigorous protection of the environment in relation to PSC activities. Without adequately addressing the challenges associated with PSCs and environmental protection, sustainable peace in a war-torn society would be that much harder to achieve.

PART IV
REMEDYING AND PREVENTING
DAMAGE AND HARM

Developments in the Law of Environmental Reparations

A Case Study of the UN Compensation Commission

Cymie R. Payne*

14.1 Introduction

The United Nations Compensation Commission ('UNCC') is a unique model for liability and compensation of environmental damage in an international context, influencing both *jus in bello* and *jus post bellum*. The 1990–1 Gulf War to evict Iraq from Kuwait was a public spectacle of environmental damage. It was followed by the UNCC's more discreet legal process that catalogued, assessed, and awarded money to pay to clean and repair the damaged soil, water, coastal ecosystems, and other harms. The UNCC's contributions include integration of environmental law principles into the reparations process; use of advanced techniques for assessment of environmental damage; and use of a multilateral process in a way that balanced confidentiality and transparency.

The UNCC environmental programme advanced international law most significantly by serving notice that environmental damage caused in relation to an armed conflict can be a culpable offence. In 1995, it was said that environment is a new concept and that 'new' environmental delicts will be subject to the Nuremberg defendants' claim that they are *ex post facto* and therefore illegitimate.¹ Participants in conflicts today cannot make that claim. In fact, many other bodies now allow legal claims for environmental losses.² The Eritrea–Ethiopia Claims Commission, established in 2000

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¹ Richard J. Grunawalt *et al.* (eds.), *Protection of the Environment during Armed Conflict* (Newport RI: International Law Studies, Naval War College, 1996), 515 (Theodor Meron comments). The UNCC stands out from other historical and modern claims commissions as the first whose mandate recognized the importance of protection of the environment to peacebuilding. UNEP, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (UNEP, 2009) 6, at <http://postconflict.unep.ch/publications/pcdmb_policy_01.pdf> accessed 7 June 2017. UNEP has recommended establishing a permanent UNCC-like body to monitor violations and address compensation for environmental damage. The Toxic Remnants of War project has called for a permanent review body on conflict and the environment, albeit one that would emphasize post-conflict assistance and assessment of the impacts of particular military practices. Manfred Mohr and Alexander Stöcker, 'Workshop Report: Exploring a legal framework for Toxic Remnants of War' (2012), at <http://www.toxicremnantsofwar.info/wp-content/uploads/2012/09/TRW-Legal-WS-Report_final.pdf> accessed 7 June 2017.

² See also, UNEP comment on the Sustainable Development Goals, Goal 16: Promote peaceful and inclusive societies, A/RES/70/1, that 'A better understanding of the links between environment and human security is vital for effective conflict prevention, post-conflict reconstruction and promotion of peaceful and inclusive societies.' UN Environment Assembly of the UNEP, *Delivering on the Environmental Dimension of the 2030 Agenda for Sustainable Development—a concept note*, UNEP/EA.1/INF/18 (2016), para. 87.

by a treaty between the belligerents to settle claims for loss, damage, or injury of either government and its nationals, accepted environmental claims.³ The UN Register of Damage, established in 2009, can receive claims for environmental damage in its public claims category.⁴ The UN General Assembly adopted resolutions calling for compensation of coastal cleaning and remediation costs for oil spill damage resulting from the Israeli Air Force strikes on oil storage tanks in the vicinity of the Lebanese Jiyeh electric power plant in 2006, which posed potential harm to human health, biodiversity, fisheries, and tourism in Lebanon.⁵ A UN Development Programme study ordered in relation to the Lebanese oil spill referred to the UNCC as a 'precedent major oil spill compensation regime for spills arising from armed hostilities' and it was even suggested that the UNCC might be used to 'secure the relevant compensations'.⁶

Environmental liability resulted from Iraq's violation of *jus ad bellum*. After Iraq invaded the neighbouring state of Kuwait on 1 August 1990, the UN Security Council condemned its actions as a breach of international peace and security under the UN Charter⁷ and took note that Iraq was liable for any loss, damage, or injury.⁸ When Iraq refused to withdraw from Kuwait, a coalition of states, authorized by the Security Council, brought military force to bear on Iraq.⁹ A few months of sharp warfare ensued, until the Iraqi government accepted the terms of a ceasefire that included the formation of a boundary demarcation commission and the establishment of an international civil tribunal to assess reparations payable by Iraq to states harmed by Iraq's aggressive acts, the UNCC.¹⁰ The

³ Agreement, Eritrea–Ethiopia, 12 December 2000, 2138 UNTS 94, 40 ILM 260. Ethiopia claimed compensation for losses of gum Arabic and resin plants, and damage to terraces in the Tigray region for a value of approximately US\$ 1 billion and for loss of wildlife. It failed to provide evidence of harm beyond the claim forms, with no details and no supporting evidence, and the Commission rejected the claims on that basis; the wildlife claim was withdrawn. See Sean D. Murphy, Won Kidane, and Thomas R. Snider, *Litigating War: Arbitration of Civil Injury by the Eritrea-Ethiopia Claims Commission* (New York: Oxford University Press New York, 2013), 146.

⁴ UN Register of Damage, Rules and Regulations Governing the Registration of Claims, Article 11(1) (19 June 2009).

⁵ A/65/278, UN General Assembly, Report of the Secretary-General: Oil Slick on Lebanese Shores, A/62/343, 17 September 2007; Report of the Secretary-General: Oil Slick on Lebanese Shores, A/63/225, 8 June 2008. At its second session, the UNEP Environment Assembly adopted the resolution: Protection of the Environment in Areas Affected by Armed Conflict, UN doc. UNEP/EA.2/L.16, May 2016, co-sponsored by Ukraine, Jordan, the Democratic Republic of Congo, Iraq, South Sudan, Norway and Lebanon, Canada, and the EU.

⁶ A/65/278, para. 7. This was not a suggestion that could be effectuated, given the UNCC's limited mandate and the fact that its claims review functions were fully terminated at the time this proposal was made. The resolution also noted that all of the relevant conventions in force between the parties were inapplicable 'during armed hostilities'. *ibid.* para. 7.

⁷ Security Council Resolution 660, UN Doc. S/RES/660, 8 February 1990. See also Security Council Resolution 661, S/RES/661, 6 August 1990 (sanctions).

⁸ Security Council Resolution 674, S/RES/674, 29 October 1990 (Iraq's liability for any loss, damage or injury).

⁹ Andrew Rosenthal, 'War in the Gulf: The Overview—U.S. and Allies Open Air War on Iraq' *N.Y. Times*, New York ed., A1 (17 January 1991) ('Rosenthal'); Alberto Bin, Richard Hill, and Archer Jones, *Desert Storm: A Forgotten War* (Westport CT: Praeger, 1998).

¹⁰ Security Council Resolution 686, 2 March 1991; UN Security Council Resolution 687 (3 April 1991), ILM 30 (1991) 846; UN Doc. S/22559 (1991); Letter dated 10 April 1991 from the Permanent Representative of Iraq to the United Nations addressed to the President of the Security Council, UN Doc. S/22480, 11 April 1991 ('The National Assembly has decided at its session held on 6 April 1991 to agree to United

boundary commission completed its task and the results were accepted by the parties.¹¹

The UNCC was established in 1991, completed its review of claims in 2005, and in 2015 began winding down its operations.¹² Iraq paid nearly US\$ 48 billion in compensation as of October 2015, for all claims categories.¹³ Of this, awards were made for a total of over US\$ 5.26 billion for environmental assessment, remediation, restoration, and response activities; nearly US\$ 85 billion had been sought for environmental damage in 168 claims.¹⁴ For comparison, the US Government reached a settlement to resolve BP's liability for natural resource injuries from the Deepwater Horizon oil spill whereby BP would pay up to US\$ 8.8 billion for restoration.¹⁵

The environmental damage from the 1990–1 conflict was varied and widespread. An estimated 10.8 million barrels of oil that was intentionally dumped in the Persian Gulf by Iraqi forces contaminated over 600 kilometres of the Saudi Arabian coastline, with toxicity that will likely persist for decades more.¹⁶ In Kuwait, over 1 billion barrels of oil was released when Iraqi forces detonated over 600 oil wells, contaminating groundwater and desert ecology.¹⁷ Further damage to Kuwait's desert was caused by 'the construction of military fortifications, including ditches, berms, bunkers, trenches, and

Nations Security Council resolution 687 (1991)'); Identical Letters dated 6 April 1991 from the Permanent Representative of Iraq to the United Nations Addressed Respectively to the Secretary-General and the President of the Security Council, S/22456, 6 April 1991.

¹¹ Richard Schofield, 'The United Nations' Settlement of the Iraq-Kuwait Border, 1991–1993' (1993) IBRU Boundary and Security Bulletin.

¹² UNCC, Press Release, PR/2015/1, 8 June 2015.

¹³ UNCC, Press Release, PR/2015/4, 28 October 2015 (referring to US\$ 4.6 billion outstanding compensation owed to Kuwait); UNCC website, Summary of Awards and Current Status of Payments, at <<http://www.uncc.ch/summary-awards-and-current-status-payments>> accessed 7 March 2016 (referring to US\$ 4,629,324,488 in outstanding award amounts and US\$ 47,704,258,660 compensation paid). The Governing Council, with decision 274, S/AC.26/Dec.274 (3 November 2016), continued to postpone Iraq's obligation to deposit 5 per cent of the proceeds of export sales of Iraqi petroleum and petroleum products in the Compensation Fund until 1 January 2018; as a result, no compensation has been paid since 2014. UNCC, Press Release, PR/2017/2, 24 April 2017.

¹⁴ UNCC, Report and Recommendations made by the Panel of Commissioners Concerning the Fifth Instalment of 'F4' Claims, UN Doc. S/AC.26/2005/10, 30 June 2005 ('Fifth 'F4' Report') Table 26, para. 784.

¹⁵ Consent Decree Among Defendant BP Exploration & Production Inc. ('BXP'), The United States of America, and the States of Alabama, Florida, Louisiana, Mississippi, and Texas, MDL No. 2179 (US District Court for the Eastern District of Louisiana, 2015), at <<https://www.justice.gov/enrd/file/838066/download>> accessed 7 June 2017.

¹⁶ Report and Recommendations made by the Panel of Commissioners Concerning the Third Instalment of 'F4' Claims ('Third 'F4' Report'), paras. 170–8; 43 ILM 704 (2004); Adriana C. Bejarano and Jacqueline Michel, 'Large-Scale Risk Assessment of Polycyclic Aromatic Hydrocarbons in Shoreline Sediments from Saudi Arabia: Environmental Legacy After Twelve Years of the Gulf War Oil Spill' (2010) 158 Environmental Pollution 1561–9, 1561.

¹⁷ Third 'F4' Report (n 16) paras. 61, 86–99, 106–11, 121–5, 134–8. Regarding the attribution of damage to oil wells, Kuwait claimed that 'out of a total of 914 operational wells in Kuwait, 798 wellheads had been detonated by the Iraqi forces, of which 603 were on fire, 45 were gushing oil but not on fire, and 150 although damaged were neither on fire nor gushing oil'. Iraq denied any responsibility; it submitted evidence that, *inter alia*, stated 'KOC executives were quoted as saying that allied bombing had set fire to as many as 34 wells'. However, the same source also stated 'but the vast majority had been blown up by occupying Iraqi forces'. Based on the evidence submitted by Kuwait and Iraq, the panel found that the majority of the damage was directly caused by Iraq, and that the relatively small amount that may have been caused by Allied bombing was also attributable to Iraq under Governing Council decision 7. Report and Recommendations made by the Panel of Commissioners Appointed to Review the Well Blowout Control Claim (the 'WBC Claim'), S/AC.26/1996/5/Annex, 18 December 1996, paras. 36–86.

pits; the laying and clearance of mines; and the extensive movement of military vehicles and personnel'.¹⁸ Iran, Jordan, and Turkey experienced the passage of hundreds of thousands of refugees and their livestock from Iraq and Kuwait, damaging vegetation and water resources.¹⁹ After the conflict, 'over 1.6 million mines and more than 109,000 metric tons of other unexploded ordnance were scattered in cities and towns, oil facilities, beaches, coastal waters and desert areas of Kuwait'.²⁰ Claimants generally sought compensation to clean up pollution, restore damaged ecosystems, and monitor public health and the environment.

Almost certainly three factors shaped the choice of requiring state responsibility-based reparations from Iraq and the inclusion of environmental losses in the scope:

- There was a clear violation of the UN Charter: the invasion of a neighbouring state, upon which even Iraq's supporters agreed;²¹
- There was highly visible, region-wide, intentional environmental damage; and
- The respondent state, Iraq, had the potential to generate sufficient wealth with its oil resources.

International civil tribunals, one of the most familiar features of *jus post bellum*, have long been used to provide compensation for civilians harmed by armed conflicts,²² a process that is thought to hasten recovery and reconciliation between the belligerents and to re-establish the rule of law.²³ The basic justice theory that requires a wrongdoer to compensate the victim of wrongful action finds expression in international law in this doctrine.²⁴ This was certainly a goal of the UNCC. Reports of harms inflicted by Iraq included, besides the environmental damage discussed here: summary execution,

¹⁸ Third 'F4' Report (n 16) paras. 62, 64–74.

¹⁹ Report and Recommendations made by the Panel of Commissioners Concerning Part One of the Fourth Instalment of 'F4' Claims, UN Doc. S/AC.26/2004/16, 9 December 2004 ('Part One Fourth 'F4' Report'), paras. 68, 70–1, 105–8.

²⁰ UNCC, Report and Recommendations made by the Panel of Commissioners Concerning the Second Instalment of 'F4' Claims, UN Doc. S/AC.26/2002/26, 3 October 2002 ('Second 'F4' Report'), para. 85.

²¹ Marc Weller, 'The United Nations and the *Jus ad Bellum*' in Peter Rowe (ed.), *The Gulf War 1990–91 in International and National Law* (New York: Routledge, 1993), 29 (mentioning China and Yemen in this connection); Weller's chapter provides remarkable details, such as the statement of Iraq at the UN, claiming that it was merely supporting a popular overthrow of the government by the Free Provisional Government of Kuwait, and a close analysis of activities at the UN.

²² David Bederman, 'Historic Analogues of the UNCC' in Richard Lillich (ed.), *The United Nations Compensation Commission: Thirteenth Sokol Colloquium* (Irvington NY: Transnational Publishers, 1995); Margery M. Whiteman, *Damages in International Law* (Washington DC: US Govt. Printing Office, 1937). The new twist here is, as Jens Iverson observes, the inclusion of environmental law, 'particularly with respect to the rights and obligations relating to repairing and rebuilding the environmental damage from the conflict'—Iverson's second branch, 'resource disputes related to the conflict', was addressed through the boundary commission mentioned above. See also Jens Iverson, 'The Foundations of Transitional Justice and *Jus Post Bellum*' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (London: Oxford University Press, 2014), 93–4.

²³ Michael J. Matheson, *International Civil Tribunals and Armed Conflict* (Leiden: Martinus Nijhoff, 2012).

²⁴ ILC Report of the International Law Commission on the Work of its fifty-third session UN Doc. A/56/10, 10 January 2001, A/56/10/Corr.1, Yearbook of the International Law Commission, 2001, Vol. II, Part Two, as corrected (Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries). Indeed, '[t]he mixed commission, to many international lawyers, is synonymous with the origins of their discipline' and such tribunals 'were significant in the development of the rules of state responsibility'. Murphy, Kidane, and Snider (n 3) xv.

rape, torture, taking of hostages, forcible conscription, beatings, organized pillage, looting, and damage to property.²⁵ In the few years between the resolution of the majority of the claims and the 2003 US invasion of Iraq, reconciliation appeared to be progressing through re-establishment of commercial and diplomatic relations, at least with respect to injured states outside the region. While the UNCC provided redress in the aftermath of a conflict that had been ended by the overwhelming military force of one side, it stands in contrast to the Ethiopia–Eritrea Claims Commission which helped to displace the conflict from the battlefield to the tribunal.²⁶

All such tribunals have the potential to create a historical documentation of what occurred. Despite the brevity of the panel reports, the UNCC did create a remarkable record of the many harms and costs of war. The environmental claims review is detailed in six reports that summarize the parties' factual and legal arguments and the commissioners' evaluations of evidence and law.²⁷ The UNCC also made procedural and substantive innovations that advanced the law of reparations in ways that have been noted by scholars and followed by practitioners.²⁸

The remainder of this chapter describes the UNCC as a case study of the only *jus post bellum* institution to date to look at a broad scope of environmental harms for armed conflict and to fashion a remedy. The emphasis is on the institutional and procedural choices made and the innovations and adaptations adopted to process the environmental damage claims while achieving the substantive goal of environmental restoration.

14.2 Constitution of the UNCC and Choice of Civil or Criminal Law

UN Security Council resolutions 687 (1991) and 692 were the constituent instruments for the UNCC.²⁹ The Security Council acted under its UN Charter, Chapter VII, authority to take measures to maintain or restore international peace and security.³⁰ All

²⁵ Françoise J. Hampson, 'Liability for War Crimes' in Rowe (n 21) 248–51.

²⁶ Murphy, Kidane, and Snider (n 3) 397–9.

²⁷ See Cymie R. Payne, 'Guidance for Researchers' in Cymie R. Payne and Peter H. Sand (eds.), *Gulf War Reparations and the UN Compensation Commission: Environmental Liability* (New York: Oxford University Press, 2011).

²⁸ Bederman (n 22); David Caron, 'The Profound Significance of the UNCC for the Environment' in Payne and Sand (n 27) 267–72 (explaining that some aspects of environmental claims are profoundly different from property claims, and that 'a claims process addressing the environment inevitably seeks representation of a community's interest in the environment'); Stacie I. Strong, *Class, Mass, and Collective Arbitration in National and International Law* (New York: Oxford University Press, 2013); Cymie R. Payne, 'Argentina's ICSID Arbitrations and the UNCC Experience: Consistency and Capability in Mass Claims' (2012) 6 World Arbitration and Mediation Review 427–62.

²⁹ Twelve 1990 resolutions related to Iraq's invasion of Kuwait including: resolution 660 (2 August 1990) (condemning the invasion demanding Iraq's immediate withdrawal); resolution 661 (6 August 1990) (imposing an arms embargo and economic sanctions; establishing a Sanctions Committee); resolution 674 (29 October 1990) (stating Iraq's legal responsibility for damage and loss to Kuwait and other states); and resolution 678 (29 November 1990) (setting 15 January 1991 as deadline for Iraq to withdraw and authorizing Kuwait and cooperating states to use 'all necessary means' if Iraq did not). UN Security Council Resolution 686 (1991), *inter alia*, called on Iraq to accept its liability for loss and damage; Iraq agreed, UN Doc. S/22320, 3 March 1991.

³⁰ Although some have disputed the Security Council's authority to establish a subsidiary organ with judicial functions, see Bernhard Graefrath, 'Iraqi Reparations and the Security Council' (1995) 55

parties to the conflict were parties to the UN Charter. Through its resolution 687, the Security Council confirmed Iraq's liability and the scope of losses for which Iraq owed reparations by stating it:

Reaffirms that Iraq, without prejudice to the debts and obligations of Iraq arising prior to 2 August 1990, which will be addressed through the normal mechanisms, is liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait.

Iraq had breached its primary international law obligations—peaceful settlement of disputes and refraining from the threat or use of force—and therefore the secondary obligations of state responsibility required Iraq to provide reparations.³¹

In resolution 687 the Security Council also set the UNCC's institutional mandate by deciding 'to create a fund to pay compensation ... and to establish a Commission that will administer the fund' and by directing the Secretary-General to develop recommendations to the Security Council for

administration of the fund; mechanisms for determining the appropriate level of Iraq's contribution to the fund ... arrangements for ensuring that payments are made to the fund; the process by which funds will be allocated and claims paid; appropriate procedures for evaluating losses, listing claims and verifying their validity and resolving disputed claims in respect of Iraq's liability as specified in paragraph 16 above; and the composition of the Commission.³²

The UNCC thus established was the only international judicial body established for the Gulf War.

In the months after the invasion of Kuwait, the Republic of Iraq and individual Iraqi perpetrators of offences were threatened with both criminal and civil legal sanctions. Taxonomically, war crimes would be violations of *jus in bello* related to illegal activities in fighting the war. The alternative model that was actually adopted was to find Iraq liable for violations of *jus ad bellum*, the illegal act of going to war in the first place.

Zeitschrift für ausländisches öffentliches Recht und Völkerrecht (Heidelberg Journal of International Law 1–68), the general view, evidenced in participation by nearly 100 nations in the UNCC as claimants, agrees with Veijo Heiskanen that 'there is ample precedent and legal authority for the view that, subject to certain conditions, the Council does have the authority to establish a subsidiary organ invested with such judicial powers.' Veijo Heiskanen, 'The United Nations Compensation Commission' (2002) 296 *Recueil des Cours: Collected Courses of The Hague Academy of International Law* 259–397, 308–9. Jeremy P. Carver argues that Iraq's letter accepting the terms of ceasefire conferred jurisdiction on the UNCC in 'Dispute Resolution or Administrative Tribunal: A Question of Due Process' in Richard. Lillich (ed.), *The United Nations Compensation Commission: Thirteenth Sokol Colloquium* (Irvington NY: Transnational Publishers, 1995), 70, referring to Letter dated 10 April 1991 from the Permanent Representative of Iraq to the United Nations addressed to the President of the Security Council, S/22480, 11 April 1991.

³¹ I.L.C Draft Articles on Responsibility of States for Internationally Wrongful Acts (n 24) Arts. 1, 2, and 31.

³² The Compensation Fund was thus created by para. 18 of Security Council Resolution 687 (1991) and established by para. 3 of Security Council Resolution 692 (1991) in accordance with section I of the Secretary-General's Report, S/22559, 2 May 1991.

Breaches of international environmental law could, less plausibly, also have been the basis for legal proceedings, depending on the specific instrument.³³

No international criminal tribunal was established, however. Saddam Hussein continued as President of Iraq, and Iraqi prisoners of war were quickly repatriated without being charged as war criminals.³⁴ Some of the acts committed during the conflict, such as abuse of prisoners of war and the civilian population, were clear violations of the law of war and would likely have qualified as war crimes. The serious, intentional environmental damage that was ordered by the Iraqi leadership might have qualified as a war crime.³⁵ The US president suggested that, *inter alia*, 'the environmental terror' could be a basis for a war crimes prosecution against Saddam Hussein.³⁶ According to Mark Weller, the February 1991 land war was at least in part the result of a breakdown in negotiations over the question of immunity from war crimes trials and reparations.³⁷ Speculation about the reason why criminal prosecutions were not pursued ranged from opposition by governments in the region to the impossibility of seizing the potential defendants. The purpose of criminal law as a deterrent is a common thread running through analysis of President George H.W. Bush's threats of criminal sanctions—intended, some say, to intimidate Saddam Hussein—and the subsequent relinquishment of criminal charges.³⁸

In 1991 the international community would have had to establish an ad hoc criminal tribunal if domestic tribunals were not competent or capable of trying war crimes; the standing forum for war crimes prosecutions, the International Criminal Court, did not begin functioning until 2002. Criminal prosecution would have been based on customary and treaty law in force with respect to the parties in 1990 and 1991. The Rome Statute, which might be considered a statement of the customary international law at that time, considers intentional, severe violations of the environmental integrity norm a war crime.³⁹ However, some scholars have argued that the stringent threshold for the severity of damage considered a war crime, 'widespread, long-term and severe damage

³³ See chapter 15 in this volume.

³⁴ Hans-Peter Gasser, 'Comment' in Grunawalt *et al.* (n 1) 513–14. Brian Orend criticized the decision not to hold *jus in bello* war crimes tribunals for both sides in respect for the principle of even-handed accountability. Brian Orend, 'Jus Post Bellum' (2000) 1(1) *Journal of Social Philosophy* 117, 127–8, 132.

³⁵ Michael Bothe, 'Criminal Responsibility for Environmental Damage in Times of Armed Conflict' in Grunawalt *et al.* (n 1) 473–78; Paul M. Barrett, 'U.S. Backs off Iraqi War Crimes Trials Due to Logistic, Political Considerations' (25 March 1991) *Wall Street Journal*, 13–14.

³⁶ George H.W. Bush, 'Remarks on Assistance for Iraqi Refugees and a News Conference' (16 April 1991), available at George Bush Presidential Library. See also, Hampson (n 25) 257.

³⁷ Weller (n 21) 43 (some of the destruction of Iraq's infrastructure was 'necessary ... to try its members for crimes against peace and for war crimes').

³⁸ Charles Krauthammer, '... And Stumbles' *The Washington Post* A25 (5 October 1990) ('the whole premise of American policy has been that aggression cannot get any reward—hence Thatcher's insistence on reparations and war crimes trials—or it will be repeated'); John Norton Moore and Robert Turner, 'Saddam, War Crimes and the Rule of Law' *Jerusalem Post* (Israel) (21 January 1991); Barrett (n 35).

³⁹ The Rome Statute, Art. 8(b)(iv), defines an attack that is intentionally launched, knowing that it will cause 'widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated' as a war crime within the jurisdiction of the International Criminal Court. Not long after, the International Criminal Tribunal for the Former Yugoslavia was established in this context: a felt need to establish accountability where there was no pre-existing forum or international criminal code. Daphna Shrager and Ralph Zacklin, 'International Criminal Tribunal for the Former Yugoslavia' (1994) 5 *European Journal of International Law* 360, 361.

to the natural environment, would not have been met even by the terrible destruction intentionally caused by the Iraqi military forces.⁴⁰ Customary international law, as reflected in Hague Convention IV of 1907, Regulations Article 23(g), and Geneva Convention IV of 1949, Article 147 could have provided a basis for an action claiming grave breach.⁴¹ Such claims would have been subject to Iraq's defence that the oil well fires and oil spills were defensive measures that satisfied the customary international law principles of necessity, distinction, and proportionality.⁴² Fact-finding to disprove Iraq's defence would have been difficult if not impossible, given the 'fog of war' problem and the novelty of the claims.

These challenges aside, international criminal law is not likely to achieve peacebuilding goals with respect to environmental harms. Had a criminal prosecution against Saddam Hussein and his officers succeeded, it would not have resulted in restoration of the environmental damage that resulted from the Gulf War. Imprisoning guilty individuals might have had a deterrent effect on future belligerents; it might have been understood by the international community to re-establish the rule of law; there might have been satisfaction in bringing the perpetrators to account.⁴³ But that alone would not have protected Kuwait's groundwater or restored Saudi Arabia's coastal ecosystems.⁴⁴

Yet another alternative approach could have been based on Iraq's breach of international humanitarian law in its conduct of the war, resulting in obligations under a theory of state (rather than individual) responsibility.⁴⁵ This would have provided a restrictive scope for claims against Iraq, and might have entirely excluded claims for environmental damage. Iraq and Kuwait were parties to some of the relevant conventions at the time of the conflict,⁴⁶ but not to Additional Protocol I, which has specific provisions prohibiting environmental harm. A report prepared for the International Criminal Tribunal for the Former Yugoslavia in relation to claims of Yugoslavia against NATO forces for the 1999 Kosovo bombing observed that Article 55 of Additional Protocol I might be considered customary international law and thus applicable to non-parties.⁴⁷ Even had a similar conclusion been reached regarding the Gulf War, Additional Protocol I imposes the same threshold requirement that applies to the Rome Statute—'widespread, long-term and severe damage to the natural environment'—and

⁴⁰ UNEP (n 1) 8; see also, José R. Allen, 'Points of Law' in Payne and Sand (n 27) 156; Thilo Marauhn, 'Environmental Damage in Times of Armed Conflict—not 'Really' a Matter of Criminal Responsibility?' (2000) *International Review of the Red Cross* 840, 1029–36 (criticizing the report for creating further ambiguity). The Committee advising the International Criminal Tribunal for the Former Yugoslavia Prosecutor decided that 'the environmental damage caused during the NATO bombing campaign does not reach the Additional Protocol I threshold'. Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia, Final Report to the Prosecutor (applying law of armed conflict principles of necessity and proportionality) paras. 14–25.

⁴¹ Hampson (n 25) 254. ⁴² *ibid.* 250–1, 254.

⁴³ Hampson argues that these are, in fact, more effective remedies than compensation. *ibid.* 258–9.

⁴⁴ See chapters 6 and 10 in this volume.

⁴⁵ See, for example, Erik V. Koppe, *The Use of Nuclear Weapons and the Protection of the Environment during International Armed Conflict* (Groningen: Rijksuniversiteit, 2006).

⁴⁶ Convention (IV) Relative to the Protection of Civilian Persons in Time of War, Geneva, 12 August 1949.

⁴⁷ Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia, Final Report to the Prosecutor, paras. 14–25 (applying law of armed conflict principles of necessity and proportionality) at <http://www.icty.org/x/file/About/OTP/otp_report_nato_bombing_en.pdf> para. 15, accessed 7 June 2017.

that would likely have precluded successful claims. It is an open question whether the dramatic oil well fires and oil spills would have challenged this perception.⁴⁸

Instead, the UN Security Council members decided to focus on accountability through civil proceedings, based on theories of treaty law and state responsibility. In this framing, reparations claims for environmental losses did not need an independent legal basis in the Law of Armed Conflict.⁴⁹

14.3 Structure, Procedures, and Substantive Law

The UNCC Governing Council made policy and took the ultimate decisions on awards.⁵⁰ The Governing Council comprised representatives of the fifteen Security Council member states, which generally maintain missions in Geneva to work with the many international agencies based there. The commissioners, responsible for reviewing the claims and recommending awards, came to Geneva as often as monthly to work with the secretariat and to deliberate.

When ad hoc tribunals are established, their location can be a sensitive issue. The secretariat was sited at the UN Office at Geneva, Switzerland,⁵¹ for several reasons. The conflict had affected a large number of states outside the region, nearly 100 of which made claims. It was also necessary to work in English, because the computer systems that were used to manage over 2 million individual claims could only be programmed in English.⁵² And, given the ongoing tension between the parties, it would not have been feasible to locate the commission in any of the principal states in the region.

14.3.1 Jurisdiction

The UNCC was an ad hoc reparations body with jurisdiction limited to claims against Iraq stemming from its invasion and occupation of Kuwait, based on Security Council resolution 687.⁵³ The UNCC's jurisdiction was not exclusive; claims could have been brought in other fora, such as domestic courts, therefore the UNCC took careful measures to prevent multiple recoveries.⁵⁴ The commission was to resolve disputed claims 'in respect of Iraq's liability as specified in paragraph 16', that is, for:

any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait.⁵⁵

⁴⁸ Richard Falk, 'The Environmental Law of War: An Introduction' in Glen Plant (ed.), *Environmental Protection and the Law of War: A 'Fifth Geneva' Convention on the Protection of the Environment in Time of Armed Conflict* (London: Belhaven Press, 1992), 93–4.

⁴⁹ See chapter 9 in this volume. ⁵⁰ See chapter 2 in this volume.

⁵¹ UN Security Council Resolution 692, S/RES/692 (1991) at para. 3.

⁵² UNCC Governing Council decision 10, S/AC.26/1992/10, Art. 6 (1992).

⁵³ UN Security Council Resolution 687, S/RES/687 (1991).

⁵⁴ UNCC Governing Council decision 1, S/AC.26/1991/1 (1991); decision 7, S/AC.26/1991/7/Rev.1 (1992); decision 13, S/AC.26/1992/13 (1992); Category D, E, and F claim forms; Heiskanen (n 30) 318–21.

⁵⁵ UN Security Council Resolution 687 (n 53) paras. 16–19.

UNCC Governing Council decision 7 provided additional detailed criteria for the jurisdiction of different categories of claims, discussed below.⁵⁶ A jurisdictional exclusion relevant to the environmental claims was ‘the costs of the Allied Coalition Forces, including those of military operations against Iraq.’⁵⁷ Although the environmental panel specified that where military personnel and equipment had been used to respond to environmental damage, threat of damage to the environment, or threat to civilian public health, such costs could be compensable, it did reject some claims as costs of Allied Coalition Forces.⁵⁸

Under resolution 687 and UNCC Governing Council decisions 7 and 10, all states, their nationals and corporations, and international organizations, could claim against Iraq. The Republic of Iraq could not bring claims against Coalition forces for violations of *jus in bello*.⁵⁹ Iraqi citizens, unless they had bona fide dual nationality, could not bring claims against Iraq.⁶⁰ Governing Council decision 7—intended to guide claimants in preparing their claims—categorized compensable losses into categories A–F, identified claimant standing for each category, and stated the evidentiary standard for the category.⁶¹ The first three categories, A, B, and C, were for individual ‘humanitarian’ claims; D, E, and F were for larger claims by, respectively, individuals, corporations, and governments and intergovernmental organizations. Environmental claims were assigned to category F, claims of governments and international organizations, and subcategory F4, environmental claims.

The F4 public health claims revealed a tension in the approach—Iraq argued that individuals had already been allowed to claim for personal injury and mental pain and anguish in categories B, C, and D.⁶² The UNCC rejected this view. The F4 panel stated that ‘Where a claim is brought by a State in such a case, the State is not acting on behalf of the injured national but rather is asserting its own right to ensure compliance with the rules of international law in respect of its nationals.’⁶³ It therefore considered such claims compensable in principle and undertook a careful case-by-case analysis to ensure that there was no double compensation and that other relevant rules were observed—such as the criteria for compensating mental pain and anguish.⁶⁴

⁵⁶ UNCC Governing Council decision 7 (n 54).

⁵⁷ UNCC Governing Council decision 19, S/AC.26/Dec.19 (1994).

⁵⁸ Second ‘F4’ Report (n 20) para. 29. Examples of category F4 claims that were rejected under decision 19 include: a claim of the Netherlands for the cost of tugboats to provide emergency firefighting, towing, rescue, and salvage services, UNCC (n 57) para. 274; and US claims for studies of the health risks to military personnel from oil well fires and hazardous materials, UNCC (n 57) para. 291, 335. The panel determined that decision 19 was intended to exclude ‘economic costs incurred by the Allied Coalition in undertaking or supporting military operations against Iraq’; accordingly it found that the expenses for remediation of damage resulting from military encampments, fortifications and roads constructed by Allied Coalition Forces in Saudi Arabia would be compensable. Part One Fourth ‘F4’ Report (n 19) paras. 247–91.

⁵⁹ For a discussion of the relationship between *jus ad bellum* and *jus in bello*, and the principle of equal application, see Koppe (n 45) 253–8.

⁶⁰ UNCC Governing Council decision 1 (n 54) (‘Claims will not be considered on behalf of Iraqi nationals who do not have bona fide nationality of any other State.’); Governing Council decision 10 (n 52) Art. 5; UNCC, Report and Recommendations made by the Panel of Commissioners Concerning the Sixth Instalment of Claims for Departure from Iraq or Kuwait (Category ‘A’ Claims), S/AC. 26/1996/3, paras. 27–31 (1996) (interpreting ‘bona fide’).

⁶¹ UNCC Governing Council decision 7 (n 54).

⁶² Fifth ‘F4’ Report (n 14) para. 62.

⁶³ *ibid.* para. 70.

⁶⁴ *ibid.* paras. 70–1.

States alone sought compensation for damage to the environment and damage caused by environmental harms. This approach is consistent with the public trust doctrine, which considers government as the trustee of elements of the environment on behalf of the community interest.⁶⁵ Other bodies that succeeded the UNCC followed this approach, notably the Eritrea–Ethiopia Claims Commission and the UN Register of Damage.⁶⁶ At the UNCC, no claims were brought on behalf of the international community, though arguably such claims would have been receivable by the UNCC and could perhaps have been made by an international organization such as the UN Environment Programme. An appropriate case would have been a claim to restore damage to marine areas beyond national jurisdiction, where no state would be likely to bring a claim. The experiment could not be made, since the entire Persian Gulf lies within national maritime boundaries.

The UNCC interpreted its temporal jurisdiction, from the date of the invasion on 2 August 1990, to the end of the war on 2 March 1991, with a certain flexibility. For example, the F4 panel recognized that refugees from the conflict continued to flow into Jordan after 2 March and therefore accepted claims for review where the cause of the environmental damage occurred as late as 1 September 1991.⁶⁷

Neither resolution 687 nor any Governing Council decision addresses the question of location of the damage.⁶⁸ The environmental panel followed the approach taken by other UNCC panels, concluding that ‘expenses resulting from reasonable monitoring and assessment of loss or damage that may have occurred outside Iraq or Kuwait are, in principle, compensable.’⁶⁹

⁶⁵ Peter H. Sand, ‘Environmental Principles Applied’ in Payne and Sand (n 27) 174; David D. Caron, ‘The Place of the Environment in International Tribunals’ in Jay E. Austin and Carl E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (New York: Cambridge University Press, 2000), 250, 257; Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Tokyo: UN University Press, 1989); Catherine Redgwell, *Intergenerational Trusts and Environmental Protection* (Manchester: Manchester University Press, 1999); Mary Turnipseed, Raphael Sagarin, Peter Barnes, Michael C. Blumm, Patrick Parenteau, and Peter H. Sand, ‘Reinvigorating the Public Trust Doctrine: Expert Opinion on the Potential of a Public Trust Mandate in U.S. and International Environmental Law’ (2010) 52(5) *Environment* 6.

⁶⁶ See notes 2 and 3 above.

⁶⁷ Report and Recommendations made by the Panel of Commissioners Concerning the First Instalment of ‘F4’ Claims, UN Doc. S/AC.26/2001/16, 22 June 2001, (‘First ‘F4’ Report’), paras. 292, 304 (‘For the purposes of its monitoring and assessment claims, Jordan defines “refugees” as “all those people, of whatever nationality, who entered Jordan from Iraq and Kuwait as a direct result of Iraq’s invasion and occupation of Kuwait, between 2 August 1990 and 1 September 1991”, having left Iraq or Kuwait on or before 2 March 1991. Jordan defines “involuntary immigrants” as people who were “refugees” initially, but who were still resident in Jordan after 1 September 1991.’).

⁶⁸ UNCC Governing Council decision 7 (n 54) para. 34. Heiskanen observes that the Governing Council and panels decided that location was not relevant to jurisdiction. Heiskanen (n 30) 332.

⁶⁹ *ibid.* paras. 53–4; Report and Recommendations made by the Panel of Commissioners Concerning the Second Instalment of ‘E2’ Claims, S/AC.26/1999/6, 19 March 1999, para. 54; Report and Recommendations made by the Panel of Commissioners Concerning the Fifth Instalment of ‘F1’ Claims, S/AC.26/2001/15, 22 June 2001, para. 18; Report and recommendations made by the Panel of Commissioners concerning the first instalment of ‘F1’ claims, S/AC.26/1999/23 (1999) para. 22.

14.3.2 Applicable law

As a subsidiary organ of the UN Security Council, the applicable law for the UNCC was international law and decisions of the UN Security Council.⁷⁰ UN Security Council resolutions, such as resolution 687, are generally considered binding as international law.⁷¹ Security Council resolution 687 established Iraq's liability,⁷² the direct causation requirement, the scope of harms covered, and the remedy.⁷³

While this provided the framing rules for the UNCC, its internal law specified the procedural and additional substantive rules that were applied to analysis of the claims. These rules were issued as decisions of the Governing Council, whose legal authority derived from the UN Charter and international law; its political authority derived from its membership: the fifteen Security Council member states. Governing Council decision 10 set the UNCC's procedural rules.⁷⁴ The procedural rules, Article 31, directed the panels to apply 'Security Council resolution 687 (1991) and other relevant security Council resolutions, the criteria established by the Governing Council for particular categories of claims, and any pertinent decisions of the Governing council [and] other relevant rules of international law'. Under the procedural rules, Article 43, the commissioners had the option of also relying 'on the relevant UNCITRAL [UN Commission on International Trade Law] Rules' or seeking direction from the Governing Council.

14.3.3 Due process

The UN Secretary-General described the UNCC's nature and task:

The Commission is not a court or an arbitral tribunal before which the parties appear; it is a political organ that performs an essentially fact-finding function of examining claims, verifying their validity, evaluating losses, assessing payments and resolving disputed claims. It is only in this last respect that a quasi-judicial function may be involved. Given the nature of the Commission, it is all the more important that

⁷⁰ Heiskanen (n 30) 333.

⁷¹ Philippe Sands, Pierre Klein, and Derek W. Bowett, *Bowett's Law of International Institutions* (London: Sweet & Maxwell, 6th edn, 2009).

⁷² On the question of the Security Council's authority to make a legal determination of Iraq's liability and to establish the UNCC, see Veijo Heiskanen and Nicolas Leroux, 'Applicable Law' in Christopher S. Gibson, Timothy John Feighery, Trevor M. Rajah, *War Reparations and the UN Compensation Commission: Designing Compensation After Conflict* (Oxford University Press, 2015). The issue was rendered moot by the following statement communicated to the UN Security Council President by the Iraqi government: 'The National Assembly has decided at its session held on 6 April 1991 to agree to United Nations Security Council resolution 687 (1991)'. UN Security Council, Letter dated 10 April 1991 from the Permanent Representative of Iraq to the United Nations Addressed to the President of the Security Council, S/22480 (1991).

⁷³ Domestic environmental law was not used either as a rule of decision for the UNCC proceedings or, to my knowledge, as an alternative forum for environmental claims. A UNDP report on the 2006 oil spill resulting from the conflict between Lebanon and Israel presents both Lebanese law and international law (including the UNCC) as avenues for claims. [No author given], Report for UNDP—Lebanon on the measurement and quantification of the environmental damage of the oil spill on Lebanon (2014), at <<http://www.undp.org/content/dam/lebanon/docs/Energy%20and%20Environment/Projects/222.pdf>> accessed 7 June 2017.

⁷⁴ UNCC Governing Council decision 10 (n 52).

some element of due process be built into the procedure. It will be the function of the Commissioners to provide this element.⁷⁵

As every claim was disputed by Iraq, the commissioners had a substantial amount of 'quasi-judicial' work to do.

The Secretary-General's mandate to the commissioners to provide 'some element of due process' was implemented within the framework of rules established by the Governing Council. Of the range of procedures used in international courts and tribunals and in claims resolution processes, the UNCC set in place a number of measures with the goal of balancing fairness, due process, and rapid review of the claims.⁷⁶

Structurally, the commissioners and their fact-finding function were strictly segregated from the political branch, the Governing Council.⁷⁷ Commissioners were selected to be impartial, distinguished experts in law and other fields who served in their personal capacity, having been recommended by the executive secretary, nominated by the Secretary-General, and appointed by the Governing Council.⁷⁸ Commissioners served in panels of three, each member being of a different nationality.⁷⁹ The commissioners had the ability to request supplemental evidence from Iraq and other parties, and made findings of fact and law on which they based award recommendations.

Iraq and claimant governments were provided information about the number and nationality of claimants, the amount of compensation sought, and significant legal and factual issues raised by the claims through 'Article 16 reports', which also invited Iraq and other governments to provide views and information to the UNCC.⁸⁰ Iraq was not always given the full claim files in the earlier phase of the UNCC but cooperation between the environmental panel, the legal officers working with the panel, and the Governing Council led to a change. Extensive, crucial information from monitoring and assessment studies funded by the first instalment of environmental claims was being sent to the UNCC; all agreed that it was necessary for Iraq to have this information.

The commissioners and teams of lawyers and accountants from the UNCC secretariat worked together on instalments of claims.⁸¹ A typical environmental panel meeting

⁷⁵ Report of the Secretary-General pursuant to paragraph 19 of Security Council Resolution 687(1991), S/22559, 2 May 1991, para. 20.

⁷⁶ For varied perspectives, compare Michael E. Schneider, 'How Fair and Efficient is the United Nations Compensation Commission System?' (1998) 15 *Journal of International Arbitration* 15–26; John Crook, 'The UNCC and Its Critics' in Richard Lillich (ed.), *The United Nations Compensation Commission: Thirteenth Sokol Colloquium* (Irvington NY: Transnational Publishers, 1995); Julia Klee, 'The Process' in Payne and Sand (n 27); David D. Caron and Brian Morris, 'The UN Compensation Commission: Practical Justice, Not Retribution' (2002) 13 *European Journal of International Law* 183; John P. Gaffney, 'Due Process in the United Nations Compensation Commission' (2000) 15 *Mealey's International Arbitration Report* 13; Elyse J. Garmise, 'The Iraqi Claims Process and the Ghost of Versailles' (1992) 67 *NYU Law Review* 840; Lalanath de Silva, 'Reflections on the United Nations Compensation Commission Experience' and Cymie R. Payne, 'Legal Liability for Environmental Damage: The United Nations Compensation Commission and the 1990–1991 Gulf War', both in Carl Bruch, W. Carroll Muffett, and Sandra S. Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (London: Earthscan, 2016).

⁷⁷ Allen (n 40) 148–9. Heiskanen (n 30) 313–14, reviews arguments that the appointment and award approval functions of the Executive Secretary and Governing Council, respectively, negate the supposed independence of commissioners.

⁷⁸ Governing Council decision 10 (n 52) Arts. 18–27.

⁷⁹ *ibid.* Art. 28.

⁸⁰ *ibid.* Art. 16; Heiskanen (n 30).

⁸¹ Norbert Wühler, 'Causation and Directness of Loss as Elements of Compensability before the United Nations Compensation Commission' in Lillich (n 76) 70; Klee (n 76).

would involve the three commissioners and the F4 team reviewing the written submissions of claimants, the comments of Iraq and claimant states on the legal and factual issues identified in so-called 'Article 16 reports', claimant responses to clarifying 'Article 34 questions' developed by the secretariat, the reports of expert consultants retained by the UNCC including reports from verification site missions, Iraq's comments on the full claim file (the claims as supplemented with information requested by the UNCC from claimants and the claimants' reports of data and analysis from the monitoring and assessment projects), and submissions made by Iraq and claimants at oral proceedings.⁸² The panel and team assigned to an instalment prepared a report to the Governing Council on the panel's findings and recommendations. The Governing Council then voted whether to adopt the panel report. Approved awards were then put into the queue for payment. Governing Council decisions could not be appealed, although corrections for computational, clerical, typographical, or other errors were possible.⁸³

While emphasis was initially placed on speedy review, it became clear that the environmental claims would need more time than the A, B, and C categories. Given their high value, complexity, and novelty, more procedural access for Iraq was requested by the environmental panel and team, and was deemed appropriate by the Governing Council. Indeed, speed was a central justification for the initial procedural restrictions on Iraq's ability to challenge claims, based on the negative experience at the Iran-US Claims Tribunal of procedural delays used by the respondent and that tribunal's failure to prioritize and rapidly address humanitarian claims.⁸⁴ Matheson observed that 'respondent states are likely to raise jurisdictional objections at every available opportunity'⁸⁵ and Iraq's obstreperous approach bore this out in the first years⁸⁶ and even up until the first oral proceeding held for the environmental claims. The effect was for the UNCC to limit Iraq's participation in order to maintain the pace of claims review. Another consideration was that the UN sanctions regimes restricted the funds available to hire counsel and experts.⁸⁷ On the other hand, Iraq was still being run by Saddam Hussein, the man who ordered the invasion, and tensions remained high.⁸⁸

⁸² Panels for most other claims categories reviewed considerably less information.

⁸³ Governing Council decision 10 (n 52) Art. 41.

⁸⁴ Michael F. Raboin, 'The Provisional Rules for Claims Procedure of the United Nations Compensation Commission: A Practical Approach to Claims Processing' in Lillich (n 76) 70. See also Hazel Fox, 'Reparations and State Responsibility' in Rowe (n 21) 46. Requests from panels for additional review time had to be made formally to the Governing Council which had the option of discharging a panel and transferring the claims to another panel. Governing Council decision 10 (n 52) Arts. 38, 39.

⁸⁵ Matheson (n 23) 66.

⁸⁶ See, for example, Report and Recommendations made by the Panel of Commissioners Concerning the Fourth Instalment of 'E1' Claims, UN Doc. S/AC.26/2000/16, 29 September 2000, para. 21: 'The Panel notes with some disappointment, however, that Iraq chose not to address the Panel on the issues presented by the claims, as specifically requested by the Panel, but rather chose to address its comments solely to matters over which the Panel has no control and not to address the substance of the claims. The Panel, therefore, terminated the oral proceedings following Iraq's presentation.'

⁸⁷ Michael Schneider, 'How Fair and Efficient is the United Nations Compensation Commission?' (1998) 15 *Journal of International Arbitration* 15; Lorraine Wilde, 'Scientific and Technical Advice: The Perspective of Iraq's Experts' in Payne and Sand (n 27).

⁸⁸ Paul Lewis, 'Immovable Object; Granite Regime of Saddam Hussein Seems Little Worn by Political Storm' *New York Times* (31 July 1992).

Over time, Iraq was gradually reintegrated politically and commercially into the international community and Iraq shifted from an uncooperative stance with respect to the UNCC to a more constructive approach.⁸⁹ Almost ten years into the UNCC work programme, as the environmental claims review was beginning, the Governing Council revised its procedures, extending its own time to review panel reports before voting on adoption from thirty days to three months.⁹⁰ The Governing Council directed the panels reviewing high-value, complex, or novel claims 'to provide it in their reports, to the extent possible, with non-confidential factual and technical information that served as the basis of the panels' recommendations.'⁹¹ The discussion of the evidence reviewed, the parties' arguments and counter-arguments, and the F4 panel's reasoning are set out for each of the claims. While not given in the level of detail found in the judgments of standing international tribunals, there is sufficient information to allow a reader to understand how the award recommendations were reached based on the panel's assessment of the evidence presented, expert views, and Iraqi and claimant arguments.

In roughly the same time period, a Governing Council decision approved the procedures used by the environmental programme, which included sending all claim files (claim form, statement of claim, and all of the documents provided by the claimant as attached to the statement of claim) to Iraq, allowing Iraq additional time to review and respond to the information, providing oral proceedings, and urging the environmental panel 'to use its experts to ensure the full development of the facts and relevant technical issues, as well as to obtain the full range of views including those of the claimants and Iraq.'⁹²

The instalments of environmental claims took an average of nineteen months each to complete; considerably longer than the six months allowed under the procedural rules.⁹³ This illustrated both the tradeoff of efficiency for procedural access by the parties and the significant size and complexity of the 168 environmental claims. Even with the extensions of time, when compared to tribunals like the International Court of Justice, the work was done at lightning speed.

14.3.4 Technical assistance for Iraq

The Governing Council realized that the environmental claims posed exceptional difficulties for Iraq, from both a legal and a scientific perspective. Additionally, the sanctions programme restricted Iraq's ability to hire experts on its own. At the same session in which it approved the first environmental awards, the Governing Council decided to provide up to US\$ 5 million from the Compensation Fund for Iraq to retain appropriate assistance 'to facilitate the promotion of legitimate interests of Iraq with respect

⁸⁹ Allen (n 40); Wilde (n 87).

⁹⁰ UNCC, Governing Council decision 114, S/AC.26/Dec.114, 7 December 2000.

⁹¹ *ibid.* para. 13. ⁹² UNCC, Governing Council decision 114 (n 90). Klee (n 76) 53–6.

⁹³ The time from submission of the instalment by the team to the panel to the approval of the report and recommendations by the Governing Council was as follows: F4(1) one year, four months months (February 2000–June 2001); F4(2) one year, seven months (March 2001–October 2002); F4(3) one year, nine months (March 2002–December 2003); F4(4) one year, nine months (March 2003–December 2004); F4(5): one year, seven months (November 2003–June 2005).

to “F4” claims, which give rise to particular questions due to their complexity and the limited amount of relevant international practice.⁹⁴ Eventually a total of US\$ 14 million was authorized.⁹⁵ Iraq was able to obtain world-class legal and technical consultants to assist with its response to the environmental claims.⁹⁶

14.3.5 Transparency and confidentiality

All panel reports and Governing Council decisions were published on the UNCC website shortly after they were translated into the official UN languages. They provide a rich source of information about the nature of the environmental claims, the arguments of Iraq and the claimants, the evidence submitted, and the reasoning of the commissioners.⁹⁷ However, the published documents are the tip of the iceberg. A vast amount of information was subject to a rule of confidentiality, including: original claim files, often amounting to hundreds of pages; reports from the UNCC’s experts; Iraq’s submissions; transcripts of oral proceedings; internal policies; financial tracking of claims, awards, and payments; and more.⁹⁸

There are strong arguments for a high level of transparency, especially for environmental matters, where transparency and public participation are considered to be obligations, supported by Rio Principle 10 and the Aarhus Convention.⁹⁹ Some of the scientific and technical expert consultants to the environmental panel have stated that ‘an open process and a public record builds confidence in the integrity of decision-making and allows all parties to learn and respond as the process moves forward’.¹⁰⁰ They recommended the example of US procedures for Natural Resource Damage Assessment, ‘where a public administrative record is created to document both technical and legal findings in detail’.¹⁰¹ This view was fully supported by the environmental commissioners and team.¹⁰²

⁹⁴ Governing Council decision 124, S/AC.26/2001/124 (2001), para. 2.

⁹⁵ Governing Council decision 226, S/AC.26/2004/226 (2004), para. 2.

⁹⁶ Wilde (n 87); Michael Schneider, ‘The UNCC and Future International Claims Practice,’ (2005) 99 Proceedings of the Annual Meeting (American Society of International Law) 332–9.

⁹⁷ For information on how to research the reports, see Cymie R. Payne, ‘Guidance for Researchers’ in Payne and Sand (n 27).

⁹⁸ Governing Council decision 10 (n 52) Art. 30.

⁹⁹ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, done at Aarhus, Denmark, on 25 June 1998, entry into force on 30 October 2001.

¹⁰⁰ Michael T. Huguenin, Michael C. Donlan, Alexandra E. Van Geel, and Robert W. Paterson, ‘Assessment and Valuation of Damage to the Environment’ in Payne and Sand (n 27) 92.

¹⁰¹ Huguenin, *et al.* (n 100) 92. It should be noted that, partly due to considerations of litigation by the government against responsible parties, the full administrative record may not be published for many years, although some information is made available immediately. For example, the Final Programmatic Damage Assessment and Restoration Plan for the Gulf of Mexico, assessing impacts of the 2010 Deepwater Horizon oil spill on natural resources in the Gulf of Mexico, on the services those resources provide, and determining the restoration needed to compensate the public for those impacts was not published until February 2016, 81 FR 8483 (2016), at <<https://federalregister.gov/a/2016-03299>>; see also <<http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan/>> accessed 7 June 2017.

¹⁰² Concern about the lack of publication of the expert reports has also been expressed by commentators. Jean-Christophe Martin, *La pratique de la Commission d’Indemnisation des Nations Unies pour l’Irak en matière de réclamations environnementales*, in *Le droit international face aux enjeux environnementaux* (Paris: Editions A. Pedone, 2010) 268. The UN Request for Expression of Interest, briefly laying out the requirements for consulting services, is provided in Payne and Sand (n 27), 359.

However, there are also strong claims for confidentiality in certain stages of judicial and quasi-judicial proceedings, based on the need for free deliberation between decision-makers and risks to parties. The latter is particularly a concern for reparations proceedings, where the claimant and respondent have already engaged in violence. An additional justification was offered by a UN archivist when I queried the need for continued confidentiality of all claim documents: the protection of individual claimants from retaliation, which he said was a standard UN practice in human rights cases. Even in dispute settlement proceedings unrelated to armed conflict a measure of confidentiality is expected. Thus, while the Aarhus Convention, Article 9(4), states that decisions of courts shall be publicly accessible, it makes no reference to transparency with respect to pleadings, oral proceedings, or judicial deliberations. Restrictions on participation and transparency need to be evaluated in light of the circumstances when an institution is established, UN practice, and the concerns of states participating in the reparations commission.

Two factors appear to weigh heavily in the calculus made by states when a reparations programme is designed. First, those who have been damaged by conflict are likely to have concerns about sharing information identifying damaged sites for security and other reasons, which will inhibit transparency mechanisms and activities. Second, perpetrators of environmental damage do not want to be labelled wrongdoers, even if they are willing to pay compensation. The history of *ex gratia* payments between states, which are generally opaque, is much older and more robust than the modern claims commission approach. For example, when the United States hit the Chinese Embassy during the Kosovo bombing, it offered an *ex gratia* payment to China without acknowledging wrongdoing. This process allows both aggressors and victims to retain more control over information than in proceedings with third party decision-makers like the UNCC, where a reasoned written decision explains the factual findings of the commissioners, albeit in a limited fashion.

14.3.6 Evidentiary standard

It remained for the commissioners to make findings of fact and to apply law to the facts, particularly: the existence, nature, and extent of damage; the causal link between the claimed harm and Iraq's invasion and occupation of Kuwait; and the monetary value of the loss. The UNCC procedural rules, Article 35(1), established the evidentiary requirements for all claims:

Each claimant is responsible for submitting documents and other evidence which demonstrate satisfactorily that a particular claim or group of claims is eligible for compensation pursuant to Security Council resolution 687 (1991).

More specifically, government claims, including the environmental claims, had to be supported 'by documentary and other appropriate evidence sufficient to demonstrate the circumstances and amount of the claimed loss.'¹⁰³ The kind of evidence was further

¹⁰³ UNCC Governing Council decision 7 (n 54) para. 37; UNCC Governing Council decision 10 (n 52) Art. 35.

elaborated in Governing Council decision 46, which asserted that ‘no loss shall be compensated by the Commission solely on the basis of an explanatory statement provided by the claimant’.¹⁰⁴

Thus, although ‘there is evidence in the published literature that a large number of refugees passed through Turkey after having departed from Iraq or Kuwait between 2 August 1990 and September 1991’,¹⁰⁵—which would provide a causal link between the presence of some refugees in Turkey and Iraq’s illegal acts—Turkey’s claims for damage to its forest resources from the impacts of refugees failed due to insufficient evidence. Specifically, the environmental panel explained that Turkey had not supplied ‘the dates on which the refugees arrived in Turkey, the duration of their stay or the details of the damage that they are alleged to have caused’.¹⁰⁶ That is, Turkey failed to provide the critical information that would show that the refugees who caused the claimed damage were also those reported in the literature to have been fleeing the conflict. Additional examples of the kinds and amount of evidence relied on by the environmental panel are discussed below in the context of fact-finding and causation.

14.3.7 Fact finding

In determining the admissibility, relevance, materiality, and weight of the evidence submitted, the UNCC availed itself of expert consultants, site visits, its own legal and actuarial staff, responses to interrogatories sent to the claimants, submissions by Iraq, and submissions by the claimants.¹⁰⁷ Mojtaba Kazazi, in his position as Secretary of the Governing Council, observed in 1999 that ‘the limited participation of the parties and particularly Iraq has resulted in the Commissioners and the Secretariat assuming an active investigative and fact-finding role in reviewing claims, with the assistance of outside expert consultants’.¹⁰⁸ When the environmental programme began a couple of years later, although there was greater participation of Iraq, the UNCC fact-finding role remained dynamic.

Matheson points to the need for members of international civil tribunals to possess appropriate experience in fact-finding and—where necessary—expertise in battlefield conditions.¹⁰⁹ The three commissioners for environmental claims—Thomas Mensah, Peter Sand, and José Allen—had between them a remarkable store of expertise in international law, fact finding, natural resource damages, international compensation for oil spill damage, and more. Understanding of battlefield conditions and military strategy would certainly be important for tribunals applying the law of armed conflict, where determinations of issues like military necessity are central to the decision-making process. That was not the case at the UNCC, which drew on state responsibility, *jus ad bellum*, and international environmental law.

¹⁰⁴ See generally, Mojtaba Kazazi, ‘An Overview of Evidence before the United Nations Compensation Commission’ (1999) 1 International Law Forum 219, 223.

¹⁰⁵ Part One Fourth ‘F4’ Report (n 19) para. 354. ¹⁰⁶ *ibid.*

¹⁰⁷ Klee (n 76); Huguenin, Donlan, van Geel, and Paterson, ‘Assessment and Valuation of Damage to the Environment’ (n 100); Wilde, ‘Scientific and Technical Advice: The Perspective of Iraq’s Experts’ (n 87).

¹⁰⁸ Kazazi (n 104) 220. ¹⁰⁹ Matheson (n 23) 150.

14.3.8 Causation: Direct losses and damage

Causation and damage were to be proved by the claimants.¹¹⁰ Security Council resolution 687 refers to Iraq's liability for 'direct' losses, as does Governing Council decision 7: this was therefore the causation standard for compensable claims. It became a source of discussion. According to the legal representative for some of the claimants, the use of 'direct' was a well-meaning error of the Security Council, intending to restrict those with only a remote causal link to Iraq from the claimant pool.¹¹¹ Heiskanen described the efforts of the Governing Council to provide clarity about what 'direct' meant through decisions defining specific loss types as direct or not; as he noted, 'the traditional rules of the international law of claims are not particularly clear on the subject.'¹¹²

There has been debate over whether the UNCC truly hewed to a standard of 'direct' causation or whether, in practice, it used 'proximate' causation. Some consider direct causation to be a civil law standard, also common in international claims, which considers that a direct loss is one where no intervening event breaks the chain of causation.¹¹³ Proximate causation, on the other hand, is held to be a common law standard, which distinguishes proximately caused harms from those too remote to be compensable and—according to some—results in policy-based decisions.¹¹⁴ From this perspective, using a proximate causation test tends to erode claims that the UNCC was a judicial body and places the emphasis on the Governing Council's role as political and as the determinant of the causation standard applied.¹¹⁵ Given the diversity of tests used by UNCC panels that Heiskanen subsequently describes, it does not appear that the Governing Council exercised much influence after all. Rather, it looks as though panels from mixed traditions worked through the problem as best they could.

A better analysis would not make a sharp distinction between direct and proximate causation.¹¹⁶ Marjorie M. Whiteman describes many international claims where the distinction was not made and others where both terms are used, in her comprehensive 1943 study of damages in international law.¹¹⁷ The Eritrea–Ethiopia Claims Commission considered a range of prior practice, including the UNCC, and settled on a 'proximate cause' test that considered whether the 'particular damage reasonably should have been foreseeable to an actor committing the international delict in question,' while noting that the particular verbal formula used was likely to make little difference to outcomes.¹¹⁸

A. *Complex causation*

A common feature of environmental damage that can make it difficult to prove causation is that the damage often results from a chain of events flowing from an initial

¹¹⁰ *ibid.* ¹¹¹ Carver (n 30) 70. ¹¹² Heiskanen (n 30) 331–2; see also 333–56.

¹¹³ *ibid.* 337. ¹¹⁴ *ibid.* ¹¹⁵ *ibid.* 338, citing Dworkin.

¹¹⁶ This appears to be the approach advised by Hazel Fox, 'Reparations and State Responsibility' in Rowe (n 21) ('Sometimes both the civil law criterion of causality as well as the common law test of predictability have been employed ... In the present circumstances these criteria provide some help in identifying heads of war damage which are too remote or indirect to be recoverable').

¹¹⁷ Whiteman (n 22) Vol. III, 1767–9

¹¹⁸ Eritrea–Ethiopia Claims Commission, Decision 7, paras. 7–14 (27 July 2007).

wrongful act. Whiteman quotes Grotius as saying that ‘the one who is liable for an act is at the same time liable for the consequences resulting from the force of the act’ and clarifying his meaning with a story.¹¹⁹ Grotius’s illustration is apt; he related that the King of Cappadocia was held liable to pay damages for the chain of events unleashed by his action blocking a river, which burst its dam, which caused the Euphrates to flood, which caused great damage to Galatia and Phrygia.¹²⁰

Whiteman’s invocation of Grotius is appealingly relevant to causal chains for the UNCC’s environmental damage claims, notably the claims for damage that resulted when people fled Iraq and Kuwait as refugees, bringing their livestock and living off the land as they passed, discussed below.

B. Intervening acts

In contrast, the environmental panel found that an intervening act did break the chain of causation in its review of Kuwait’s claim for expenses of remediation to be undertaken at sites where stored ordnance spontaneously detonated. Iraq argued that the damage was the result of negligent storage of ordnance at the sites. The panel concluded that, in the absence of evidence that appropriate management procedures were taken—and in one case, in light of evidence that they were not—mismanagement of the sites was the direct cause of damage and that broke the chain of causation, relieving Iraq of liability.¹²¹ The panel recommended no compensation for this claim. In a mundane example of injury to a crew member of a German oil spill response vessel, the panel found that the accident which caused the injury was not a direct result of Iraq’s invasion and occupation of Kuwait.¹²²

C. Refugees as intervening actors

Claims by Iran, Jordan, and Turkey for losses from the impact of refugees on their environments also raised the issue of intervening acts that break the chain of causation.¹²³ Iraq contended that decisions of the refugees themselves and of the Government of Jordan were intervening acts.¹²⁴ Therefore, Iraq argued, the environmental damage caused by the transit of refugees through Jordan was not a direct result of the conflict and the UNCC should reject the Jordanian claims, which stemmed from the influx of refugees (a situation which is distressingly repeating itself due to the conflicts in Syria

¹¹⁹ Whiteman (n 22) Vol. III, 1767, citing Grotius, *De jure belli ac pacis* (Carnegie Endowment for International Peace trans. of 1646 ed., 1925) II, Chap. XVII, Sec. 12, 434.

¹²⁰ Whiteman (n 22) Vol. III, 1767. ¹²¹ Part One Fourth ‘F4’ Report (n 19) paras. 197–218.

¹²² *ibid.* para. 245.

¹²³ The panel found that ‘the evidence provided by Turkey is not sufficient to enable the Panel to determine whether the damage alleged to have resulted from the presence of refugees in Turkey is eligible for compensation. In particular, no information is provided by Turkey regarding the dates on which the refugees arrived in Turkey, the duration of their stay or the details of the damage that they are alleged to have caused, and accordingly received no compensation.’ Part One Fourth ‘F4’ Report (n 19) paras. 350–6.

¹²⁴ First ‘F4’ Report (n 67) para. 302.

and Iraq).¹²⁵ Governing Council decision 7, defined ‘departure from or inability to leave Iraq or Kuwait (or a decision not to return) during that period’ as a direct loss.¹²⁶ The F4 panel applied decision 7 to Jordan’s claimed environmental damage and decided that, in principle, refugee impacts could have been a direct result of Iraq’s invasion and occupation of Kuwait; on that basis, it made awards for monitoring and assessment of Jordan’s environmental damage.¹²⁷

Later, in reviewing the substantive claims for environmental damage from refugees brought by Jordan, Iran, and Turkey, the panel said that

it was necessary to consider whether the presence of the refugees occurred during the period specified in paragraph 34(b) of Governing Council decision 7, and also whether the stay of any of the refugees beyond that period was due to factors unrelated to Iraq’s invasion and occupation of Kuwait, such as intervening acts, including decisions of the Claimants or other Governments.¹²⁸

Applying this approach to Iran’s claims, the F4 panel found that there was ‘evidence that the presence of the refugees resulted in environmental damage to rangeland areas ... that this damage is a direct result’ of the conflict, and on that basis it awarded compensation.¹²⁹ However, Iran’s forest claims failed on the basis that Iran had failed to provide sufficient evidence that the refugees who allegedly caused damage to forests were the same as those who ‘departed from Iraq or Kuwait during the period 2 August 1990 to 2 March 1991 stipulated in paragraph 34 of Governing Council decision 7’: refugees had also entered Iran in 1991 as a result of the rebellion of Iraqi Kurds.¹³⁰ With regard to Jordan’s claims that refugees damaged water, agricultural, wetlands, and marine resources, the panel found that the evidence submitted failed to demonstrate a causal link between the damage and the presence of refugees from the conflict.¹³¹

D. Mitigation

Mitigation is a potential problem for a strict interpretation of ‘direct’ causation as the act of mitigation clearly intervenes after the initial action triggering liability, but this is not a difficulty for a less dogmatic approach. In fact, the only way to reconcile an injured party’s legal obligation to mitigate damage, thereby reducing the harm, with direct causation is to recognize that mitigation is not an intervening act that breaks the causal chain.¹³² Accordingly, expenses of measures undertaken to prevent or abate harmful impacts of airborne contaminants on property or human health could qualify

¹²⁵ 1.4 million Syrian refugees were estimated to be in Jordan in 2015. 3RP Regional Refugee & Resilience Plan 2016–2017, 8, at <<http://www.3rpsyriacrisis.org/wp-content/uploads/2015/12/3RP-Regional-Overview-2016-2017.pdf>> accessed 7 June 2017.

¹²⁶ UNCC Governing Council decision 7 (n 54) para. 34.

¹²⁷ First ‘F4’ Report (n 67) paras. 297–362.

¹²⁸ Part One Fourth ‘F4’ Report (n 19) para. 46.

¹²⁹ *ibid.* para. 71.

¹³⁰ *ibid.* para. 80. Peter W. Galbraith, ‘Refugees from War in Iraq’ Policy Brief No. 2 (Migration Policy Institute, 2003), at <<http://www.migrationpolicy.org/sites/default/files/publications/MPIPPolicyBriefIraq.pdf>> accessed 7 June 2017.

¹³¹ Part One Fourth ‘F4’ Report (n 19) paras. 103–55.

¹³² Heiskanen (n 30) 351–4 (finding that this approach can only be proximate causation).

as environmental damage, provided that the losses or expenses were a direct result of Iraq's invasion and occupation of Kuwait.¹³³

E. Parallel and concurrent causes

The UNCC had to carefully distinguish damage from oil spills caused by the conflict from those resulting from either natural oil seeps or other oil spills and extraction operations. As is often the case, baseline information demonstrating the environment's pre-invasion condition was generally inadequate, a problem anticipated by the commissioners.¹³⁴ The environmental panel said:

Iraq is, of course, not liable for damage that was unrelated to its invasion and occupation of Kuwait nor for losses or expenses that are not a direct result of the invasion and occupation. However, Iraq is not exonerated from liability for loss or damage that resulted directly from the invasion and occupation simply because other factors might have contributed to the loss or damage. Whether or not any environmental damage or loss for which compensation is claimed was a direct result of Iraq's invasion and occupation of Kuwait will depend on the evidence presented in relation to each particular loss or damage.¹³⁵

Where there was not sufficient evidence to distinguish the cause of oil damage, as was the case for damage to the marine environment in Iran that might have been caused by either the 1991 war or by the 1983 Nowruz oil well blowout and other oil spills and seeps, the F4 panel recommended no compensation be awarded; Iran's proffer of evidence that included chemical and fingerprinting data was insufficient to distinguish oil spill damage attributable to Iraq from the other possible sources.¹³⁶

However, multiple kinds of evidence showed that most of the very severe oil damage to the Saudi and Kuwaiti coastal areas was caused by the 1991 oil spills.¹³⁷ Saudi Arabia demonstrated that there was oil from the conflict still present and continuing to cause harm. The panel concluded that 'evidence available from a variety of sources supports the conclusion that the overwhelming majority of the oil currently present in the areas which Saudi Arabia proposes to remediate resulted from Iraq's invasion and occupation of Kuwait'.¹³⁸ The totality of the evidence that was available to the UNCC in relation to Saudi Arabia's oil spill claims included daily oil spill reports,¹³⁹ peer-reviewed scientific publications,¹⁴⁰ field visits by independent experts contracted by the UNCC to assess sites where damage was claimed,¹⁴¹ and the results of

¹³³ Second 'F4' Report (n 20) para. 23.

¹³⁴ First 'F4' Report (n 67) para. 34.

¹³⁵ Second 'F4' Report (n 20) para. 25.

¹³⁶ Fifth 'F4' Report (n 14) para. 212.

¹³⁷ Third 'F4' Report (n 16); Fifth 'F4' Report (n 14).

¹³⁸ Third 'F4' Report (n 16) para. 176.

¹³⁹ Second 'F4' Report (n 20).

¹⁴⁰ See, for example, Saleh Al-Muzaini and Mirza U. Beg (eds.) 'Special Issue: The Long-term Environmental Effects of the Gulf War' (1998) 24 *Environment International* 1–248; Andrew R. G. Price and John H. Robinson (eds.), 'Special Issue: The 1991 Gulf War: Coastal and Marine Environmental Consequences,' (1993) 27 *Marine Pollution Bulletin* 1–380.

¹⁴¹ Disclosure: the present author led the missions to verify Saudi Arabia's marine oil spill damage claims. The UNCC's expert consultants identified locations that they wished to verify and we were able to have full access to observe those sites as well as sites identified by Saudi Arabia's experts.

a shoreline survey conducted by Saudi Arabia that examined more than 19,500 sampling sites and chemical analysis ('biomarker fingerprinting') of over 3,000 sediment samples.¹⁴²

Even though Saudi Arabia's claimed oil spill damage was found attributable to Iraq, there were still further considerations. The F4 Panel recommended compensation for only the marginal cost of some activities, such as personnel expenses that would have been incurred regardless of Iraq's actions.¹⁴³ A claimant could overcome this presumption by showing that it incurred additional expenses. Thus, Saudi Arabia's claim for the cost of personnel and equipment to assist in oil spill response was rejected because it failed to show that it had incurred any extraordinary cost beyond the normal.¹⁴⁴ Similarly, the salaries of the German oil pollution control vessel were not compensated.¹⁴⁵

Determining the causal link for the monitoring and assessment ('M&A') claims was problematic. Claimants, in general, had not pursued detailed, appropriate monitoring and assessment of the damage on their own initiative. Where they had done so as part of the UNEP-led assessment in 1991,¹⁴⁶ the results were out of date because the UNCC had decided to leave review of these claims to the end of its work programme, almost ten years later. But the damage claims—for oil spills, oil well fires, and so on—could not be substantiated without data and analysis. The M&A claims sought funding for various investigations to be undertaken in the future in order to ascertain whether damage occurred; to quantify the loss; and to assess methodologies to abate or mitigate the damage.¹⁴⁷ Without evidence that damage had occurred, how could the claimants prove their claims for costs of collecting the evidence? Faced with the reality that a large number of the environmental claims lacked the kind of evidence necessary for their assessment, the environmental panel decided that:

it would be both illogical and inequitable to reject a claim for reasonable monitoring and assessment on the sole ground that the claimant did not establish beforehand that environmental damage occurred. To reject a claim for that reason would, in effect, deprive the claimant of the opportunity to generate the very evidence that it needs to demonstrate the nature and extent of damage that may have occurred.¹⁴⁸

The panel required sufficient evidence to demonstrate a 'nexus between the activity and environmental damage or risk of damage that may be attributed directly to Iraq's invasion and occupation of Kuwait' using several factors, including evaluation of the plausibility that effects of the invasion could have affected a claimant's territory, examination of the possible pathways and media by which pollutants could have reached the affected resources, evidence of actual damage, and whether there was a reasonable prospect that

¹⁴² Third 'F4' Report (n 16) paras. 172, 177. The shoreline survey was funded by a monitoring and assessment award made in the first instalment of claims. First 'F4' Report (n 67) paras. 592–9.

¹⁴³ Second 'F4' Report (n 20) para. 30. ¹⁴⁴ *ibid.* paras. 194–8. ¹⁴⁵ *ibid.* 240–8.

¹⁴⁶ UNEP, Report on the UN Inter-Agency Plan of Action for the ROPME region, reprinted in Mark Weller (ed.), *Iraq and Kuwait: The Hostilities and their Aftermath* (Cambridge: Grotius Publishers, 1993); UNEP, Updated Scientific Report on the Environmental Effects of the Conflict between Iraq and Kuwait, UNEP/GC.17/Inf. 9, Nairobi, March 1993.

¹⁴⁷ First 'F4' Report (n 67) para. 28. ¹⁴⁸ *ibid.* para. 29.

the activity would produce results that could assist the panel in reviewing any related substantive claims.¹⁴⁹

While some lawyers have been troubled by the UNCC's willingness to award M&A funds in advance, the only alternative that would have been more fair to both parties would have been to use another source of funds for the natural resource damage assessment.¹⁵⁰ Such a fund was not available (then or now), although it has been recommended.¹⁵¹

14.3.9 Remedy—funding compensation

The UNCC provided financial compensation administered through the Compensation Fund. Other remedies that post-conflict commissions offer include: determining disputed boundaries; making declaratory statements of the legality or illegality of actors and activities; requirements that parties provide assurances and guarantees of non-repetition; and reparation in the form of restitution, compensation, and satisfaction.¹⁵² Some of these were addressed in other ways, such as Security Council resolution 687's declaration that Iraq's acts were illegal and the separate process to delineate the Iraq–Kuwait border. David Caron has noted that 'the determination of the merits of claims, regardless of eventual satisfaction, is itself a form of satisfaction.'¹⁵³

The UNCC followed the classic approach described by the International Law Commission in its work on state responsibility. The Permanent Court of International Justice set the measure: 'reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed.'¹⁵⁴ Of course, international civil tribunals addressing damage from armed conflict may fail to satisfy full relief for many reasons—damage that is too profound to be restored, refusal of parties to comply, the limits of advisory jurisdiction, a lack of funds to pay compensation.¹⁵⁵

¹⁴⁹ *ibid.* para. 31. The International Tribunal for the Law of the Sea also referred to 'plausibility' as a standard when it said that the precautionary approach must be used 'in situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks'. *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), ITLOS Reports, 1 February 2011.

¹⁵⁰ This conundrum has been a problem in domestic law. While the U.S. Oil Pollution Act allows state, tribal, and federal government trustees to draw on the Oil Spill Liability Trust Fund for assessment costs which can then be used to support claims, the Superfund does not, which 'has had the effect of placing trustees in the unfortunate position of being forced to settle with one or more PRPs in order to obtain sufficient funds to perform a site assessment. . . . settling forecloses the possibility of filing suit against that PRP once the true extent of the damage it caused has been discovered. In fact, this lack of funding has often proved to be an insurmountable obstacle because agency budgets have historically authorized little or no funding for natural resource damage actions.' Laura Rowley, 'NRD Trustees: to what Extent are They Truly Trustees?' (2001) 28(2/3) *Boston College Environmental Affairs Law Review* 459, 465 (citations omitted).

¹⁵¹ Klee (n 76).

¹⁵² ILC Draft Articles on Responsibility of States for Internationally Wrongful Acts (n 24) Arts. 30, 31, 34–7.

¹⁵³ Caron and Morris (n 76) 189.

¹⁵⁴ *Case Concerning the Factory at Chorzów* (Germany v. Poland) Merits, Claim for Indemnity, Judgment, PCIJ Reports (Series A No. 17, 47) 13 September 1928.

¹⁵⁵ Matheson (n 23) 212.

Environmental losses are challenging because, on the one hand, damage will rarely be fully reparable and, on the other hand, they require special techniques to monetize. The UNCC environmental claimants most frequently sought compensation for the cost of response, monitoring, assessment, remediation, and restoration activities. Where remediation or restoration were not possible—for example, an oiled shoreline ecosystem that was too fragile for active remediation—claimants used alternative approaches to render the value of lost ecosystem services in terms of financial compensation, further discussed below.

The UNCC has been called ‘unique’ because of the perception that Iraq’s oil wealth provided a source of funding for reparations that is unlikely to be repeated in most cases. However, in its first years Iraq’s government refused to cooperate and even the UNCC’s operating expenses were uncertain. Even after funding began to flow, it was not expected to be sufficient to pay all the claims and Governing Council decision 7 advised claimant governments that claims might be paid on a pro rata basis, with priority at the discretion of the Governing Council.¹⁵⁶ Although nearly all UNCC claims—and all environmental claims—have now been fully paid, a pro rata approach might be a good strategy for future reparations programmes.

However, as the UNCC Governing Council contemplated the possibility that claims might not be fully paid, it recognized that the obligation to actually restore environmental damage with award funds posed a particular problem. While a commercial claimant might be asked to ‘take a haircut’ and accept only a percentage of its award as final payment, a percentage of an environmental award would not be sufficient to carry out the restoration project for which it was awarded. This would result in an impasse if the claimant were unable or unwilling to make up the difference. While the UNCC did not have to face this problem, in other circumstances a judicial body would face the difficult decision to award nothing if restoration could not be achieved with the funds available or to award a lesser amount and relax the stricture that environmental awards must be used for the benefit of the damaged environment. In the latter case, an alternative environmental project might be substituted or the claimant might be given full discretion to use the funds.

A final note on the source of the UNCC awards—they were funded from a percentage of Iraq’s oil revenues. Initially, 30 per cent of Iraq’s oil revenues went to the UNCC Compensation Fund, until this was reduced to 25 per cent through a political compromise, and eventually it was reduced to 5 per cent.¹⁵⁷ In 2014, the Governing Council

¹⁵⁶ David. D. Caron, ‘Introductory Note’ (1992) 31 ILM 1009; Cymie R. Payne, ‘Environmental Claims in Context: Overview of the Institution’ in Payne and Sand (n 27) text at note 52; Garmise (n 76) 840, 841. The Governing Council prioritized payment of the monitoring and assessment awards; this allowed the start of projects that eventually provided useful information for the UNCC’s review of other environmental claims. UNCC Governing Council decision 73, S/AC.26/1999/73, 25 June 1999; Governing Council decision 100, S/AC.26/2000/100, 19 June 2000, para. 1(e) concerning the ‘third phase of payment;’ Governing Council decision 256, S/AC.26/256, 8 December 2005).

¹⁵⁷ Letter Dated 30 May 1991 from the Secretary-General Addressed to the President of the Security Council, UN SCOR, Forty-sixth Session, para. 6, at 3, UN Doc. S/22661, 31 May 1991 (Secretary-General’s recommendation to UN Security Council of the percentage of the value of Iraq’s petroleum exports to be transferred to the UNCC Compensation Fund for satisfaction of UNCC awards); SC Res. 705, 15 August 1991, 30 ILM 1715 (1991) (setting 30 per cent level); International Claims Litigation II: A Case Study of the UNCC, 99th Proceedings of the American Society of International Law 325, 334 (2005). UN Security Council Resolution 1483 (2003) reduced the percentage of Iraq’s oil revenues paid to the Compensation

decided to postpone Iraq's obligation, in consideration of Iraq's difficult financial situation and in 2015 it decided to continue the postponement, due to 'extraordinarily difficult security circumstances in Iraq and the unusual budgetary challenges associated with confronting this issue', noting Kuwait's agreement to the arrangement.¹⁵⁸ All of the claims were finally paid except for one, related to losses from Kuwait's oil sector, which remains outstanding.

14.3.10 Compensable losses and damage

By specifying that environmental damage and the depletion of natural resources were compensable losses, Security Council resolution 687, paragraph 16, established a solid basis for a modern approach to reparations. Although this was the first time international claims included these heads of damage explicitly, there was certainly precedent in previous claims commissions,¹⁵⁹ the International Maritime Organization's Civil Liability Conventions,¹⁶⁰ EU law,¹⁶¹ and US law.¹⁶² The International Law Commission describes compensation as a financial transfer that can 'cover any financially assessable damage'.¹⁶³ Although Iraq agreed that reasonable costs of remediation or restoration were compensable, it argued that the loss of resources that are not traded in the market is not 'financially assessable',¹⁶⁴ and that there is no legal justification for compensating such losses. Iraq's argument ignores the International Law Commission's further explanation that 'the qualification "financially assessable" is intended to exclude compensation for ... the affront or injury caused by a violation of rights not associated with actual damage to property or persons'.¹⁶⁵ That is, 'financially assessable' is not intended to exclude losses to non-market resources, which are 'actual damage'. The environmental panel stated that 'there is no justification for the

Fund from 25 per cent to 5 per cent where it remains; it also established the Development Fund for Iraq (DFI), whose International Advisory and Monitoring Board assumed responsibility for the proceeds of petroleum sales and payments to the Compensation Fund. Report of the Secretary-General pursuant to paragraph 5 of Resolution 1859 (2008), S/2009/385, para. 8. SC Res. 1905, S/RES/1905, 21 December 2009, para. 4.

¹⁵⁸ Governing Council decision 272, S/AC.26/Dec.272 (2014); Governing Council decision 273, S/AC.26/Dec.273 (2015).

¹⁵⁹ See chapter 2 in this volume. See also, Whiteman (n 22), Vol. II, 1458.

¹⁶⁰ Joe Nichols, 'Scope of Compensation for Environmental Damage under the 1992 Civil Liability Convention and the 1992 Fund Convention' in Frank Maes (ed.), *Marine Resource Damage Assessment, Liability and Compensation for Environmental Damage* (Dordrecht: Springer, 2005), 59–66.

¹⁶¹ EU Council Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (Environmental Liability Directive), OJ L143/56 (2004), as amended by Council Directive 2006/21/EC, OJ L102 (2006) and Council Directive 2009/31/EC, OJ L140, Preamble (14), Art. 2(1).

¹⁶² Huguenin, Donlan, Van Geel, and Paterson (n 100). UNCC Governing Council decision 7 (n 54) para 35, was itself proposed in a working paper submitted by the United States, Criteria for Claims for Environmental Damage and the Depletion of Natural Resources, S/AC.26/1991/WP.20, 20 November 1991, based on the US natural resource damage legislation.

¹⁶³ ILC Draft Articles on Responsibility of States for Internationally Wrongful Acts (n 24), Art. 36; see also *Case concerning the Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment of 25 September 1997, ICJ Reports 7 81, para. 152; *Factory at Chorzów* (n 154) 29.

¹⁶⁴ Fifth 'F4' Report (n 14) para. 46.

¹⁶⁵ ILC Draft Articles on Responsibility of States (n 24) 99.

contention that general international law precludes compensation for pure environmental damage.¹⁶⁶

Governing Council decision 7, paragraph 35, detailed examples of the kinds of losses contemplated under resolution 687:

These payments are available with respect to direct environmental damage and the depletion of natural resources as a result of Iraq's unlawful invasion and occupation of Kuwait. This will include losses or expenses resulting from:

- (a) Abatement and prevention of environmental damage, including expenses directly relating to fighting oil fires and stemming the flow of oil in coastal and international waters;
- (b) Reasonable measures already taken to clean and restore the environment or future measures which can be documented as reasonably necessary to clean and restore the environment;
- (c) Reasonable monitoring and assessment of the environmental damage for the purposes of evaluating and abating the harm and restoring the environment;
- (d) Reasonable monitoring of public health and performing medical screenings for the purposes of investigation and combating increased health risks as a result of the environmental damage; and
- (e) Depletion of or damage to natural resources.

The environmental panel considered this an indicative, not exclusive, list of compensable losses. Damage to environmental resources not traded in the market, emergency assistance costs, and cultural heritage were all considered compensable losses, in principle. The panel observed that public health costs could be within the scope:

For example, expenses of measures undertaken to prevent or abate harmful impacts of airborne contaminants on property or human health could qualify as environmental damage, provided that the losses or expenses are a direct result of Iraq's invasion and occupation of Kuwait.¹⁶⁷

Public health monitoring costs related to risks from environmental damage were included explicitly in paragraph 35(d) of decision 7, but Iraq challenged substantive claims related to health impacts since they were not explicitly mentioned.¹⁶⁸ The F4 panel reasoned that it would be illogical to allow monitoring and screening for damage to health from the conflict but to disallow claims for costs of treating the health risks that would be revealed by the tests.¹⁶⁹ Substantive public health claims received awards for costs of treating injuries from mines and ordnance, post-traumatic stress disorder, and medical treatment and public health facilities for refugees.¹⁷⁰

¹⁶⁶ Fifth 'F4' Report (n 14) para. 58.

¹⁶⁷ Second 'F4' Report (n 20) para. 23.

¹⁶⁸ For a comprehensive discussion of the public health claims, see Peter H. Sand and James K. Hammitt, 'Public Health Claims' in Payne and Sand (n 27).

¹⁶⁹ Fifth 'F4' Report (n 14) para. 67. This is consistent with the UNCC's jurisdiction for broad scope of compensable losses. Although the International Oil Pollution Compensation Funds excludes health risks, its compensation scheme is established within a very different context and has different goals. See also, Sand and Hammitt (n 168) 195.

¹⁷⁰ Fifth 'F4' Report (n 14). However, a claim by the United States for compensation of US Army expenses to monitor health risks to US military personnel for exposure to pollutants from the oil well fires

Where countries outside the Persian Gulf region contributed funds or material aid as assistance to abate and prevent environmental damage, such costs were awarded compensation.¹⁷¹ For example, Germany received compensation for expenses related to sending oil pollution control equipment and personnel to assist with the response to the oil spills at the request of the governments of Bahrain and Qatar.¹⁷² Such costs fit squarely within Security Council resolution 687 and paragraph 35 of Governing Council decision 7. In analysing this question, the F4 panel also recollected that

specific appeals for assistance in dealing with the environmental damage caused by Iraq's invasion and occupation of Kuwait were made by the United Nations General Assembly and by other organizations and bodies of the United Nations system as well as by the countries affected by environmental damage or threat of such damage resulting from Iraq's invasion and occupation of Kuwait.¹⁷³

In some cases, expenses of military equipment or personnel such as the cost of the German Ministry of Defence's minesweepers were compensated. Although in apparent contradiction to Governing Council decision 19, which provided that 'the costs of the Allied Coalition Forces, including those of military operations against Iraq, are not eligible for compensation', the F4 panel considered compensation appropriate 'if there is sufficient evidence to demonstrate that the predominant purpose of the activities was to respond to environmental damage or threat of damage to the environment or to public health in the interest of the general population.'¹⁷⁴ In recommending an award, the F4 panel accepted the statement of the German government that '[s]ecure sea lanes in the gulf area are an indispensable prerequisite for starting the process of economic

and other sources was rejected as non-compensable expenses for costs incurred for military operations under Governing Council decision 19. Second 'F4' Report (n 20) paras. 332–5.

¹⁷¹ Second 'F4' Report (n 20) paras. 32–5, 34; Thomas Mensah and Peter Sand have referred to these as 'solidarity' costs. Thomas A. Mensah, 'Foreword' in Payne and Sand (n 27) xix; Sand (n 65). Solidarity is a concept rooted in Emer de Vattel's argument that states have a legitimate expectation that others will assist them when they are threatened with 'disaster and ruin', although its modern meaning and status in international law is much debated. Rudiger Wolfrum and Chie Kojima (eds.), *Solidarity: A Structural Principle of International Law* (Berlin: Springer-Verlag, 2010).

¹⁷² Second 'F4' Report (n 20) paras. 240–73.

¹⁷³ *ibid.* (n 58) para. 34. The F4 panel referred to the following: General Assembly resolutions 46/216 (20 December 1991) and 47/151 (18 December 1992) (both entitled, 'General Assembly resolution concerning international cooperation to mitigate the environmental consequences on Kuwait and other countries in the region resulting from the situation between Iraq and Kuwait'). See also the report of the United Nations Environment Programme entitled 'Introductory report of the Executive Director: environmental consequences of the armed conflict between Iraq and Kuwait', UNEP/GC.16/4/Add.1; Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization Assembly Resolution VXi-14 (1991) entitled 'Oceanographic Co-operation within the ROPME sea area'; decision 16/11/A of the Governing Council of the United Nations Environment Programme at its sixteenth session entitled 'The environmental consequences of the armed conflict in the Gulf area', 31 May 1991; and International Maritime Organization Circular letter No. 1492, 5 March 1991. A number of international agreements and declarations recognize the obligation to provide assistance to respond to environmental emergencies. For example, principle 18 of the Declaration of the United Nations Conference on Environment and Development (Rio de Janeiro), 1992, A/CONF.151/26, Vol. I, provides that 'States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.' See also Art. 194 of the United Nations Convention on the Law of the Sea (1982), 10 December 1982.

¹⁷⁴ Second 'F4' Report (n 20) para 29.

recovery in the region' and noted that the German minesweepers were deployed after the end of hostilities.¹⁷⁵

Whether cultural heritage can be included within the scope of 'environmental damage' has been questioned in theoretical debates.¹⁷⁶ The UNCC received a number of public cultural heritage claims which it allocated to the F4 category. This included claims for damage to artefacts, monuments, and structures that might be considered cultural landscape. For example, Iran claimed compensation for assessment of damage from oil fire emissions to 'stone relics in Persepolis; tilework in Esfahan and Kermân; wall paintings in Esfahan, Fârs, and Yazd; construction materials at the Tchoga Zanbil Ziggurat in Khûzestân; and construction materials, archaeological sites and artefacts in Susa'; it was awarded US\$ 1.4 million.¹⁷⁷ Syria claimed US\$ 1.2 billion for the costs of restoring damage from the oil well fires to cultural sites including the World Heritage-listed Temple of Bel at Palmyra; an Umayyad limestone castle at Qasr Al-Hayr East; and other structures at Dura Europos and Resafe. These claims failed due to lack of evidence regarding the causal link to Iraq's illegal acts.¹⁷⁸

14.3.11 Valuation of damage

The environmental panel recognized that 'there are inherent difficulties in attempting to place a monetary value on damaged natural resources, particularly resources that are not traded in the market'.¹⁷⁹ But it observed that it was 'entitled and required' to determine appropriate compensation, while recognizing that putting a monetary value on non-market natural resources entails some uncertainties.¹⁸⁰ The panel quoted the *Trail Smelter* case in support of its view that international law neither prescribes nor prohibits any particular valuation technique:

Where the [wrongful act] itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoer from making any amend for his acts. In such case, while the damages may not be determined by mere speculation or guess, it will be enough if the evidence show the extent of the damages as a matter of just and reasonable inference, although the result be only approximate.¹⁸¹

For many claims, the award was the estimated value of the cost of remediating and/or restoring the damaged resource. This is how Saudi Arabia's award for oil spill damage to its Persian Gulf coast was calculated.¹⁸² The limitations of remediation as a

¹⁷⁵ *ibid.* 265–73.

¹⁷⁶ For example, Julio Barboza, 'Environmental Damage' in Alexandre Timoshenko (ed.), *Conclusions by the Working Group of Experts on Liability and Compensation for Environmental Damage Arising from Military Activities, in Liability and Compensation for Environmental Damage*, Compilation of Documents (Nairobi: United Nations Environmental Programme, 1998), 97 ('Some such elements as do not belong to the notion or [sic] "environment", (human health), or to the notion of "natural environment" (cultural elements) should, therefore, be discarded.').

¹⁷⁷ First 'F4' Report (n 67) para 84; Fifth 'F4' Report (n 14) para. 33.

¹⁷⁸ Fifth 'F4' Report (n 14) paras. 719–43.

¹⁷⁹ *ibid.* para. 81.

¹⁸⁰ *ibid.* para. 80.

¹⁸¹ *ibid.* para. 80.

¹⁸² Claim No. 5000451, Third 'F4' Report (n 16) paras. 169–89.

surrogate were evident in this case, as some of the damaged wetlands were too sensitive for highly intrusive restoration and best environmental practice counselled that those areas should be left to recover through slower natural processes.¹⁸³

To address the loss of ecosystem services that would not be fully compensated by that award, Saudi Arabia proposed constructing ten marine and coastal preserves. The panel instead used a valuation technique called habitat equivalency analysis ('HEA'), which uses a more complex analysis that sets the value of the loss as the cost of environmental projects designed to replace ecosystem services previously provided by irretrievably damaged natural resources.¹⁸⁴ It considered that two preserves would sufficiently compensate for damage that had not already been addressed in the remediation award and recommended an award of approximately US\$ 46.1 million.¹⁸⁵

Jordan used HEA to calculate that damage to rangeland and wildlife reserves from vehicular traffic, overgrazing by refugees' livestock, and refugees' use of plants for fuel would require compensation of US\$ 2.4 billion.¹⁸⁶ However, implementing the project as proposed would have required more land than was available in Jordan. The environmental panel accepted the HEA approach in principle, and, in consideration of the limited land available, awarded US\$ 160.3 million. This amount reflected the costs of an alternative programme in which rangeland users and managers would cooperatively manage the resource.¹⁸⁷ These and other examples of HEA demonstrate a valuation procedure for ecosystem services that can be relied on in future proceedings to protect and restore environmental resources that are not traded in the market.¹⁸⁸

14.3.12 Nature of environmental loss and damage

Environmental claims were handled as public claims where the government stood in the role of a trustee¹⁸⁹ with fiduciary responsibility for 'a community interest in full remediation of the damage'.¹⁹⁰ This is a bold characterization of a programme that did not

¹⁸³ Third 'F4' Report (n 16) para. 181, Annex VI.

¹⁸⁴ Huguenin, Donlan, Van Geel, and Paterson (n 100) 78–9 (providing extensive explanation of the valuation techniques used by the UNCC and their use in other legal systems).

¹⁸⁵ Fifth 'F4' Report (n 14) paras. 611–36. ¹⁸⁶ *ibid.* paras. 353–66, Annex I.

¹⁸⁷ The amount awarded also reflected a reduction to account for 'inadequacies in the information provided by Jordan and also the fact that Jordan failed to take steps to mitigate the damage, particularly by failing to reduce grazing pressure on the rangelands' Fifth 'F4' Report (n 14) paras. 362–3.

¹⁸⁸ See also Kuwait's US\$ 194.1 million claim for the disruption of ecological services and human activities in desert areas. Fifth 'F4' Report (n 14) paras. 413–75. Desert areas were damaged by tarcrete, windblown sand, dry oil lakes, wet oil lakes, oil-contaminated piles, oil-filled trenches, oil spills, military fortifications, and open detonation and open burning of ordnance. Ecological services that were harmed included soil stabilization, soil microcommunities, wildlife habitat, and vegetative diversity; human activities that were temporarily diminished included animal grazing and desert camping (a popular and culturally important form of recreation). Kuwait had submitted claims in the first instalment for the costs of assessing environmental damage from oil lakes that had resulted from oil well fires and evaluating technology to remediate the damage. In the fourth instalment, the panel reviewed its claims for cleaning and restoring terrestrial damage from oil wells, pipelines, trenches, mines, and other remnants of war.

¹⁸⁹ Sand (n 65) 174–90; David D. Caron, 'The Place of the Environment in International Tribunals' in Jay, E. Austin and Carl, E. Bruch (eds.), *The Environmental Consequences Of War: Legal, Economic And Scientific Perspectives* (Cambridge: Cambridge University Press, 2000), 253, 256.

¹⁹⁰ Sand (n 65) 173. See David D. Caron, 'Finding Out What the Oceans Claim: The 1991 Gulf War, the Marine Environment, and the United Nations Compensation Commission' in David D. Caron and Harry N. Scheiber (eds.), *Bringing New Law to Ocean Waters* (Leiden: Nijhoff, 2004), 393, 394; Caron (n 28).

explicitly endorse the public trust doctrine, however it fits well with the reality. The environmental panel described the environment as a common concern that 'entails obligations towards the international community and future generations'.¹⁹¹ David Caron put the relationship in terms of a government acting 'as an agent for the environment, for a community's interest in that environment'.¹⁹²

14.3.13 Oversight: Tracking and follow-up programmes

Two oversight measures underscore this. International law traditionally considered that reparations resulting from a breach of an international obligation were owed to the injured state. The UNCC Governing Council instead required each successful claimant state to provide reports that the funds it received were transferred to the real claimant in interest.¹⁹³ In the case of humanitarian claims, this was an individual.¹⁹⁴ In the case of the environmental claims, it was the relevant national agency that would be implementing the projects. The M&A tracking programme and the substantive claim Follow-up Programme were created to ensure that award money would not be used for any purpose other than the projects for which they were awarded.¹⁹⁵

The Governing Council put in place additional measures for the first instalment of 'F4' claims, 'to ensure that funds are spent on conducting the environmental monitoring and assessment activities in a transparent and appropriate manner and that the funded projects remain reasonable monitoring and assessment activities'.¹⁹⁶ Under this M&A tracking programme, claimant governments submitted regular progress reports on their implementation of the environmental studies, and at the end, audited financial statements.¹⁹⁷ They were thus directed to use award funds only for the monitoring and assessment studies that they claimed were needed. As the environmental panel

¹⁹¹ Third 'F4' Report (n 16) para. 42; Second 'F4' Report (n 20) para. 38; and Fifth 'F4' Report (n 14) para. 40.

¹⁹² Caron (n 28) 268. Caron ties this shift in perspective to an equivalent change from a government owning the claims of its citizens (and residents) to the UNCC approach where the government acted as an agent for the individual claimants. Reflecting the earlier practice, a British court found that the British government properly declined to pay a citizen money that it had received from the Chinese government 'on account of debts due to British subjects', stating that the relationship was not 'the duty of an agent to a principal, or of a trustee to a cestui que trust'. *Rustomjee v The Queen*, II QBD 74 quoted in Whiteman (n 22) Vol. III, 2051–2.

¹⁹³ UNCC Governing Council, Distribution of Payments and Transparency, S/AC.26/Dec.18, 24 March 1994. While traditionally international courts and tribunals have recognized only states as parties, states could espouse the claims of individuals as a matter of diplomatic protection; the advent of Mixed Arbitral Tribunals allowed resolution of disputes between individuals and states, and between nationals of different states. Paul de Auer, 'The Competency of Mixed Arbitral Tribunals' (1927) Transactions of the Grotius Society xxvii–xxx.

¹⁹⁴ Crook (n 76) 87: 'prior to the UNCC, states' decisions whether to seek compensation for war damages, and the amounts sought, typically rested on political considerations, not on law-based assessments of individuals' injuries. ... For the first time, a multilateral UN mechanism has been created to provide redress for the individual consequences of illegal state action.'

¹⁹⁵ UNCC Governing Council decision 132, S/AC.26/Dec.132, 21 June 2001. ¹⁹⁶ *ibid.*

¹⁹⁷ Mojtaba Kazazi, 'Environmental Damage in the Practice of the UN Compensation Commission' in Michael Bowman and Alan Boyle (eds.), *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* (Oxford: Oxford University Press, 2002), 129–39.

concluded its work in 2005, it recommended the return of remaining award funds for four projects that were, in its judgment, no longer necessary.¹⁹⁸

Under the Follow-up Programme, instituted in 2005 after all environmental claims had been reviewed, governments were to provide periodic financial and technical reports on their progress to the Governing Council to ensure that 'funds awarded for certain environmental remediation and restoration projects are spent in a transparent and appropriate manner on implementing those projects.'¹⁹⁹ The Follow-up Programme provided detailed guidelines for review of the very large remediation projects, a US\$ 4.3 billion programme.²⁰⁰ Given that some of the projects were planned to continue for as long as twenty years into the future, it was not feasible for the Governing Council to maintain oversight, but it did not relinquish the principle that the environmental awards were intended to be used for specific environmental remediation projects. In 2011, the Governing Council outlined a set of structural systems and controls to be adopted by Iran, Kuwait, and Saudi Arabia, upon which the remaining award funds being held by the UNCC pending completion of the projects would be released to them.²⁰¹ In 2013, the Governing Council declared that Iran had completed its environmental projects and that Jordan, Kuwait, and Saudi Arabia had satisfactorily put in place the necessary systems and controls; the final funds would be released; and the mandate of the programme had been fulfilled.²⁰²

14.4 UNCC Environmental Reparations and *Jus Post Bellum*

With the historical facts about the UNCC in mind, it becomes clearer how the programme fits into the larger context of the post-conflict legal regime, *jus post bellum*. The UNCC environmental reparations programme has been presented here as an institution that applied international law to reparations for environmental damage in the transition from armed conflict to peace after the 1990–1 Gulf War.²⁰³ First, this section describes some of the *jus post bellum* principles that have been advanced by various scholars. Then it discusses those principles in relation to the UNCC environmental programme and some steps towards reconciliation through environmental cooperation that followed. The questions to be answered are whether the UNCC fits the description of *jus post bellum* on its face; whether it serves the purposes of *jus post bellum*; and how the concepts of *jus post bellum* can be further enriched by this case study. We will see that the inherently transboundary nature of the environment does in fact, create unique opportunities for cooperation at the end of conflict.

Brian Orend pointed out that 'as we can imagine a war justly begun being fought unjustly, so too we can imagine a war justly begun, and justly fought, but ending with a

¹⁹⁸ Fifth 'F4' Report (n 14) para. 782.

¹⁹⁹ UNCC, Statement of the President of the Governing Council, S/AC.26/2013/1, 20 November 2013.

²⁰⁰ UNCC Governing Council decision 258, S/AC.26/Dec.258, 8 December 2005; Cymie R. Payne, 'Oversight of Environmental Awards and Regional Environmental Cooperation' in Payne and Sands (n 27).

²⁰¹ Governing Council decision 269, S/AC.26/Dec.269, 7 April 2011.

²⁰² UNCC, Statement of the President of the Governing Council (n 199).

²⁰³ Brian Orend, 'Preface' in Stahn, Easterday, and Iverson (n 22).

set of unjust settlement terms.²⁰⁴ Therefore, he proposed that we need to consider ‘the termination phase of the war, in terms of the cessation of hostilities and the move back from war to peace’ and to identify ‘a set of just war norms or rules for what we might call *jus post bellum*: justice after war.’²⁰⁵ This supposes a relatively narrow definition, which Orend helpfully illustrated with the example of the Bosnian war that dragged on ‘for want of a just and practicable peace settlement.’²⁰⁶ In contrast is Easterday, Iverson, and Stahn’s definition of *jus post bellum* as ‘the laws and norms of justice that apply to the process of ending war and building peace.’²⁰⁷ This approach includes a wider and more complex set of concepts that may make a crisp definition of *jus post bellum* impossible but that are capacious enough to encompass more issues of modern peace-building scholarship and practice.

Several concerns of *jus post bellum* scholars are not relevant to this case study, and can be set aside at the outset—regime change, occupation, conflict of law, and gender. The choice was made not to attempt regime change in Iraq and there was no territorial administration of Kuwait or Iraq by external forces.²⁰⁸ Questions about distinctions between and applicability of international humanitarian law, human rights law, and refugee law²⁰⁹ were not at issue because the UN Charter prohibition on the use of force between states plus the doctrine of state responsibility were identified as the bases for the UNCC in its constitution. Although women participated as diplomats, lawyers, and scientific experts in the claims process for the claimant, respondent, and the UNCC, the special concerns of women were not visible as articulated elements of the programme.²¹⁰ They have been evoked more recently in both

²⁰⁴ Brian Orend, ‘Jus Post Bellum’ (2000) 31(1) *Journal of Social Philosophy* 117, 118. Orend uses the example of the 1990–1 Gulf War in this article. Orend observes that the UNCC compensation fund ‘was an enlightened and defensible actualization of the compensation principle.’

²⁰⁵ *ibid.* 118. ²⁰⁶ *ibid.*

²⁰⁷ Jennifer S. Easterday, Jens Iverson, and Carsten Stahn, ‘Exploring the Normative Foundations of Jus Post Bellum’ in Stahn, Easterday, and Iverson (n 22) 1.

²⁰⁸ Dieter Fleck, ‘*Jus Post Bellum* as a Partly Independent Legal Framework’ in Stahn, Easterday, and Iverson (n 22) 44–51.

²⁰⁹ There has been very little discussion of choice of law in the environmental protection context compared to the well developed discussion of conflicts between relatively permissive rules of international humanitarian law and more restrictive human rights law. ILC, Preliminary report on the protection of environment, A/CN.4/674, A/CN.4/674/Corr.1, 30 May 2014, para 3 (‘Since the applicable law in relation to armed conflict clearly extends beyond the realm of the law of armed conflict, it is sometimes not sufficient to refer to international humanitarian law as *lex specialis* in the hope of finding a solution to a specific legal problem. Other areas of international law may be applicable, such as international human rights and international environmental law’); ILC, Second Report on the Protection of the Environment in Relation to Armed Conflicts, A/CN.4/685, 28 May 2015 (quoting from *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 9 July 2004, ICJ Reports 136, para. 106). ILC Analytical Study 2006, ILC Study Group on the Fragmentation of International Law. Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law; Report of the Study Group of the International Law Commission, Finalized by Martti Koskeniemi, UN Doc. A/CN.4/L.682 and Add.1 and Corr. 1, New York: ILC, 2006.

²¹⁰ UNCC commissioners did address rape committed by Iraqi soldiers in a manner that received positive comment in UN Division for the Advancement of Women Department of Economic and Social Affairs, Sexual Violence and Armed Conflict: United Nations Response, at <<http://www.un.org/womenwatch/daw/public/w2apr98.htm>> accessed 7 June 2017, referring to UNCC Governing Council decision 3, Personal Injury and Mental Pain and Anguish, S/AC.26/1991/3, 23 October 1991; and UNCC, Report and Recommendations Made by the Panel of Commissioners Concerning Part One of the Second Instalment of Claims for Serious Personal Injury or Death (Category “B” Claims), S/AC.26/1994/4, 15 December 1994, para. 17.

scholarship²¹¹ and UN documents,²¹² and in the future gender could be considered in the formation and analysis of claims.²¹³

The UNCC's reparations programme was an example of *jus post bellum* in the most literal sense. As a legal proceeding that took place in the aftermath of armed conflict it actualized 'law after war.'²¹⁴ It was not—unlike some *jus post bellum* activities such as repatriation of soldiers—entirely located in the post-conflict legal context because it hearkened back to the illegality of Iraq's actions in beginning the war and the activities that occurred during the conflict.²¹⁵ This is, of course, true for any civil or criminal legal proceedings, which find the basis for claims in acts committed by beginning a war or in the manner of fighting it. The fact that this *is* always a feature of such proceedings would seem to conclusively answer the question of whether a sharp temporal distinction can be drawn to define *jus post bellum*.²¹⁶

Larry May provided six principles of *jus post bellum*: retribution, rebuilding, restitution, reparations, proportionality, and reconciliation,²¹⁷ which neatly capture the chief concerns of the field. As May pointed out, imposing retribution by bringing individuals to account is one of the most difficult principles to apply, and the UN Security Council eschewed that approach by forgoing criminal trials. Criminal punishment of those responsible for Iraq's brutal pollution of the environment would have made a strong and highly visible statement of the importance of environmental integrity if the judges so interpreted the law; it would have done nothing to restore the damage.

Clearly, requiring Iraq to pay US\$ 52.4 billion in compensation imposed accountability for its aggression while the compensation also contributed to rebuilding and provided restitution and reparations for the 1.5 million successful claimants, including the damaged environment. The UNCC's unusual requirement that award funds must be used for environmental remediation and restoration, enforced by the Tracking

²¹¹ Fionnuala Ní Aoláin and Dina Francesca Haynes, 'Compatibility of Justice for Women with Jus Post Bellum Analysis' in Stahn, Easterday, and Iverson (n 22) 160–77; Freya Baetens, 'Facilitating Post-Conflict Reconstruction: Is the UN Peacebuilding Commission Successfully Filling an Institutional Gap or Marking a Missed Opportunity?' in Stahn, Easterday, and Iverson (n 22).

²¹² UNGA, Challenge of sustaining peace, Report of the Advisory Group of Experts on the Review of the Peacebuilding Architecture in UN Doc. A/69/968–S/2015/490, 30 June 2015, paras. 51–6, 77–82; UNGA, A More Secure World: Our Shared Responsibility, Report of the High-Level Panel on Threats, Challenges and Change in UN Secretary-General, Note by the Secretary-General, UN Doc. A/59/565, 17 November 2004, para. 103.

²¹³ Indeed, in the social context of some Middle Eastern countries women's voices were sometimes entirely mute—for example, household public health assessments were hampered because of the difficulty of hiring qualified female investigators to interview female head-of-household informants, particularly given the constraints on interactions between the male programme directors and the female investigators. See also Christopher S. Gibson, Timothy John Feighery, Trevor M. Rajah, *War Reparations and the UN Compensation Commission: Designing Compensation After Conflict* (New York: Oxford University Press, 2015), 93, 202–3.

²¹⁴ Although one could argue that this was a war over natural resources—oil—the concerns that have been associated with conflict resources in Liberia, the Democratic Republic of the Congo, and elsewhere do not apply here as the State of Kuwait resumed its governance of its oil industry once the occupation ended. See chapter 7 in this volume.

²¹⁵ Cymie R. Payne, 'The Norm of Environmental Integrity in Post-Conflict Legal Regimes' in Stahn, Easterday, and Iverson (n 22) 504, 513–15.

²¹⁶ Jens Iverson, Jennifer S. Easterday, and Carsten Stahn, 'Epilogue: *Jus Post Bellum*—Strategic Analysis and Future Directions' in Stahn, Easterday, and Iverson (n 22) 546–8.

²¹⁷ Larry May, 'Jus Post Bellum, Grotius, and Meionexia' in Stahn, Easterday, and Iverson (n 22) 16–18.

and Follow-up Programmes, emphasized the rebuilding and restitution elements for the environmental claims. May suggests that reparations and rebuilding may be owed also to the vanquished aggressor,²¹⁸ which the UNCC did not address. The theory that underlies this view is that the people—in this case the people of Iraq—should not bear collective responsibility for the actions of their leaders. Under that view, the responsible leaders must be held accountable personally—retribution against the responsible individuals must be paired with even-handed reparations and rebuilding or there is effectively impunity for aggression. There is a special argument in support of the even-handed approach to reparations and rebuilding when it concerns damage to environmental integrity, something that is not just the property of one state, but that affects the common interests of neighbours and the international community.

May tempers his proportionality principle with a concept that he finds in Grotius's writing: 'meionexia'—asking for less than one's due in order to achieve the goal of peace.²¹⁹ There is no benchmark to measure this in the context of the UNCC environmental programme.²²⁰ Yet Iraq was asked to pay far less than the total cost of environmental damage that it caused. Some states that suffered environmental damage chose not to make claims at all. Those that did make claims sometimes under-claimed—and sometimes over-claimed. The UNCC awarded far less than it could have by applying a stringent evidentiary standard, and taking a conservative approach with regard to awards for interim damages and valuation of remediation techniques.²²¹ Without explicit statements from the parties, we cannot know whether this was considered restraint or how it contributed to reconciliation.

It is submitted that the UNCC environmental programme also made a distinctive contribution to reconciliation. There was evidence of reconciliation between the primary antagonists, and perhaps this tells us that as a *jus post bellum* proceeding that prioritized environmental integrity, the UNCC was a success. After the last claims were done, all parties engaged in efforts to rebuild the regional environment. Relations between Iraq and Kuwait thawed to the point that in September 2005 Iraqi diplomats were invited to meet in Kuwait to arrange the environmental Follow-up Programme. The Regional Environmental Rehabilitation Advisory Group ('RERAG') was created by Iraq, Jordan, Kuwait, and Saudi Arabia (Iran was also invited to participate and became a RERAG member) at that meeting, facilitated by the UNCC, with the purpose

²¹⁸ *ibid.* 18. ²¹⁹ *ibid.* 18–22.

²²⁰ It is argued by some that the burden of reparations on Iraq's own population was too great, raising questions of disproportion and human rights violations. It is submitted that the government of Iraq, documented mismanagement of the Oil for Food Program and the 2003 Gulf War, not the UNCC programme, were responsible for the suffering of the Iraqi people. See also, Orend (n 204) 133 ('everything that everyone knew about the Hussein regime indicated that the funds would be used for its own buttressing and benefit . . . but the extent and depth of Iraqi civilian deprivation in the aftermath leaves one wondering whether the Allies could have done more to ease their suffering, without providing any comfort or succor to their aggressor regime'). There is a further question of so-called 'odious debt' and its argument that the burden of collective responsibility represented by reparations payments is not an appropriate sanction for armed conflict where the belligerent state is a dictatorship. The factual, legal, and theoretical basis for these points typically focuses on compensation in general and does not include detailed assessment of environmental damage.

²²¹ See text at note 15 above, for comparison with the cost of the smaller 2010 Deepwater Horizon oil spill in the Gulf of Mexico.

of increasing regional cooperation on environmental remediation and assisting Iraq with remediation of its own war damage.²²² It is noteworthy that RERAG collaborative discussions on the environment continued even in 2009 when—in a separate track—Iraq and Kuwait were heatedly disputing the final payment of Kuwait's oil production and sales loss claim, the last remaining unpaid award.²²³ Eventually, Kuwait provided US\$ 10 million for Iraq to conduct monitoring and assessment of Iraq's environmental war damage.²²⁴

The RERAG participants were interested in improving the shared regional environment, which they expressed in terms of practical concerns and environmental norms of sustainability and concern for future generations. A valuable resource—a databank of environmental information related to the claimant states—had been created by the United Nations Environment Programme ('UNEP') under a contract with the UNCC as a source of evidence in support of the F4 panel's claims review. Providing access to this information and adding information from Iraq by developing a shared databank was one of the RERAG projects. Iraq's representative at the first RERAG meeting noted that Iraq was pleased to participate because 'the environmental damage is not limited to certain countries but affects the whole region, including Iraq.'²²⁵ Saudi Arabia's representative said that 'the environmental issues are the most important as they affect the public health of future generations and that remediation is necessary to achieve sustainable growth in the region.'²²⁶ Such sentiments were repeated throughout the meetings.

14.5 What *Jus Post Bellum* Adds to Environmental Integrity

The concept of *jus post bellum* did not create environmental reparations and it is not needed for programmes like the UNCC environmental claims to develop and expand in the future. What it can do is to provide an organizing category. By bringing legal disciplines together under the rubric of *jus post bellum*, it becomes possible to examine them more critically and constructively and perhaps to strengthen and improve them.²²⁷ Analysing the legal regimes for protection of the environment in relation to

²²² Memorandum of Understanding for the Establishment of the Regional Environmental Rehabilitation Advisory Group, in Executive Summary of Fourth Meeting on Regional Cooperation pertaining to Remediation of the Environmental Damage (2 May 2006) Annex III (in author's files). The Executive Head of the UNCC said, at the eighth RERAG meeting, that 'the RERAG program, while reflecting on the F4 follow up program, also corrects its deficiencies for not addressing the environmental issues in Iraq'. State of Kuwait NFP, RERAG 8th Meeting (2009).

²²³ The Kuwait Petroleum Corporation's production and sales loss claim received the largest award made by the UNCC, for Kuwait's 'inability to use the oilfields and refineries to produce and sell oil and gas during the period of the illegal occupation; and thereafter the inability to use such property or to use it fully, because of the physical damage inflicted on the oilfields and refineries'. The award was US\$ 14,750,324,488, of which US\$ 4.6 billion remains to be paid. Report and Recommendations made by the Panel of Commissioners Concerning the Fourth Instalment of 'E1' Claims, UN Doc. S/AC.26/2000/16, 29 September 2000, para. 260, Table 15.

²²⁴ RERAG, Report on Fifth Meeting on Regional Cooperation Pertaining to Remediation of the Environmental Damage (22 November 2006) (in author's files).

²²⁵ Meeting of the Claimant Countries, Iraq and the UNCC on Possible Mechanisms for the Use of UNCC Environmental Awards and the Creation of a Follow-Up Program (First RERAG Meeting) (September 2005) (in author's files).

²²⁶ First RERAG Meeting. ²²⁷ Iverson *et al.* (n 216) 542.

armed conflict is a difficult task. The common goal is to protect, create, and restore environmental integrity, but the bodies of law do not work together smoothly. The administrative, regulatory approach that dominates peacetime environmental law seems to have little to do with either the minimalist rules of armed conflict or the emphasis on development in the peacebuilding phase.

The challenge is compounded by the lack of dialogue between experts in international humanitarian law and in environmental and natural resource protection law. By focusing attention on the transitions between them and linkages that connect them, the study of *jus post bellum* may advance effective use of law and norms from all the relevant disciplines. As modern governments pursue the demand for justice with legal instruments and practice, new norms take shape, including a norm of environmental integrity.²²⁸ Jutta Brunnée discusses ‘the role of distinctively legal materials’ in the process whereby ‘first, legal norms arise from social norms; second, when norm creation meets specific requirements of legality and, third, meets with norm application that also satisfies these legality requirements’, resulting in law that can be used to advance society’s purposes.²²⁹ Placing the UNCC environmental programme in this context, as a site of norm development and application, helps us to understand environmental integrity as part of the larger tapestry of *jus post bellum*. International society’s awakening to our need for a healthy, resilient, and complete environment is evident. When environmental integrity takes its place as a norm of *jus post bellum*, it becomes available to enrich the work of practitioners and scholars in that larger field. As they become familiar, environmental norms and practices will be better integrated into peacebuilding, the law of armed conflict, and the norms of just war.

14.6 Conclusion

The UNCC environmental programme, viewed as an innovative approach to justice after war, highlights the contribution that the environmental integrity norm can make. This case study describes what happened. Perhaps parts of the programme can be reproduced in other contexts; perhaps this was indeed a unique confluence of circumstances and people. However, certain elements stand out. The agreement of parties—Iraq, Kuwait, Iran, Jordan, and Saudi Arabia—to establish the Follow-up Programme and the RERAG illustrates the former antagonists’ willingness to cooperate for the improvement of regional environmental conditions. The UNCC’s role as a trusted, neutral administrator for the Follow-up Programme and convenor for RERAG was surely built on the manner in which the F4 panel, the Secretariat, and the Governing Council conducted the environmental claims review. That in turn included the adjustments to the UNCC procedures that were agreed by all the participants to be desirable to accommodate the special demands of the environmental programme.

²²⁸ Payne (n 215).

²²⁹ Jutta Brunnée, ‘The Sources of International Environmental Law: Interactional Law’ in Samantha Besson and Jean d’Aspremont (eds.), *Oxford Handbook on the Sources of International Law* (2017).

Compensation programmes, like all international civil tribunals, are inherently reactive. This limits their direct influence.²³⁰ On the other hand, commissions like the UNCC can influence norms, they can offer procedural innovations, and they can reflect new developments in the law. If we look to the UNCC's environmental reports for progressive development of international environmental law, we find that they are generally restrained in their discussions of international law principles. And yet, they demonstrate principles of precaution, common concern, obligations to future generations, environmental integrity, polluter pays, and the general obligation of states to prevent transboundary environmental damage and damage to the environment beyond national jurisdiction.²³¹

In making awards for environmental monitoring and assessment costs, the UNCC acknowledged the precautionary need to identify potential risks in order to plan future action, especially for the protection of human health, and to obtain information that could inform the substantive claim review. Peter Sand observed that the reference to public health monitoring in Governing Council decision 7, paragraph 35(d), 'is probably the closest the UNCC ever came to endorsing the "precautionary approach" in international environmental law'.²³²

The environmental panel characterized the duty of injured states to mitigate environmental damage as 'a necessary consequence of the common concern for the protection and conservation of the environment, and entails obligations towards the international community and future generations'.²³³ This is a fair statement of the overarching obligation on all parties that the UNCC environmental claims programme represented.

Finally, a great contribution of the UNCC environmental programme, and its successors, will be the spotlight they shine on the often ignored devastation to the natural environment caused by armed conflict and its potential to lead us towards prevention of harm. It is easy to see, for example in Jordan where new camps for Syrian war refugees are again causing damage to the Badia, that waiting until conflict ends to provide protection for the environment is a fool's game.

²³⁰ Matheson (n 23) 10 (contrasting the reactive posture of international civil tribunals with the proactive nature of international criminal tribunals, where the prosecutor chooses cases).

²³¹ Philippe Sands, Ruth Mackenzie, and Ruth Khalastchi, 'Background Paper' in Alexandre Timoshenko (ed.), *Conclusions by the Working Group of Experts on Liability and Compensation for Environmental Damage Arising from Military Activities, in Liability and Compensation for Environmental Damage*, Compilation of Documents (Nairobi: United Nations Environmental Programme, 1998) 35–6.

²³² Sand and Hammitt (n 168) 195. ²³³ Third 'F4' Report (n 16) para. 42.

Victims of Environmental Harm During Conflict

The Potential for ‘Justice’

Merryl Lawry-White*

15.1 Introduction

The priorities of *jus post bellum* include sustainable peace, but it is ‘not merely peace that is at issue, but a just peace, where mutual respect and the rule of law are key considerations.’¹ Achieving the desired peace requires considering the experience victims of violations during conflict, thus facilitating the (re)building of links within society, including fostering the trust of state institutions² and the norms they espouse.

Reparations programmes, frequently ‘prominent elements of post-conflict legal responses,’³ provide an avenue through which damage and needs may be considered. Reparations are often ‘crucial for re-establishing trust among parties after war’s end.’⁴ This includes reparations for violations of environmental protections, an area that has often been under-prioritized. Failing to consider environmental harm will affect the ability of certain communities—and perhaps entire nations or regions—to participate in peace-building and move forward after conflict.

Environmental damage during conflict is often part of a broader landscape of environmental neglect pre- and post- conflict, as well as structural inequalities in accessing resources. *Jus post bellum* is concerned not only with immediate post-conflict remediation of environmental damage, but also what is necessary for the long-term transition to peace, which extends to considerations of capacity, management, an appropriate normative framework, and community participation.

Reparation can play myriad roles, including deterrent,⁵ corrective,⁶ or restorative⁷ functions. Temporally, reparations are most commonly implemented following

* This Chapter was last updated in December 2015. At time of writing, the author was Juriste Adjointe to the former Vice-President, International Court of Justice.

¹ Larry May and Elizabeth Edenburg (eds.), *Jus Post Bellum and Transitional Justice* (Cambridge: Cambridge University Press, 2013), 1.

² Pablo de Greiff, ‘Theorizing Transitional Justice’ in Melissa Williams, Rosemary Nagy, and Jon Elster (eds.), *Transitional Justice: Nomo LI* (New York: NYU Press, 2012), 47.

³ Cymie Payne, ‘Environmental Integrity in Post-Conflict Regimes’ in Carsten Stahn, Jens Iverson, and Jennifer S. Easterday (eds.), *Jus Post Bellum* (Oxford: Oxford University Press, 2014), 503.

⁴ May and Edenburg (n 1) 4, 6.

⁵ Emanuela-Chiara Gillard, ‘Reparation for Violations of International Humanitarian Law’ (2003) 85 *International Review of the Red Cross* 529:

[des réparations] constituent un aspect important de l’application du droit et peuvent avoir un important effet dissuasif.

⁶ Lucy Reed, ‘The United Nations Compensation Commission’ (2003) 306 *Recueil des Cours* 310.

⁷ For example, the Pinheiro Principles on Housing and Property Restitution for Refugees and Displaced Persons issued by the UN Sub-Commission on the Protection and Promotion of Human

conflict (or intense periods of conflict) and contribute to the prospective normative framework.⁸ The adjudication and enforcement of norms on a mass scale post-conflict can play a part in defining the extent of protection in the past and embedding these norms in the legal system and national consciousness to come.

The flexibility inherent in reparative responses makes them an important tool in recognizing a diverse range of harm. In her writing on transitional justice in 2000, Ruti Teitel claimed that '[b]ecause of their versatility, reparatory practices have become the leading response in the contemporary wave of political transformation.'⁹ Yet the manner in which reparation is conceived and implemented is central to achieving the goals of *jus post bellum*. Reconciliation, for example, has taken 'cent[re] stage in *jus post bellum* debates.'¹⁰ While there is little consensus around the concept and practice of reconciliation, it has been defined as 'a process through which a society moves from a divided past to a shared future' and 'that redesigns the relationship.'¹¹ A misconceived reparations strategy may fail to support reconciliatory processes and exacerbate tensions. This, in turn, may undermine the cooperation required to remediate environmental damage and prevent further harm.

The sections of this chapter survey the various elements of a reparations strategy: primary norms, reparative principles and potential mechanisms. It considers the patchwork of relevant: norms drawn from different 'subsets' of international law, as well as domestic law, that target different perpetrators, implicate different thresholds, apply in different types of conflicts, and afford varying potential for redress. This overlap of norms and guidelines drawn from various fields is a feature of the various conceptions of *jus post bellum*.¹² The prospective differential between 'typologies' of victims and the redress available may detract from the aims of reducing tensions, ensuring non-repetition, and creating a shared future.

Section 15.2 of this chapter looks at the importance of halting or redressing environmental damage that occurs during conflict, as part of ensuring a sustainable peace. Section 15.3 considers some of the norms that may be implicated in this damage to illustrate the potential complexity for a reparations strategy and the mechanism

Rights (August 2005) characterize restitution, and, where restitution is unavailable, compensation, as a key element of restorative justice (see, for example, Principles 2 and 21). See also Christine Evans, *The Right to Reparation in International Law for Victims of Armed Conflict* (Cambridge: Cambridge University Press, 2012), 119.

⁸ The definition and nature of *jus post bellum* is still subject to debate. However, this contribution proceeds on the basis that *jus post bellum* is concerned at a minimum with violations occurring during and after conflict. 'the . . . contours of the concepts of war and peace have become blurred'. See Carsten Stahn, 'Jus Post Bellum: Mapping the Discipline(s)' (2007) 23(2) *American University International Law Review* 311, 323. As history shows, peacebuilding and peace treaties are the context in which a cohesive reparations strategy is often considered in respect of violations during conflict. While (if defined temporally) certain claims will likely be dealt with while the conflict is ongoing (especially if it is protracted), this does not detract from the need to consider these claims in designing a post-conflict reparations strategy for the reasons set out in this chapter.

⁹ Ruti Teitel, *Transitional Justice* (Oxford: Oxford University Press, 2000), 127.

¹⁰ Larry May, 'Jus Post Bellum, Grotius, and Meionexia' in Stahn, Iverson, and Easterday (n 3) 16.

¹¹ David Bloomfield, 'On Good terms: Clarifying Reconciliation' (October 2006) Berghof Report No. 14, 4 and 7.

¹² See, for example, 'Epilogue' Stahn, Iverson, and Easterday (n 3) 548–9.

which follows. Section 15.4 discusses the variety of reparations principles and practices developed under different international law specialisms. The section also considers the forms that reparation may take under international law, as well as the flexible approach required to respond to different types of damage. Section 15.5 then moves to look at different mechanisms that have been employed to redress environmental damage and the lessons that may be drawn from the experience. The section highlights the contribution of process and participation to affording reparation in a *jus post bellum* framework.

There are important caveats to any discussion about reparation in this context. First, as explained in Section 15.3, there are significant normative ‘gaps’ in environmental protection during conflict. An examination of the consequences of breach might then seem rather superfluous. Second, the reality described by the International Court of Justice (‘ICJ’) as the ‘often irreversible character of damage to the environment’ and ‘the limitations inherent in the very mechanism of reparation of this type of damage’¹³ helps to explain the emphasis of international environmental norms on prevention¹⁴ and structures to operationalize prevention, rather than repairing what is often irreparable. Third, given the nature of much environmental damage, procedures to ensure cooperation and facilitate compliance are particularly important. This has historically resulted in some more loosely framed or aspirational obligations on which it may be difficult to base a claim for reparation.¹⁵ However, while recognizing the limitations of reparation as a response, prevention is often superseded before, during, and after conflict. Reparation remains an important pillar of *jus post bellum*, both in responding to damage and performing a normative and symbolic function.¹⁶ Where protections are disparate, specific, and subject to high thresholds, reparation for those that do exist is important. Implementing accountability through reparation reinforces protection, including by contributing to the development of relevant practice.

The discussion in this chapter is necessarily general. Each conflict and post-conflict scenario is different; there is no cross-cutting solution. However, there are important themes and questions when considering a reparations strategy as part of a *jus post bellum*.

15.2 The Environmental Imperative

Environmental integrity and sustainable natural resources management often have an important role to play in achieving a sustainable peace: ‘[e]nvironmental pressures can

¹³ *Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment of 25 September 1997, ICJ Reports 7, 78.

¹⁴ Preliminary Report (to the ILC) on the Protection of the Environment in Relation to Armed Conflicts, A/CN.4/674, 30 May 2014 (‘ILC Report I’), 35.

¹⁵ UNEP Report, ‘Protecting the Environment During Conflict: An Inventory and Analysis of International Law’ 2009 (‘UNEP Study’), 38 (in a discussion of the Convention on Long-Range Transboundary Air Pollution).

¹⁶ See Alan Boyle, ‘Globalising Environmental Liability’ (2005) 17 *Journal of Environmental Affairs* 1, 3.

lead to conflict and conflict can exacerbate environmental pressures making more difficult the restoration of peace.¹⁷

The United Nations Environment Programme ('UNEP') has conducted many post-conflict environmental assessments, including in Sudan following the 2005 Peace Agreement and that in Darfur in 2006 (which has now been superseded).¹⁸ The analysis 'indicate[d] that there [was] a very strong link between land degradation, desertification and conflict in Darfur' and concluded that: '[l]ong-term peace [would] not be possible unless . . . underlying and closely linked environmental and livelihood issues were resolved'.¹⁹ Access to resources and to limited fertile land fuelled tribal, ethnic, political, and social tensions. The conflict resulted in mass displacement and a breakdown in land use governance, which caused further land degradation and exacerbated the underlying causes of conflict. In addition, the main source of livelihood in internally displaced persons ('IDP') camps was brick-making. A 2008 UNEP Report on Darfur described the use of firewood in the brick kilns as the most damaging source of deforestation. This was one of the reasons for the enormous loss of forest cover in Darfur—a third between 1973 and 2006.²⁰ Deforestation further decreased land fertility exacerbating the competition for resources and potential conflict. Darfur provides an important example of how grappling with environmental harm and governance affects the potential for a sustainable peace. Other authors throughout this volume have described this phenomenon in relation to other conflicts.²¹

Environmental damage may also be a deliberate tactic to undermine the enemy. The use of Agent Orange in Vietnam is a famous example. The United States sprayed almost 20 million gallons of the chemical over Vietnamese farmland (and some parts of Cambodia and Laos) between 1961 and 1972 with the intention of eliminating the tree cover and crops that sheltered and fed the Vietcong.²² The detrimental effects on the environment and the health of the population has been extensively reported and memorialized as a section of the War Remnants Museum in Ho Chi Minh City. Further, specific weapons may cause massive environmental damage, even if the environment is not the target.

As these examples show, environmental harm and competition for natural resources can act as a cause, catalyst, and consequence of conflict. Environmental damage creates a multiplicity of victims: the environment itself, and the organisms that rely upon that environment, states, businesses, communities, etc. The effects will likely be felt individually and collectively. This recognition raises questions as to how accountability and

¹⁷ See, for example, Rosemary Rayfuse, 'Introduction' in Rosemary Rayfuse (ed.), *War and the Environment. New Approaches to Protecting the Environment in Relation to Armed Conflict* (Leiden/Boston: Brill/Nijhoff, 2014), 5.

¹⁸ See UNEP website, at <<http://www.unep.org/disastersandconflicts/Introduction/PostCrisisEnvironmentalAssessment/UNEPsEnvironmentalAssessments/tabid/54635/Default.aspx>> accessed April 2015.

¹⁹ See UNEP 'Sudan—Post Conflict Assessment' (2007), at <http://www.unep.org/sudan/post-conflict/PDF/UNEP_Sudan.pdf> accessed April 2015, 8.

²⁰ *ibid.* 11. See also, UNEP Report, 'Destitution, Destruction and Deforestation—Darfur', November 2008, 5.

²¹ See, for example, chapter 7 in this volume.

²² Anon, 'Agent Orange's Long Legacy for Vietnam and Veterans' *History* (11 May 2014), at <<http://www.history.com/topics/vietnam-war/agent-orange>> accessed April 2015.

reparation is to be conceived of in such scenarios (for whom, according to whom, for which wrongs, etc.) so as to facilitate lasting peace.

15.3 The Patchwork of Relevant Protections

Environmental damage—especially on the scale often witnessed during conflict—will likely implicate many different international norms, especially as damage will vary at different stages of a conflict or across geographical regions. These norms by perpetrator, victim, damage, scenario, geography, etc. The perpetrator may be an individual, corporation, armed group, or occupying power bound by a regional human rights treaty. Wrongful acts of individuals or different groups may also be attributable to a state. Use of the same weapon might result in pollution of the water supply in some regions or destruction of land and livelihood in another. In some places the concern may be more for future, rather than current generations. Comparable environmental damage might therefore result in breach in some scenarios or not in others.

The implication of multiple bodies of norms is far from unusual in domestic or international settings and is a natural result of the intersection of different bodies of law with different priorities. So why does this matter? First, certain bodies of law provide for recourse to a particular dispute resolution mechanism (such as a regional human rights court), providing access for specific participants and, often, different rules regarding reparation. Other bodies of law provide for no such recourse, or recourse at the option of a state. Certain norms implicate more stringent thresholds or levels of deference than others—for example, even within international humanitarian law (‘IHL’) relevant thresholds vary. Where multiple victims are seeking redress, it could appear as if priority is afforded to some, not others. Second, if a reparations mechanism is developed to compensate or otherwise ‘repair’ environmental damage and its consequences, how would it digest a multitude of norms, standards, and different types of claimant? What evidentiary standards may be appropriate? What information is available? Will certain victims be excluded *de jure* or *de facto* from its mandate? Third, there may be calls for choices to be made, allowing certain norms or types of damage to be prioritized. Political forces may play more heavily in making choices, thus making it easier to implement a more one-sided accountability package. The perception that reparations are an application of victor’s justice has been a key factor undermining their utility as a mechanism to transition to peace.²³ All of these factors could result in exacerbating tensions between groups that will detract in moving away from conflict and could undermine some of the key priorities of *jus post bellum*.

Relevant protections may include those arising from IHL, human rights, environmental treaties, and customary provisions, the prohibition on the use of force, investment, and other property protections, to name a few. In the following paragraphs, a brief discussion follows of some of the relevant protections contained within IHL, international criminal law (‘ICL’), international human rights law (‘IHRL’), and international environmental law (‘IEL’). These norms have been discussed in more depth

²³ Gabriella Blum and Natalie Lockwood, ‘Earthquakes and Wars’ in May and Edenberg (n 1) 182.

by other authors throughout this volume.²⁴ This chapter is not intended to constitute a comprehensive analysis of these norms, but rather to illustrate certain variations, as well as uncertainty surrounding potential application that may act to undermine a claim for breach and reparation, or leverage as part of negotiations.

15.3.1 International humanitarian law

Under the current IHL regime, the environment finds both special (direct) protection, as well as general (indirect) protection as a civilian object. In practice, however, as has been recognized by the International Committee of the Red Cross ('ICRC'),²⁵ protection of the environment is limited.

Two provisions of Additional Protocol I to the 1949 Geneva Conventions ('AP I') have garnered much attention for their protection of the environment per se. Article 35(3) of AP I prohibits methods or means of warfare, which are intended, or may be expected, to cause widespread, long-term, and severe damage to the natural environment. Article 55(1) contains similar language but adds 'and thereby to prejudice the health or survival of the population'. The latter is effectively an ecocentric protection with an anthropocentric goal.

These provisions thus provide an absolute threshold on damage that cannot be justified by military necessity. But there are significant challenges to their application to, or invocation by, victims post-conflict. AP I applies only to international armed conflicts ('IACs'), and therefore does not apply to many recent or current conflicts. Further, various states and scholars have declared or stated that the provisions apply only to conventional warfare and weapons.²⁶ The status of the provisions is also unsettled. While not all states are parties to AP I, the Special Committee established to study NATO's bombing in the Former Yugoslavia concluded that Articles 35(3) and 55(1) 'may' reflect customary international law (see also the ICRC's formulation below).²⁷

The cumulative conditions (widespread, long-term, and severe) set an imprecise and exigent threshold: '[a]t least if interpreted in the light of the negotiating history, it seems next to impossible that the threshold could be reached by conventional warfare.'²⁸ Given the difficulties associated in meeting these thresholds, a temporal question arises. At least two states (the UK and France) have declared their understanding

²⁴ See, for example, chapter 5 in this volume. See also chapter 10 in this volume.

²⁵ The ICRC notes that the development of IHL has not kept pace with the strengthening of IEL, 'despite the serious impact of warfare on the environment'. ICRC Report, Strengthening Legal Protection for Victims of Armed Conflict, 31IC/11/5.1.1, October 2011, 14. See also UNEP Study (n 20) 4, noting, *inter alia*, a 'legal vacuum' in relation to NIAC and the aiding and abetting of civil war parties by States or corporations. Additionally see Payne (n 3) 506.

²⁶ Michael Bothe *et al.*, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92 International Review of the Red Cross 573. Second Report to the ILC on the Protection of the Environment in Relation to Armed Conflicts, A/CN.4/685, April 2015 ('ILC Report II'), para. 130.

²⁷ Final Report of the Committee to the Prosecutor (2000), at <<http://www.icty.org/en/press/final-report-prosecutor-committee-established-review-nato-bombing-campaign-against-federal>> accessed April 2015, para. 15. The Report noted that neither the United States nor France were signatories to API. France ratified API in 2001.

²⁸ Bothe *et al.* (n 26) 575–6.

that risk of environmental damage is to be assessed objectively and based on the information available at the time.²⁹ However, that raises questions about damage for which longevity/scope could not be predicted with sufficient certainty. On the other hand, it would be counterproductive (and ironic) to encourage a ‘wait and see’ approach to the damage before claiming the resources necessary to mitigate or repair, given that an early response is often linked to the extent of feasible repair/remediation.

There are also multiple treaty protections that could indirectly protect against environmental harm, for example, those relating to enemy property, civilian or cultural objects, prohibitions on attacking works or installations containing dangerous forces or ‘objects indispensable to the civilian population’ under, for example, the Hague Regulations 1907, Geneva Convention IV, AP I and Additional Protocol II.³⁰ The natural environment, including natural resources, is generally considered civilian property, and thus, is protected as such until such time as it qualifies as a military objective. The Ethiopia–Eritrea Commission found that Ethiopia’s airstrikes on the Harsile water reservoir breached Article 54 AP I, which prohibits attacks indispensable to the survival of the civilian population—a protection that the Commission concluded reflected customary international law.³¹ In the *Armed Activities Case*, the ICJ ordered Uganda to make reparation for breaches of IHL and IHRL during its military activities and occupation of Ituri, including of the Hague Regulations, such as acts of looting, plundering, and exploitation of natural resources in the occupied territory.³²

These treaty provisions regarding the protection of civilian property reflect the general principles applicable in armed conflict: those of distinction, military necessity, proportionality, taking precautions, and humanity. Rule 43 in the ICRC’s 2005 Report on customary rules of international humanitarian law specifically reflects the first three principles *vis-à-vis* the natural environment. Rule 44 talks of taking ‘all feasible precautions’ to minimize incidental damage to the environment and that, in assessing the extent of damage, the precautionary approach should be adopted. Rule 45 reflects the concern that methods and means of warfare not cause ‘widespread, long-term and severe damage’ to the natural environment, also prohibiting the destruction of the environment as a weapon of war. The prohibition of damage is thus subject to an absolute, rather than relative, threshold. Rule 43 applies in IAC and non-international armed conflict (‘NIAC’) and Rules 44 and 45 during IAC, and ‘arguably’ during NIAC (their status during NIAC is ‘less clear’).³³

Other IHL treaties directly consider the protection of the environment during conflict. The Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques 1976 (‘ENMOD’) prohibits contracting parties from engaging in ‘military or any other hostile use of environmental modification

²⁹ ILC Report II (n 26) para. 129. ³⁰ UNEP Study (n 20) 16–17.

³¹ Partial Award: Western Front, Aerial Bombardment and Related Claims—Eritrea’s Claims, 19 December 2005, RIAA XXVI, 291, para. 98 *et seq.*

³² *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, Judgment of 19 December 2005, ICJ Reports 168, para. 250 (see also paras. 206–7 for discussion of civilian life and property).

³³ Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law, Volume 1: Rules* (Cambridge: Cambridge University Press, 2009) (‘ICRC Study’), 147–57.

techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party'. The prohibition applies even to actions taken in self-defence.³⁴ It therefore constitutes a blanket prohibition on harm that reaches the level of an alternative, less stringent threshold 'widespread, long-term or severe' rather than the conjunctive 'and' contained in AP I. However, the techniques covered by the treaty are narrowly defined. Although it has been heralded a success when assessed against its specific objectives,³⁵ critics suggest that, in reality, ENMOD is not likely to curtail environmental degradation caused by war because it does not target conventional warfare techniques that damage the environment as a by-product.³⁶ Like ENMOD, the Convention on Certain Conventional Weapons 1980 also targets specific warfare scenarios that may result in environmental damage and direct or indirect harm to other victims on the ground. Following an amendment in 2001, its protection explicitly extends to NIAC—in contrast to many other direct IHL environmental protections. Breach of other treaties addressing the production, use, destruction, and disposal of certain weapons—such as the 1993 Chemical Weapons Convention ('CWC') and Protocol II to the CWC addressing Landmines and Explosive Remnants—may also act to harm the environment and other victims as a result.

Finding a norm that covers the damage in question is the first hurdle to obtaining redress. But when considering the potential for reparation, producing sufficient evidence to discharge the requisite burden to prove breach is likely to pose an additional hurdle, particularly in a conflict scenario. This may require evidence recreating various processes, for example, the planning and precautionary measures taken prior to employing a specific weapon, or targeting or damaging the environment. The fact that relevant standards are fluid or undetermined adds another layer of complexity: at what point the environment becomes a 'military object' and its damage or destruction renders 'military advantage' is not only controversial but also requires a case-by-case analysis; further, what is lawful 'collateral' damage is 'difficult to determine'.³⁷ Much depends upon the information available to the decision-makers at the time, a factor that changes over time with developments in weaponry and scientific understanding.

The International Criminal Tribunal for the Former Yugoslavia ('ICTY') Special Committee that examined NATO bombing of military targets noted the imprecise nature of what constitutes 'excessive' destruction. It noted that, in considering whether NATO had complied with relevant principles, it would be necessary to understand the extent of NATO's knowledge—could NATO have reasonably anticipated the release of toxic chemicals? Add to this the often uncertain nature of scientific knowledge and the hurdles to obtaining reparation become higher: the Special Committee noted that the present and long-term environmental impact of the bombing campaign was 'unknown

³⁴ Commentaries to the ILC Articles, ILC Ybk 2001/II(2) ('Commentaries'), Art. 21, para. 4.

³⁵ UNEP Study (n 20) 12.

³⁶ Keith McManus, 'Civil Liability for Wartime Environmental Damage: Adapting the United Nations Compensation Commission for the Iraq War' (2006) 33 *Environmental Affairs* 417, 427.

³⁷ *Bothe et al.* (n 26) 570.

and difficult to measure.³⁸ There may be a tendency for adjudicative bodies to afford discretion to the decision-makers where information was limited and consequences uncertain—a not uncommon scenario during intense conflict.

15.3.2 International criminal law

Certain breaches of IHL that provide indirect protection of the environment can constitute grave breaches of the Geneva Conventions, if combined with the requisite intent. Article 147 of Geneva Convention IV lists ‘extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly’ as a grave breach.³⁹ There is an obligation on state parties to prosecute such crimes, but they may also fall within the jurisdiction *ratione materiae* of international criminal courts (see, e.g., Art. 2(d) of the ICTY Statute). The Statute of the ICTY and the Statute of the International Criminal Tribunal for Rwanda (‘ICTR’) also criminalize actions constituting breaches of the ‘laws and customs of war’, which could indirectly protect the environment, for example, the plunder of public and private property or the employment of poisonous weapons or weapons ‘calculated to cause unnecessary suffering’ (see Art. 3 of the ICTY and ICTR Statutes).

Article 8(2)(b)(iv) of the Rome Statute now criminalizes as a war crime in IAC:

[i]ntentionally launching an attack in the knowledge that such attack will cause . . . widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.

The ICC thus creates a permanent institutional framework to prevent and punish environmental war crimes through the criminal justice paradigm. Commentators note that there is a ‘tremendous expressive value’ to the inclusion of the crime in the Rome Statute.⁴⁰ States parties are encouraged to reflect the crimes listed in the Rome Statute in their domestic legislation.

However, there is limited clarity on how these crimes will be interpreted by the ICC. Article 8(2)(b)(iv) is drawn from customary and conventional IHL, but with the addition of a proportionality requirement. It applies only during IAC.⁴¹ The high burden of proof, the stringent criteria for *mens rea*, and the difficulty of evidencing environmental harm in general, mean that the breach of the provision will be found on rare occasions. Mark Drumbl has concluded that ‘it’s going to be very difficult, as it rightly should be, to secure a conviction under this provision.’⁴² And no conviction means no reparation.

³⁸ Final Report of the Committee to the Prosecutor (2000), at <<http://www.icty.org/en/press/final-report-prosecutor-committee-established-review-nato-bombing-campaign-against-federal>> accessed April 2015, para. 23.

³⁹ UNEP Study (n 20) 12.

⁴⁰ Mark Drumbl, Symposium on ‘International Responses to the Environmental Impact of War’ (2004–05) 17 *Georgetown International Environmental Law Review* 565 (‘Symposium’) 623.

⁴¹ See Matthew Gillett, chapter 10 in this volume regarding the potential extension to NIAC and of other relevant crimes.

⁴² Drumbl, Symposium (n 40) 626.

15.3.3 International human rights law

The place of IHRL during conflict is not clear-cut. However, its applicability and relevance has been frequently confirmed, including by the ICJ, for example in the *Armed Activities* case:

the protection offered by human rights conventions does not cease in case of armed conflict, save through the effect of provisions for derogation of the kind to be found in article 4 of the International Covenant on Civil and Political Rights.⁴³

Human rights courts and bodies have also adjudicated multiple cases concerning alleged violations that occurred during conflict.⁴⁴ In considering the environment as a victim in itself, human rights become (by definition) irrelevant. However, when considering reparative practices the relationship is more symbiotic: reparation for anthropocentric norms may result in environmental remediation and for ecocentric norms will benefit individuals living in that environment.

While certain IHRL instruments contain environment-focused rights, commentators note that there is no internationally recognized right to a 'decent, healthy or viable environment' (Principle 1 of the Stockholm Declaration) or a 'general, satisfactory environment favourable to their development' (Art. 24 of the Banjul Charter). Yet, environmental harm may impinge on different human rights embodied in international and regional human rights treaties.⁴⁵ Given the limited fora available to individuals to claim for breaches of international protections related to environmental damage, human rights bodies and relevant jurisprudence play an important part in ensuring redress. The approach of the regional human rights courts and the binding nature of their decisions render them particularly important in this regard. The European Court of Human Rights ('ECHR'), for example, has played an active role in the 'greening' of human rights. Its jurisprudence identifies an obligation on states to take 'adequate preventative measures', including regulation and enforcement, against certain environmental harm that may prejudice life, health, private life, or property. These duties apply whether or not the government is the owner or operator of the cause of the nuisance. The rights are not purely substantive, but have a procedural element. The decision-making process must afford 'due respect for the [safeguarded] interests of the individual', including participation/considering views during the decision-making process, access to information, and a forum to appeal.⁴⁶

The Inter-American Court of Human Rights ('IACtHR') has focused on environmental harm largely in the context of indigenous rights and property, in scenarios outside of and within conflict, including cases examining the granting of concessions, deforestation, or attacks that damaged the environment (such as scorched earth

⁴³ *Armed Activities* (n 32) para. 216. See also *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 9 July 2004, ICJ Reports 136, para. 106.

⁴⁴ See, for example, ILC Report II (n 26) fn 153.

⁴⁵ 'Whether general international law recognizes such a right is more doubtful, but attempts have been made to develop one.' See Alan Boyle, 'Environment and Human Rights' (2009) 23 *European Journal of International Law* 613.

⁴⁶ *Taşkin v. Turkey*, App no. 46117/99 (ECtHR, 10 November 2004), para. 118.

tactics).⁴⁷ A key part of complying with a community's rights is ensuring 'meaningful' or 'effective' participation when implementing changes that affect the environment.⁴⁸

Article 24 of the Banjul Charter (set out above) is more explicit that other regional human rights treaties in terms of states' obligations *vis-à-vis* the environment of individuals within their jurisdiction. The landmark *Ogoniland* decision issued by the African Commission of Human Rights noted that Article 24 of the Banjul Charter 'imposes clear obligations' on a state to take measures to prevent pollution and degradation, promote conservation, and 'secure an ecologically sustainable development and use of natural resources'.⁴⁹

There are limits to the extent of protection offered by human rights treaties. States may derogate from certain applicable rights during conflict. Protection only extends to those whose rights are specifically affected, which does not encompass everyone who experiences changes to their environment. The ECHR determined that the illegal draining of wetlands in *Kyrtatos v. Greece* did not affect the rights of the applicants who lived nearby.⁵⁰ Further, human rights adjudication involves a balancing of interests, and a wide margin of appreciation may be afforded to states in determining the public interest (for example, in favour of economic development). In times of conflict, depending upon the nature and intensity of conflict, the degree of deference to state measures may shift even further. IHL may inform the interpretation of IHRL, as stated by the ICJ in its Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*,⁵¹ and the ECHR Grand Chamber in *Hassan v. UK*⁵²—resulting in the imposition of a different standard.⁵³

15.3.4 International environmental law

The application of IEL⁵⁴ during conflict varies by source, instrument, and norm, and 'the extent and parameters of continued application are debated'.⁵⁵ Nor is there consensus on the approach to be adopted in determining applicability. Most of the commentary analyses the extent of protection offered to the environment during conflict, and/or the obligations and discretions afforded to military commanders. *Jus post bellum* is, of course, concerned also with compliance with obligations in the post-conflict period,

⁴⁷ See, for example, *Mayagna (Sumo) Awas Tingni Community v. Nicaragua* Judgment (Series C no. 79) (IACHR, 31 August 2001); *Case of the Plan de Sanchez Massacre v. Guatemala*, Judgment (Series C no. 105) (IACHR, 29 April 2004).

⁴⁸ See, for example, *Case of the Saramaka People v. Suriname*, Judgment (Series C no. 172) (IACHR, 28 November 2007), para. 129.

⁴⁹ *The Social and Economic Rights Action Center and Center for Economic and Social Rights v. Nigeria (Ogoniland)*, African Commission on Human and Peoples' Rights, Comm 155/96, 27 May 2002, para. 52.

⁵⁰ App no. 41666/98 (ECtHR, 22 May 2003), para. 52 *et seq.*

⁵¹ 8 July 1996, ICJ Reports 226, para. 25.

⁵² App no. 29750/09 (ECtHR, 16 September 2014), paras. 100–2.

⁵³ Lawrence Cawthorne-Hill, 16 September 2014, at <<http://www.ejiltalk.org/the-grand-chamber-judgment-in-hassan-v-uk/>> accessed April 2015, describing the standard as more 'lenient'.

⁵⁴ IEL is defined in broad terms to refer to the corpus of international law that seeks to protect or regulate interaction with the natural environment and thus crosses many areas of international law, such as the law of the sea or those discussed in this chapter. See Patricia Birnie, Alan Boyle, and Catherine Redgwell, *International Law and the Environment* (Oxford University Press, 2009), 2.

⁵⁵ UNEP Study (n 20) 44.

when any 'suspension' or limitation of obligations on the grounds of conflict would cease. This further complicates the picture.

The interaction of IEL with other bodies of law is also unsettled. As with IHRL, there is no reason to assume that IEL and IHL cannot apply alongside each other in many contexts. Questions have been raised as to whether or not the former or latter would constitute the *lex specialis* in case of conflict, depending on the subject matter of the damage.⁵⁶ The ICJ in its *Nuclear Weapons* Advisory Opinion determined that the obligations stemming from treaties relating to the protection of the environment were not intended to be obligations of total restraint during conflict, but that '[r]espect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality'.⁵⁷ This would suggest that IEL obligations would play an interpretative role.

The unsettled position of IEL during conflict poses an additional hurdle to relying upon these norms for redress: does the norm apply and, if so, in what role? Further, many environmental protections are embodied in non-binding instruments⁵⁸ and/or phrased in aspirational or vague terms.⁵⁹ In addition, many key environmental principles have a shaky status as legal principles rather than political concepts.⁶⁰ Where resources are limited, will there be a tendency to focus upon adjudication and reparation of protections of less disputed status?

Many IEL norms are codified in multilateral treaties.⁶¹ While some environmental treaties are explicit as to whether they apply during conflict, many are silent or ambiguous. Subject to the agreement of the parties, the ILC's Articles on the effects of armed conflicts on treaties note that the 'existence of an armed conflict does not ipso facto terminate or suspend the operation of treaties'. The subject matter of certain treaties or provisions 'imply' continued operation, and an indicative list is annexed to the Articles, including international protection of the environment and treaties creating or regulating permanent rights or a permanent regime or status. However, the presumption of continuity of IEL protections is also dependent upon external factors, such as the character of the conflict, and thus requires a case-by-case assessment.⁶²

It has been suggested that the Ramsar Convention and the World Heritage Convention 'are the only two areas under IEL where the obligations are sufficiently concrete and clear' to provide 'real guidance' on the battlefield or to be 'enforce[able] after the event'.⁶³ Both treaties focus on monitoring and prevention: the former allows parties to 'delete or restrict' boundaries of listed wetlands due to 'urgent national interests' (which scholars suggest would include conflict);⁶⁴ the latter provides that the outbreak

⁵⁶ *ibid.* ⁵⁷ *Legality of the Threat or Use of Nuclear Weapons* (n 51) paras. 29–31.

⁵⁸ The Rio Declaration, for example, has been noted as playing an important role in the evolution of environmental protection. Patricia Birnie and Alan Boyle, *Basic Documents on International Law and the Environment I* (Oxford: Clarendon Press, 1995), 9.

⁵⁹ See, for example, Convention on Long-Range Transboundary Air Pollution 1979, Arts. 2 and 7.

⁶⁰ ILC Report I (n 14) 33 (regarding sustainable development).

⁶¹ UNEP Training Manual, at <http://www.unep.org/environmentalgovernance/Portals/8/documents/training_Manual.pdf> accessed April 2015, 1.

⁶² ILC Articles on the Effects of Armed Conflicts on Treaties, Arts. 3–5 and Annex.

⁶³ Alice Bunker, 'Protection of the Environment During Armed Conflict: One Gulf Two Wars' (2004) 23 *Review of European Community and International Environmental Law* 201–11.

⁶⁴ *ibid.* 211.

of conflict is sufficient to place a property on the 'danger' list. Other treaties also contain guidance (some more explicit than others) on the effect of conflict on the protections contained therein. The Convention on the Law of the Non-navigational Uses of International Watercourses (1997), for example, reaffirms the protection offered by existing principles and rules of international law. It is explicit that states' cooperation obligations under the treaty do not cease even where there are 'serious obstacles to direct contacts'. Contracting states must then use indirect procedures.⁶⁵

Other treaties specifically exclude or limit their application during conflict. This is often the case for treaties that require the civil liability of operators, for example, the International Convention on Civil Liability for Oil Pollution ensures no liability where owners show that violations resulted from 'war or other armed hostilities' and the International Fund for Oil Pollution will not compensate for damages resulting from war or armed conflict. Similar provisions are found in treaties relating to civil liability for nuclear damage.⁶⁶ The application of these treaties is thus not temporally limited to peacetime ('non-military conduct' would be caught), but excludes liability associated with conflict.⁶⁷

While treaties have an important place in regulating state conduct in the field of environmental protection,⁶⁸ customary norms also have a role to play. Particularly important is the prohibition on 'significant' transboundary environmental harm and a state's obligation to exercise due diligence in ascertaining and addressing the risks of such harm—as originally formulated (as 'serious' harm) in the *Trail Smelter Arbitration* more than eighty years ago.⁶⁹ However, the status of this protection during conflict is disputed.⁷⁰ It is an obligation of conduct, not result, and thus proving breach requires (objective) evidence of perceived risks and of the absence of sufficiently responsive actions.

This brief survey of relevant norms highlights the potentially uneven and uncertain picture that could apply when understanding protections for which reparations could be sought, both during conflict, as well as the post-conflict scenario, which is of concern to *jus post bellum*.

15.4 The Parameters of Reparation

In a post-conflict context, claims for reparation will likely be based both on international or domestic norms (whether the latter reflects the former or otherwise).

⁶⁵ For example, to cooperate in protecting of the marine environment. See Arts. 5–6, 8, 23, and 28–31.

⁶⁶ See, for example, Vienna Convention on Civil Liability for Nuclear Damage.

⁶⁷ Silja Voneky, 'Peacetime Environmental Law as a Basis of State Responsibility for Environmental Damage Caused by War' in Carl Bruch and Jay Austin (eds.), *The Environmental Consequences of War* (Cambridge: Cambridge University Press, 2000), 198. See also, Art. 32 of UNCLOS, which states:

With such exceptions as are contained in subsection A and in articles 30 and 31, nothing in this Convention affects the immunities of warships and other government ships operated for non-commercial purposes.

⁶⁸ See, for example, Malgosia Fitzmaurice, 'International Responsibility and Liability' in Daniel Bodansky, Jutta Brunée, and Ellen Heys (eds.), *The Oxford Handbook of International Environmental Law* (Oxford: Oxford University Press, 2007), 1012.

⁶⁹ See also, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment of 20 April 2010, 2010 ICJ Reports 14, and *Gabčíkovo-Nagymaros* (n 13).

⁷⁰ UNEP Study (n 20) 40.

Bodies awarding reparation for breaches of international law rely upon the foundational principle developed in a state-to-state context and famously articulated by the Permanent Court of International Justice in the *Chorzów Factory* case:

[i]t is a principle of international law that the breach of an engagement involves an obligation to make reparation in an adequate form. ... The essential principle contained in the actual notion of an illegal act ... is that reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed.⁷¹

This customary principle demonstrates that reparation is an essential part of upholding the rule and value of international law. Ensuring reparation for breaches of norms focused on environmental protection may also ultimately contribute to prevention, including, as mentioned earlier, by deterring future violations.

Article 31 of the 2001 ILC Draft Articles on the Responsibility of States for Internationally Wrongful Acts ('ILC Articles') codifies an obligation to make 'full reparation' for material or moral damage caused by the internationally wrongful act of a state. ILC Articles 34–7 prescribe a hierarchy in the analysis of appropriate forms of reparation: restitution in primary position, or where this is 'impossible' or 'inappropriate', compensation to the extent that damage is financially assessable. Satisfaction is prescribed as a residual form of reparation, to remedy injury suffered as a result of the *fact of a breach*, which may be unquantifiable in numerical terms and, as such, 'unsuited' to compensation. The ILC Articles thus envisage a degree of flexibility depending upon the nature and scope of the damage.

In the context of environmental damage, the validity of this hierarchy is questionable. As environmental harm is often irreversible, remediation is likely to be a more appropriate focus than restitution. Remediation is resource-intensive and requires specialist expertise and equipment, necessitating a focus on compensation. However, environmental damage is sometimes difficult to quantify—for example, what are sometimes termed 'nonuse values', such as biodiversity.⁷² Where individuals have suffered as a result of environmental damage, the concept of 'wiping out' damage may be not only impossible, but insulting. Further, compensation alone might not touch individual suffering.⁷³ Larry May notes that the 'legal literature has focused on the concept of satisfaction to mark the difference between return to the status quo ante and the approximate form of compensation that is called for in reparations, especially when

⁷¹ *Case Concerning the Factory at Chorzów (Germany v. Poland)* Merits, Claim for Indemnity, Judgment, PCIJ Reports (Series A No. 17, 47) 13 September 1928.

⁷² Commentaries (n 34) Art. 31, para. 15: 'In cases where compensation has been awarded or agreed following an internationally wrongful act that causes or threatens environmental damage, payments have been directed to reimbursing the injured State for expenses reasonably incurred in preventing or remedying pollution, or to providing compensation for a reduction in the value of polluted property. However, environmental damage will often extend beyond that which can be readily quantified in terms of clean-up costs or property devaluation. Damage to such environmental values (biodiversity, amenity, etc.—sometimes referred to as "nonuse values") is, as a matter of principle, no less real and compensable than damage to property, though it may be difficult to quantify.'

⁷³ Pablo De Greiff, 'Justice and Reparations' in Pablo De Greiff (ed.), *The Handbook of Reparations* (Oxford: Oxford University Press, 2006), 13.

the damage done is partly psychological.⁷⁴ Individual experiences of redress demonstrate the importance of recognition and acknowledgement of suffering (a form of satisfaction).⁷⁵ Full reparation suggests a wide definition of harm, and, in a post-conflict context, a broad definition of what constitutes reparation under international law is therefore welcome. Where resources are few and damage varied in nature, reparative avenues should be maximized to increase the chance that harm will be met with an appropriate remedy.

The ILC Articles apply to the responsibility of states. While they may prove instructive when considering the responsibility of non-state actors, direct parallels cannot simply be imposed across the board (conceptually or practically). At the level of primary norms, few bodies of law purport to bind non-state actors. IHL is one of the few, but practice on the obligation to make reparation is mixed.⁷⁶ ICL provides a means for individuals to be held accountable and, in certain cases, a responsibility to make reparation. IHRL imposes 'due diligence' obligations on state parties, requiring that states take certain actions to regulate interference with rights by third parties, including providing avenues of redress.⁷⁷ In the context of non-state actors, IHRL or IEL continue to look primarily to state responsibility for a failure to regulate private action to the requisite standard.

There are other questions relating to the standing of certain non-state actors to claim breach and request redress, depending upon the particular focus of the norm. For example, the ability of individuals to claim for reparation for breach of international norms is increasingly prevalent, but still subject to different interpretations. Barriers often arise in the search for a forum or in seeking enforcement. While the ILC Articles have been drawn largely from a state-to-state context, they are also invoked in the conceptualization and realization of reparation in scenarios involving non-state actors.⁷⁸ Article 33 makes clear that the ILC Articles are without prejudice to the right of an entity other than a state to invoke a state's responsibility to cease or make reparation for an illegal act, recognizing that rights may accrue to individuals under international law (inside or outside of the IHRL framework).

The focus of a particular norm will determine additional parts of the legal test that need to be satisfied before reparation can be awarded, such as causation and remoteness. The relevant rules and specific circumstances of the case will affect whether, for example, individuals can seek reparation for damage suffered as a result of breach of ecocentric norms. The ILC Articles make clear that reparation is awarded for injury suffered 'as a consequence' of the breach, without establishing a specific formula. The Commentary to the ILC Articles notes that various formulae that have been used to establish the legal tests of causation and remoteness: 'proximate cause', 'directness',

⁷⁴ Larry May, 'Reparations, Restitution and Transitional Justice' in Larry May and Andrew Forchimes (eds.), *Morality, Jus Post Bellum' and International Law* (Cambridge: Cambridge University Press, 2012), 41.

⁷⁵ For a more detailed explanation: Merryl Lawry-White, 'The Reparative Effect of Truth Seeking in Transitional Justice' (2015) 64(1) *International & Comparative Law Quarterly* 141.

⁷⁶ In respect of IHL, see Commentary to Rule 150, ICRC Study (n 33) 459–550.

⁷⁷ *Case of Velasquez-Rodriguez v. Honduras* (Series C no. 4) (IACHR, 29 July 1988), para. 172.

⁷⁸ UN Study, *Materials on the Responsibility of States for Internationally Wrongful Acts* (2012) ST/LEG/SER B/25.

'foreseeability', etc.⁷⁹ The United Nations Claims Commission ('UNCC') awarded compensation for 'direct loss[es]' suffered 'as a result of' Iraq's illegal invasion of Kuwait,⁸⁰ although, in practice, commentators notes that UNCC panels used a variety of legal tests in implementing this standard.⁸¹ Claimants had a duty of 'reasonable' mitigation.⁸² Procedural rules and other questions of admissibility and standing may also bar a claim.

The ILC Articles are 'residual' or default rules and are therefore subject to any applicable *lex specialis*. While the fundamental principle laid out in the *Chorzów Factory* case underpins the concept and place of reparation,⁸³ the approach to forms and standards of reparation is not uniform across different areas of international law. Judicial bodies award reparation in line with their specific jurisdiction as determined by their constituent instruments and objectives. This creates an additional layer of complexity to the tapestry of applicable norms already discussed.

15.4.1 International humanitarian law and international human rights law

Article 3 of the 1907 Hague Convention (IV), as well as Article 91 AP I, specifically mention an obligation to pay compensation in case of breach of norms contained in these instruments. But, under customary international law, and as per the *Chorzów Factory*, this obligation extends to breach of all IHL obligations in IAC and NIAC.⁸⁴ There are multiple examples of states agreeing to pay reparation for breaches of IHL as part of peace treaties or following proceedings, for example, before the ICJ or mixed commissions. The form and valuation methods have varied depending upon the agreement of the parties, including restitution (usually of property), compensation, and satisfaction.⁸⁵ In July 2015, the ICJ resumed the proceedings in *Armed Activities* to decide upon the form and quantity of reparations. Any decision rendered in this case will provide more clarity on reparation for IHL breaches, including in relation to natural resources.

Practice regarding environmental damage flowing from breach of the IHL protections discussed in the previous section is more limited. As explained, the Ethiopia–Eritrea Claims Commission found that Ethiopia had breached Article 54 AP I by carrying out airstrikes on a water reservoir in Harsile. However, because no significant damage had been caused to the reservoir, the Commission decided that its decision on liability constituted sufficient reparation.⁸⁶ It thus relied on satisfaction as the appropriate form of reparation. Ethiopia's \$1 billion (plus) claim for damages to the natural environment and natural resources was dismissed. The Commission decided

⁷⁹ Commentaries (n 34) Art. 31, paras. 9–10. ⁸⁰ *ibid.* para. 10.

⁸¹ See discussion in chapter 11 in this volume. See also, Vijejo Heiskanen, 'The United Nations Compensation Commission' (2002) 296 *Recueil des Cours* 340.

⁸² See, for example, chapter 2 in this volume.

⁸³ See, for example, Merryl Lawry-White, 'Universality and Cosmopolitanism: Some Insights from the World of Moral Damage' (2014) 3(4) *Cambridge Journal of International and Comparative Law* 729 *et seq.*

⁸⁴ ICRC Study (n 33) Rule 150.

⁸⁵ ICRC Study (n 33) Commentary to Rule 150.

⁸⁶ Partial Award (n 31) para. 105.

the damage had not been caused by breach of applicable IHL, and, although theoretically compensable as the consequences of breach of *jus ad bellum*, the claim was unsubstantiated.⁸⁷

As noted above, international law envisages reparation for non-state actors in certain circumstances, and practice shows that this extends to IHL violations. The Ethiopia–Eritrea Claims Commission awarded reparation to individuals, via the state of nationality.⁸⁸ The UNCC considered claims of prisoners of war for breach of IHL.⁸⁹ The UN Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law⁹⁰ (‘Basic Principles’) envisage ‘persons’ as victims, whether they have suffered harm individually or collectively as a result of acts or omissions that qualify as gross violations of international human rights law, or serious violations of international humanitarian law. Harm is defined broadly as including ‘physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights’. The term ‘victim’ may also include family members, dependents and those that have intervened to prevent or assist. The Basic Principles are not in themselves binding on states, but identify ‘mechanisms, modalities, procedures, methods’ to operationalize *existing* obligations. They thus reflect relevant instruments, practice, and jurisprudence.⁹¹

The Basic Principles are framed in terms of ‘gross’ and ‘serious’ violations only (often prevalent during conflict), but ‘seek’ to rationalize through a consistent approach the means and methods by which victims’ rights can be addressed, thus suggesting potential for wider application.⁹² The Basic Principles categorize reparation into five different forms, which are not subject to a specific hierarchy or formula: restitution, compensation, rehabilitation, satisfaction, and guarantees of non-repetition.⁹³ The Basic Principles thus also retain a degree of flexibility and recognize that multiple modalities may be required to remedy a breach.

Article 11 speaks of ‘adequate, effective and prompt’ reparation ‘proportional’ to the gravity of the violation and the harm. ‘Wiping out the consequences’ will often be aspirational in the case of IHRL/IHL breaches and environmental damage. The Basic Principles envisage that victims of the actions of *all* groups receive reparation on the same basis: there is no distinction. Yet, practice on this point is more mixed, as is the perception of whether the state has an obligation (legal or otherwise) to step in where non-state actors do not do so.⁹⁴

⁸⁷ *Ethiopia’s Damages*, Final Award, 17 August 2009, RIAA, Vol XXVI, 631–770, para. 425.

⁸⁸ See, for example, *ibid.* paras. 105–10 (in relation to rape) and paras. 127–35 (in relation to housing—as civilian property).

⁸⁹ Gillard (n 5) 542.

⁹⁰ Basic Principles, ‘adopted and proclaimed’ by the General Assembly, GA Res 60/147 (16 December 2005) Annex.

⁹¹ *ibid.*

⁹² Mahmoud Bassiouni, ‘International Recognition of Victims’ Rights’ (2006) 6 Human Rights Law Review 203, 251.

⁹³ Basic Principles (n 90) Art. 18.

⁹⁴ ICRC Report (n 33) Commentary to Rule 150: ‘it is unclear to what extent armed opposition groups are under an obligation to make full reparation’. See also Cecily Rose, ‘An Emerging Norm: the Duty of States

The Basic Principles do not guarantee access to a body at the international level, nor a body implementing international law, but they have been drawn upon in different contexts, including by transitional justice mechanisms and the ICC in the *Lubanga* reparations judgment (discussed below). The Sierra Leone Truth Commission, for example, was mandated to (*inter alia*) create a historical record of IHL and human rights abuses during the conflict.⁹⁵ It considered the Basic Principles ‘indicative of the current status of international law of the right to redress of victims of such violations’, where remedies included reparation for harm suffered. The state, it declared, was under a legal obligation to provide reparation for harm suffered as a result of its acts or omissions, and those of private actors.⁹⁶ It determined that the focus of a reparations programme should be on rehabilitation through service packages and symbolic measures (a form of satisfaction) to *acknowledge* the harm suffered: ‘compensation and restitution must be a unifying factor and should not be used to further divide the population,’⁹⁷ thus emphasizing some of the concerns raised in this chapter.

Various standing IHRL mechanisms have jurisdiction to award reparation. There are multiple judicial/non-judicial bodies that receive applications alleging breach of rights, although many only have authority to issue non-binding opinions, judgments, or comments.⁹⁸ The most prominent exceptions are regional human rights courts, which each have *sui generis* jurisdiction regarding reparations. The ECHR, for example, may award ‘just satisfaction’, unless the internal law of the breaching state allows for full reparation.⁹⁹ The IACtHR enjoys jurisdiction to order ‘if appropriate, that the consequences of the measure or situation that constituted the breach of such right or freedom be remedied and that fair compensation be paid to the injured party’.¹⁰⁰

The IACtHR’s decisions on reparations are detailed and comprehensive. For example, in the *Case of the Saramaka People v. Suriname*, in which the granting of concessions was deemed to have damaged land and infringed indigenous rights, the IACtHR required legislative changes to ensure the protection of rights, measures of satisfaction, as well as compensation for ‘material’ (\$75,000) and ‘non-material’ (\$600,000) damage, valued on an equitable basis.¹⁰¹ In 2012, the IACtHR considered the case of *Rio Negro Massacres v. Guatemala*, concerning the massacre, destruction of property (including damage to land), and displacement of the Mayan community of Rio Negro during a period of internal armed conflict. The Court ordered (*inter alia*) an investigation subject to certain safeguards, compensation for pecuniary and non-pecuniary loss, measures of satisfaction (including symbolic reparations) and of rehabilitation and guarantees of non-repetition.¹⁰² The use of different forms of

to Provide Reparations for Human Rights Violations by Non-State Actors’ (2010) 33 *Hastings International and Comparative Law Review* 307 (focusing on IHRL).

⁹⁵ The Truth and Reconciliation Commission Act 2000, Art. 3.

⁹⁶ Sierra Leone Truth Commission Report, Vol. 2, paras. 19–21.

⁹⁷ *ibid.* paras. 22–4.

⁹⁸ Karen Hulme describes the contribution of treaty monitoring bodies in chapter 5 in this volume, Section 5.4.1.

⁹⁹ Art. 41, European Convention on Human Rights.

¹⁰⁰ Art. 63(1), American Convention on Human Rights.

¹⁰¹ *Saramaka* (n 48) paras. 194–201.

¹⁰² *Rio Negro Massacres v. Guatemala*, Judgment (Series C no. 250) (IACHR, 4 September 2012), for example paras. 273 *et seq.*, 286 *et seq.*, 309.

reparation in the face of environmental damage, as well as collective and symbolic reparations, expands the potential resources available. The IACtHR's jurisprudence has been cited as an important authority for, or influence on, many of the Basic Principles.¹⁰³

As discussed in Section 15.3, a noted theme running through human rights judgments relating to environmental harm is the emphasis on procedural rights and participation as an element of the right and thus the remedy. In *Ogoniland*, the Commission required substantive and procedural measures to be taken to remedy breach and reduce future damage, including awarding compensation to victims, ensuring environmental and social impact assessments for future developments and providing information and access to decision-making bodies for communities likely to be affected.¹⁰⁴

15.4.2 International criminal law

ICL targets individual perpetrators, regardless of their qualification as a state or non-state actor. A criminal conviction can constitute a form of satisfaction.¹⁰⁵ Whether or not compensation or additional forms of reparation are available depends upon the rules of the forum in which redress is sought.

At the international level, the ICTY and ICTR have power to order the restitution of 'property or proceeds' where associated with the crime, although commentators note that the tribunals have been reluctant to use these powers.¹⁰⁶ Rather, it was envisaged that victims would seek compensation themselves before 'competent national authorities'.¹⁰⁷ The Rome Statute, on the other hand, envisages different forms of reparation for victims. Victims can make requests for reparations and participate in proceedings.¹⁰⁸ The ICC has jurisdiction to award a wide variety of forms of reparation that may, collectively, contribute to a greater reparative effect for victims. The Trust Fund may be asked to administer an award against a convicted person,¹⁰⁹ as well as raising money via voluntary contributions. In the case of environmental damage, accessing the Trust Fund increases the likelihood of tapping the extensive resources implicated in remedying environmental harm and other loss, when compared with the resources of the convicted. However, studies drawn from a domestic law context confirm a greater 'satisfactory' effect for victims of environmental crimes where financial resources are provided by the perpetrator, as opposed to third party or state-based contributions where the latter is not the perpetrator.¹¹⁰ Resources without accountability or an admission of wrongdoing are not technically 'reparation'.

The recent Appeals Chamber judgment in *Lubanga* provides insight into the parameters for the award of reparations for the ICC. It made clear that reparations should be awarded only where there was a link between liability and harm, assessed against a test

¹⁰³ See, for example, Gabriella Citroni and Karla Quitana Osuna, 'Reparations for Indigenous Peoples in the Inter-American Court' in Federico Lenzerini (ed.), *Reparations for Indigenous Peoples* (Oxford: Oxford University Press, 2008), 319.

¹⁰⁴ *Ogoniland* (n 49) final paragraph. ¹⁰⁵ See Evans (n 7) 90. ¹⁰⁶ *ibid.* 91.

¹⁰⁷ Rules of Procedure and Evidence, r98ter, r105, r106.

¹⁰⁸ Art 68(3) of the Rome Statute; ICC Rules of Procedure and Evidence, r94.

¹⁰⁹ ICC Rules of Procedure and Evidence, r98(3).

¹¹⁰ Matthew Hall, *Victims of Environmental Harm* (New York: Routledge, 2013), 99.

of 'but for' or 'proximate cause'.¹¹¹ It also clarified that the scope of liability for reparations must be 'proportionate' to the harm caused and would depend upon 'participation in the commission of the crimes'.¹¹²

15.4.3 International environmental law

As discussed in the previous section, many of the protections relevant to environmental protection and damage do not easily lend themselves to claims for reparation. The ILC's work in developing its 2006 draft principles on the allocation of loss in the case of transboundary harm ('ILC Principles') demonstrated the difficulty of developing a regime of state responsibility for environmental damage.¹¹³ The ILC ultimately decided to focus on the civil liability of the operator, based on the polluter pays principle. They envisage a potential role for supplementary funding provided by states—a recognition of the inadequacy of a purely civil-liability based approach—but without clear delineation of a state's obligation (if any) or role in this regard, except that they are a reflection of the due diligence obligations of states.¹¹⁴ As the regime was intended to be residual and general in nature, the ILC deemed it unnecessary to precisely allocate loss between the different actors or determine the role of the state.¹¹⁵ Commentators note the dearth of practice on state liability beyond due diligence obligations, and the role of civil liability regimes in 'plug[ging] the gap', given the difficulties of holding states responsible for breach of environmental obligations.¹¹⁶

The ILC Principles also reveal the challenges in obtaining reparation for harm suffered during conflict. The commentaries note that civil liability regimes and domestic law providing for strict liability tend towards a 'uniform' set of exceptions. As observed above, these include: 'damage [resulting from] (a) an act of armed conflict, hostilities, civil war or insurrection'.¹¹⁷ Given the residual role assigned to states, the Principles thus uncover and leave open a significant gap in a conflict scenario.

In spite of the focus of the ILC Principles, many IEL treaties/customary norms focus on state obligations and, from a dispute resolution perspective, envisage state–state interaction, including contentious cases (there are, of course, exceptions aside from civil liability regimes, such as cases before the Seabeds Disputes Chamber). Victims thus rely upon their states to bring a claim to ensure reparation for environmental damage, or upon the international community to step in. The lack of citizen participation on the international level is noteworthy when considering the scope of reparation offered in the context of *jus post bellum*.

¹¹¹ Carsten Stahn, 'Reparative Justice after the Lubanga Appeals Judgment on Principles and Procedures of Reparation', 7 April 2015, at <<http://www.ejiltalk.org/reparative-justice-after-the-lubanga-appeals-judgment-on-principles-and-procedures-of-reparation/>> accessed April 2015.

¹¹² ICC-01/04-01/06, 3 March 2015, para. 118.

¹¹³ See, for example, Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge: Cambridge University Press, 3rd edn, 2012), 735 *et seq.*

¹¹⁴ Gunther Handl, Proceedings of the Annual Meeting (ASIL) 105 (March 2011), 429.

¹¹⁵ Sands and Peel (n 113) 737.

¹¹⁶ Handl (n 114).

¹¹⁷ Commentaries to ILC Principle 4, para. 27.

There is no specialized standing environmental court.¹¹⁸ However, there are permanent bodies that hear environment claims that fall within their jurisdiction, for example, UNCLOS and the WTO. Certain environmental treaties also envisage recourse to other permanent or ad hoc bodies. The ICJ has heard cases involving environmental issues where jurisdiction is based on specific environmental treaties, or the optional declarations of states.¹¹⁹ The rules regarding reparation will thus depend upon the specific focus of norm/body and the rules applied by that body to reparation. The ICJ, for example, usually considers its decision sufficient reparation in the form of satisfaction, and has rarely awarded compensation.¹²⁰ However, the recent judgment in the *Certain Activities* and *Construction of a Road* cases, envisaged both compensation and satisfaction as forms of reparation for environmental damage.¹²¹

15.5 Implementation: Institutions, Considerations, and Precedents

There are advantages to having 'on tap' institutional frameworks, expertise, and, potentially, a budget to consider questions of environmental harm.¹²² Further, a standing body reduces the likelihood that reparations may be under-prioritized, given the enormous resources associated with remedying environmental harm, and the complex evidentiary questions or uncertainty often associated.

However, while some of the relevant protections provide for recourse to a specific body, many of them do not. The potential for, and realization of, reparation for many victims will often depend upon ad hoc mechanisms put in place post-conflict. This allows the reparations strategy (reflected in the mechanism) to be specifically tailored to the context. In her discussion of civil liability schemes set up under treaties targeting particular types of environmental harm, Fitzmaurice notes that 'liability regimes should fit structurally the activity in question'; a general model is 'impossible'.¹²³

There are many overlapping legal and strategic questions surrounding how best to respond to environmental victims. What factors would such mechanisms have to consider, in light of competing demands on resources and priorities of *jus post bellum*—including a 'just' peace? For example:

- Which norms (or type of liability) are implicated? How is 'harm' or 'damage' to be defined? With what limits? Thus, who or what is a 'victim'? The difficulty of developing definitions 'lies in the apparently all-encompassing nature, and

¹¹⁸ In 1993, the ICJ created an Environmental Disputes Chamber, which has never been invoked.

¹¹⁹ For example, *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)* joined on 27 April 2013, Judgment of 16 December 2015, ICJ Reports 358.

¹²⁰ James Crawford, *State Responsibility: The General Part* (Cambridge: Cambridge University Press, 2013) 518.

¹²¹ *Certain Activities* (n 119), for example paras. 142 and 224.

¹²² Carl Bruch, Symposium (n 40) 645, 649.

¹²³ Malgosia Fitzmaurice, 'International Responsibility and Liability' in Bodansky, Brunée, and Heys, *The Oxford Handbook of International Environmental Law* (n 68) 1031.

near-limitless scope, of such victims.¹²⁴ What happens when victimization is delayed (e.g. the onset of health conditions many years after the event)?

- What sort of mechanism is envisaged? Institutional design, including mandate, and the process by which design and implementation takes place will determine the degree of reparation afforded to victims.
- Are victims of all perpetrators to be subsumed within its scope? And, if so, would the standard of liability be the same (including, considering the implications of a 'due diligence' standard)?
- Is liability pre-determined? Will another body conduct relevant investigations?
- How is causation established and what is the evidential burden to establish loss? How far does the duty of mitigation extend?
- Is one body mandated to examine all relevant claims? Or are there several bodies with overlapping mandates? For example, if transitional justice bodies are examining IHRL and IHL violations, do they take a wider view *vis-à-vis* environmental damage? What coordination mechanisms are thus in place?
- What forms of reparation are envisaged by the mechanism, and in what manifestation (individual, collective, etc.)?

When considering liability thresholds and evidentiary standards, many of the potential barriers discussed earlier in the chapter play into strategic considerations. In certain situations, there may be a lack of information, lack of scientific certainty, and/or insufficient resources to undertake the intensive fact-finding and analysis necessary to reach these standards. Cymie Payne notes that '[a] major cause of failed environmental claims is lack of sufficient evidence of causation and quantum of damage attributable to the alleged illegal acts'.¹²⁵ For instance, advocates highlight that a lack of data and scientific information hindered U.S. veterans' claims for damage caused by depleted uranium in Iraq in 1991.¹²⁶ In situations where breach has been established, a lack of baseline data will complicate how to assess and respond to the damage and thus appropriate reparation. Further, the circumstances of conflict, for example in the case of mass displacement, will often result in key evidence being lost or destroyed. Should this bear on the standard of proof and the reparation awarded?¹²⁷

As noted, there is limited empirical evidence analysing appropriate responses to environmental victims' needs and desires. While each context is different, there is thus value in drawing analogies and 'best practice' or lessons¹²⁸ from both relevant domestic and international practice: schemes based on criminal liability, administrative schemes,

¹²⁴ Hall (n 110) 25. ¹²⁵ Payne (n 3) 515.

¹²⁶ Charles Sheehan-Miles, Symposium (n 40) 631.

¹²⁷ For example, in *Akdivar et al. v Turkey*, in which the ECtHR found that the applicants' houses were burnt down by the security forces, and in which the applicants claimed that there was no tradition of registering property in the area in which they lived, the ECtHR noted '[t]he Court also considers it appropriate to make an award in respect of the remaining houses. However, due to the absence of evidence which substantiates the size of these properties any calculation must inevitably involve a degree of speculation. It will base its award on fifty percent of the surface area claimed by the applicants at the base rate'. (Judgment, App no. 99/1995/605/693 (ECtHR, 1 April 1998, paras. 16–20).

¹²⁸ Bruch, Symposium (n 40) 645.

civil liability schemes under treaties or based on class actions, commissions examining state responsibility and transitional justice mechanisms, because of their relevance to transitional periods. A few examples are expanded on below.

15.5.1 Criminal liability

As discussed earlier in the chapter, in considering reparation, international criminal courts have often conceived of the judgment as a source of satisfaction, as well as criminal proceedings as having a deterrent (non-repetition) and rehabilitating effect. In theory, the ICC's reparation mechanism would allow for other forms of reparation to be awarded. However, the ICC has not yet had the opportunity to consider reparation for breach of an environmental protection. Commentators have questioned whether the international criminal law paradigm is well suited to considering liability and remedies for environmental damage, especially as states and corporations cannot be held liable. Drumbl notes that insufficient funds will limit any potential corrective function: '[u]nless this criminal law apparatus is hooked into broader restorative remediation efforts, compensation efforts, and scientific expertise, the value of the expression will be limited only to symbolism and the actual hard work of improving the damage to the environment will not take place'.¹²⁹ Further, while one of the central goals is writing a historical narrative, it is 'scripted by the law of evidence', as well as the scope of the relevant protections, and results in 'microscopic truths'.¹³⁰ This does not necessarily contribute to understanding the multi-causal origins of environmental harm (especially during conflict) that will assist actors operating within a *jus post bellum* paradigm to consider the transition to peace and longer-term management.

Domestic criminal systems may provide more relevant examples. In many civil law systems, victims may join and claim compensation in criminal proceedings. In certain common law systems, claims may be based on specific criminal statutes. Following the Exxon oil spill in Alaska in 1989, the United States commenced criminal proceedings against the company under the Migratory Bird Treaty Act and the Refuse Act, which carried penalties and required restitution to injured parties. As a result of these criminal charges, Exxon pleaded guilty and reached a settlement involving significant payments to the federal government for clean-up and damage to natural resources.¹³¹ A claim may thus also act as a pressure point for a negotiated settlement that results in reparation for victims.

Studies of victims of (traditional) crime show that criminal sanctions carry a greater sense of condemnation of environmental crimes and are therefore likely to have a greater 'satisfactory' effect than other sanctions:

criminal sanctions ... demonstrate a social disapproval of a qualitatively different nature compared to administrative sanctions or a compensation mechanism under civil law.¹³²

¹²⁹ Drumbl, Symposium (n 40) 625–6. ¹³⁰ Hall (n 110) 22–3.

¹³¹ Nathan Richardson, 'Deepwater Horizon and the Patchwork of Oil Spill Liability Law' (2010) Resources for the Future 4.

¹³² Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, C-180-E/238, March 2001, para. 4.

Yet, a scheme based in criminal law would involve a higher burden of proof, mitigating against a finding of liability. If tied to restitution orders, they might not result in the most appropriate form of reparation (as discussed earlier). Further, as demonstrated in the 1989 Exxon Oil Spill, the claims of individuals (under the Act) were effectively adopted by the state and thus precluded the potential for direct settlement of restitution claims of individuals, as well as their participation in and control over the process.¹³³ However, in this context, the ‘use of criminal law ... almost certainly resulted in more compensation being paid than would have been forthcoming from civil or administrative mechanisms.’¹³⁴ ‘Clean-up funds’ may be more readily available in criminal claims where a corporation is convicted (and thus via domestic proceedings).

15.5.2 Civil suits

Another option would be to consider civil liability in domestic courts as a model, in cases brought against private or state actors. However, many national systems are not set up to assimilate mass victimization, which is a common consequence of environmental damage. Suits, schemes, or settlements based on civil liability raise similar concerns about time and cost, the scope of diligence required to meet the burden of proof, regarding the resources available to remedy harm, or how to measure damage/harm or implement repair, as well as the political/judicial willingness to award huge sums against domestic companies.¹³⁵ ‘The history of transnational mass tort claims is hardly reassuring ... settling claims through litigation can be time-consuming, expensive and ultimately inequitable. Some private lawsuits are too big for courts to handle.’¹³⁶

15.5.3 Administrative reparations schemes

An administrative reparations scheme may ultimately prove more efficient, or even realistic, than linking many claims to a criminal conviction or a multitude of civil suits. A less strict approach may avoid injustice in practice. ‘Judicialisation is not synonymous with accountability.’¹³⁷ Administrative schemes (which tend to be ad hoc)¹³⁸ allow for a greater degree of flexibility in definitions and lower standards of proof, avoiding a rigidity that may not always serve victims’ best interests. There may also be more flexibility around the identity of the perpetrators and victims subsumed within its scope, the identity of the commissioners (with particular expertise), and increased potential for citizen participation, including in the design and appointment process. Increased participation, and thus a stake in the process, may mitigate against the lesser ‘satisfactory’ effect of the process and outcome of administrative schemes when compared to a criminal conviction (see below), especially if the perpetrator does not have to contribute.

¹³³ Richardson (n 131). ¹³⁴ Hall (n 110) 135.

¹³⁵ *ibid.* 116, 118. Jon Van Dyke, ‘Liability and Compensation for Harm caused by Nuclear Damage’ (2006–2007) 35 *Denver Journal of International Law and Policy* 13, 36–41.

¹³⁶ Handl (n 114) 430. ¹³⁷ Hall (n 110) 26.

¹³⁸ *ibid.* 115 [tend to be ad hoc and focused on a particular type of environmental harm].

Suggestions that an ad hoc adjudicatory institution could exercise a deterrent function ‘may be asking too much.’¹³⁹

There is also a concern that a lower standard of proof will affect the willingness of perpetrators (including taxpayers in the case of the state) to fund the scheme. In 1988, the Japanese government abolished a class of payments under an administrative scheme designed to compensate victims of pollution in Japan’s ‘post-World War II industrial drive.’ Victims that contracted a specific respiratory disease in areas where air pollution was particularly prevalent (Class I regions) were to be compensated (*inter alia*) via levies on companies emitting sulphur dioxide, without having to establish a ‘but for’ causal test. Yet, in respect of other areas (Class II regions), if a causal relationship between specific diseases and certain substances could be established, victims were compensated by the identified polluter.¹⁴⁰ Corporations were unwilling to pay levies to compensate harms where no causal link had been established with their actions. This was an important factor in political pressure leading to the scheme’s abolishment.¹⁴¹ Lin argues that for successful implementation of a similar scheme ‘[s]takeholders in the system must view it as equitable.’¹⁴²

The best-known international mechanism for post-conflict environmental harm is the UNCC, which was established in the aftermath of the Gulf War pursuant to Security Council Resolution 687. Resolution 687 established Iraq’s responsibility under international law for direct loss and damage suffered as a result of its invasion and occupation of Kuwait, including environmental damage and depletion of natural resources. The UNCC was designed to perform ‘an essentially fact-finding function’—it would perform a quasi-judicial function only in resolving disputed claims.¹⁴³ However, in relation to the claims for environmental damage and the depletion of natural resources, which tended to be larger claims raising complex (particularly technical and evidentiary) issues, Iraq was given more opportunity to participate in the proceedings.¹⁴⁴ The fact that liability was pre-determined had cost and time implications: ‘[t]he resolution of such a significant number of claims with such a large asserted value over such a short period [was] unprecedented in the history of international claims resolution.’¹⁴⁵

Compensation was financed by proceeds from Iraq’s oil sales, available as a result of the oil-for-food programme. The UNCC accepted claims from a diverse universe of victims—states, businesses, individuals, international organizations—via their governments or international organizations acting in a representative capacity. Claims were divided by typology and reflected in the UNCC’s institutional structure.¹⁴⁶ Many of the types of claims discussed in this chapter were considered in categories separate from

¹³⁹ Peter Sand, ‘Catastrophic Environmental Damage and the Gulf War Reparation Awards: The Experience of the UN Compensation Commission’ (2011) *American Society of International Law and Procedure* 430, 433.

¹⁴⁰ David Bronston, ‘Compensating Victims of Hazardous Substance Pollution in the United States and Japan: A Comparative Analysis’ (1983) 7(3) *Fordham International Law Journal* 510–11.

¹⁴¹ Albert Lin, ‘Beyond Tort: Compensating Victims of Environmental Toxic Injury’ (2005) 78 *Southern California Law Review* 1495–6.

¹⁴² *ibid.* 1499. ¹⁴³ Report of the Secretary-General (1991) S/25863, 7.

¹⁴⁴ Julia Klee, Symposium (n 40) 615.

¹⁴⁵ UNCC, ‘UNCC at a Glance’, at <<http://www.uncc.ch/uncc-glance>> accessed March 2015.

¹⁴⁶ For more detail see chapter 2 in this volume.

environmental damage: for example, claims of individuals were reviewed in categories A, B, and C. Compensation was awarded based on ranges of pre-determined amounts. Commentators observe that the number of claimants, the urgency of many of the claims, and the difficulty that claimants faced in gathering sufficient evidence to discharge the burden of proof made the standard of full reparation 'difficult if not impossible to realize'. Further, application of this standard would have bankrupted Iraq.¹⁴⁷

Claims for environmental damage were presented separately and focused purely on environmental clean-up: 'UNEP's lesson ... that ... the environment is also a humanitarian concern [is] not one that was expressed in the institutional structure when [the UNCC categories] were organised'.¹⁴⁸ Commentators also remind us that over 90 per cent of the amount awarded by the UNCC was for non-environmental claims and that environmental claims were dealt with as part of a 'second wave'.¹⁴⁹

Yet, in 2005, one leading commentator described the UNCC as 'the only institution to address issues of accountability for environmental damage in a meaningful way'.¹⁵⁰ It has been acclaimed for its corrective function—'we know for a fact that the corrective justice of the UNCC process has worked'¹⁵¹—which, in an environmental context, can be difficult to achieve.

The UNCC was unique from many angles, for example, the way in which it was financed, the number of claims that it handled, and its status and support across the international community. It would be a difficult initiative to repeat, but, there is much that can be learned from the experience, including about evidence, burdens and standards of proof, questions of causation, standards of reparation, the importance of allocating funds for assessment etc. The definition of environmental damage drew upon a UNEP report that interpreted the term broadly as 'impairment of the environment'.¹⁵² It was broad enough to cover measures of prevention, monitoring and assessment of environmental damage and public health, past and future measures to clean and restore the environment, and depletion or damage to natural resources.¹⁵³ The standard of compensation was defined by the response to the damage, as the actual costs of reasonable remediation rather than the value of the loss, and the UNCC allocated funds to assess environmental impacts. The UNCC made extensive use of scientific expertise at a technical (rather than adversarial) level although the panel had to make adjustments and deductions to cater for scientific uncertainty.¹⁵⁴ A follow-up programme was established to monitor the use of funds and life of funded projects, to ensure they retained their purpose or character. These efforts were financed by beneficiary states, not the Compensation Fund and thus did not constitute additional financial sanctions on Iraq.

¹⁴⁷ Arif Ali and Marguerite Walter, 'Principles of Valuation Taken from the UNCC Perspective' in Timothy J. Feighery, Christopher S. Gibson, and Trevor M. Rajah (eds.), *War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2015), 83–4.

¹⁴⁸ Klee, Symposium (n 40) 599.

¹⁴⁹ See, for example, McManus (n 36) 434; Handl (n 114) 430.

¹⁵⁰ Bruch, Symposium (n 40) 647. ¹⁵¹ Reed (n 6) 310.

¹⁵² UNEP, *Report of the Working Group of Experts on Liability and Compensation arising from Military Activities* (UNEP, 1996), para. 45.

¹⁵³ McManus (n 36) 43.

¹⁵⁴ Klee, Symposium (n 40) 643.

15.5.4 Transitional justice mechanisms

Transitional justice mechanisms have played an important role in delivering reparation in post-conflict states. They traditionally focus on human rights and IHL violations. Whether their mandate *should* (on either a philosophical or practical basis) be extended further is debated.¹⁵⁵ As noted above, there are limited examples or studies of whether/how similar mechanisms have been employed in respect of environmental victims, even where caused by breach of IHL/IHRL.

However, there are still important lessons to draw from the experience. Ruti Teitel draws attention to the forward-looking paradigm and concepts of transition adopted by transitional justice.¹⁵⁶ Not only is returning to the *status quo ante* often impossible, long-term remediation and preventing repetition will likely require reform of the environmental governance framework. The legislative changes required as reparation by the IACtHR in *Suriname* reflect similar concerns.

Further, reparations are a 'crucial' component of both transitional justice and *jus post bellum*.¹⁵⁷ Administrative reparations schemes implemented during transition demonstrate the importance of facilitating participation, and thus communication, appropriate claim forms and filings deadlines; of mandate and definitions (for example of harm and victim/beneficiary, as discussed earlier); of the identity and appointment of commissioners, to highlight a few lessons learned.¹⁵⁸ Many of these are echoed by the UNCC experience: for example, criticisms of the 'too short' six-year deadline for filing environmental claims.¹⁵⁹ Where environmental harm has damaged individuals, environmental remediation and even compensation for pecuniary loss, may not be enough. As mentioned earlier, there is a desire for acknowledgment. Fact-finding or truth commissions (as well as some reparations schemes) can, depending upon how they are implemented, provide a degree of satisfaction as victims' stories are told, recognized, and memorialized.¹⁶⁰

15.5.5 Facilitating participation

Victim contact and interaction with justice institutions affects perceptions of institutional legitimacy and thus the 'satisfaction' afforded by its findings. One line of argument in the criminology literature notes the importance of 'procedural justice':

[V]ictims of (traditional) crime care more about how a justice system treats them, including its sensitivity to their concerns and needs and how it *recognises* the harm they have suffered, than about the instrumental outcomes.¹⁶¹

¹⁵⁵ See, for example, Jens Iverson, 'Jus Post Bellum Symposium: Contrasting Transitional Justice and Jus Post Bellum', *Opiniojuris*, <<http://opiniojuris.org/2014/05/06/jus-post-bellum-symposium-contrasting-transitional-justice-jus-post-bellum/>>, accessed 29 June 2017; 'Report of the Special Rapporteur on the Promotion of Truth, Justice, Reparation and Guarantees of Non-Recurrence, Pablo de Greiff UN Doc. A/HRC/24/42, 28 August 2013, para. 32.

¹⁵⁶ Ruti Teitel, 'Rethinking Jus Post Bellum in an Age of Global Transitional Justice' (2013) 24(1) *European Journal of International Law* 335–42.

¹⁵⁷ May (n 10) 24.

¹⁵⁸ Lawry-White (n 75) 159 *et seq.*

¹⁵⁹ McManus (n 36) 443.

¹⁶⁰ Lawry-White (n 75).

¹⁶¹ Hall (n 110) 96 (emphasis added).

Although there is still much work to be done in relation to environmental victims in particular, the suggestion is that facilitating participation and institutionalizing a way to listen to victims' suggestions and needs therefore plays a role in determining the degree of reparation, regardless of resources available. What is notable is that this extends beyond institutional design to the sensitivity of the day-to-day execution of the strategy.

Procedural rights are phrased in mandatory terms in Article 10 of the Rio Declaration 1992, which speaks of (*inter alia*) disseminating and affording access to information, participation in decision-making processes and providing 'effective access to ... proceedings, including redress and a remedy'. The emphasis on participation mirrors the emphasis of human rights bodies on the procedural aspects of rights affected by environmental damage.

Given the limited evidence on how best to respond to victims of environmental crimes, commentators note the pitfalls of 'presuming what victims want'.¹⁶² An important consideration in the design of these mechanisms is participation and respect of procedural rights. A multi-way information flow and ensuring the inclusion of affected communities facilitates (a) finding out how best to respond to victims' needs and managing expectations; and (b) a potential avenue for recognition and of empowerment, and thus of reparation in itself. In the context of limited resources, both such functions are important. Following the targeting and destruction of the Iraq marshlands in 1991–7, which was targeted following a Shia uprising many Marsh Arabs fled. Following the conflict, organizations found that the Marsh Arabs liked living on the edge of the marshlands, partly due to a concern about access to services. Such preferences are key to thinking about appropriate reparation, especially where there might be a tendency to presume that a return to the *status quo* is top of victims' agenda.¹⁶³

Transitional justice experiences show the importance of employing appropriate techniques to facilitate the participation of traditionally marginalized groups or vulnerable groups post-conflict. A history of exclusion, distrust, or an inability to engage for logistical reasons may mitigate against interaction unless specific steps are taken. Criminologists report that ethnic minorities tend to fall victim to environmental harm,¹⁶⁴ and that the economically disadvantaged are 'often excluded from the environmental decision-making processes'.¹⁶⁵ Yet, to reduce the risk of conflict, encourage reconciliation, and to achieve the goals of *jus post bellum*, it is those that are affected that must be included. The themes of this chapter emphasize an inclusive approach: taking a wide view of applicable primary norms, of forms of reparation, of reparative practices, and considering a participatory process.

15.6 Conclusions

Reparation is a key pillar of the *jus post bellum* framework. In a post-conflict scenario, there are 'high demands for *post bellum* justice ... to address the security, not just of states, but of persons and peoples'.¹⁶⁶ The environment is an economic, social, and security issue.¹⁶⁷ Reparation plays a central role in addressing these issues: redressing

¹⁶² *ibid.* 97, 101.

¹⁶³ John Wilson, Symposium (n 40) 596.

¹⁶⁴ Hall (n 110) 43.

¹⁶⁵ Matthew Hall, *Exploring Green Crime* (London: Palgrave, 2015), 169.

¹⁶⁶ Teitel (n 156).

¹⁶⁷ John Wilson, Symposium (n 40) 597.

the damage, reinforcing the rule of law, and creating the conditions for the sustainable and just peace that *jus post bellum* seeks.

However, in the face of various challenges creativity and ingenuity will allow reparation to play this role. Post-conflict scenarios tend to focus the mind, given the scale of the destruction, mass victimization, and extent of suffering. The normal justice systems may be overwhelmed or may not cater for the types of breaches or suffering that has taken place. And there are usually limited resources. A strategy that fails to consider the underlying complexities may alienate and detract from the desired nature of peace. Environmental protection and governance would ideally have a place in the newly established legal order and the design of redress mechanisms will affect how far that is possible.

Post-Conflict Mine Action

Environment and Law

*Ursign Hofmann and Pascal Rapillard**

If trees could speak, they would cry out
that since they are not the cause of war
it is wrong for them to bear its penalties

Hugo Grotius, *De Jure Belli Ac Pacis Libri Tres*, 1646¹

16.1 Introduction: Nexus Between Peacebuilding, Mine Action, and the Environment

In times of armed conflict, the environment might be targeted deliberately to reach military or political goals.² However, most of the environmental damage resulting directly or indirectly from armed conflict can be understood as collateral damage. The most direct damage to the environment, such as the release of toxic substances during bombardments or the physical destruction of ecosystems, results from hostilities themselves.³ Contamination of land from remnants of conflict, such as mines, cluster munitions, and other explosive remnants of war, is a further direct impact on the environment and a legacy of conflicts even long after they have ended.⁴ The environment can also be affected indirectly, for instance as a consequence of the loss of basic

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¹ Cited in Johan A. Cohan, 'Modes of Warfare and Evolving Standards of Environmental Protection under the International Law of War' (2003) 15 *Florida Journal of International Law* 481, 500.

² The author would like to thank Dominic Eggel, Mohamed Ghalaieney, François Grünewald, and Adam Koniuszewski for their insightful comments on previous versions of this chapter. Special thanks also go to Christine Spring and Elisa Volpi Spagnolini for their contribution. Responsibility for any errors in the text lies entirely with the authors.

³ UNEP, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (UNEP, 2009), 15.

⁴ Ken Conca and Jennifer Wallace, 'Environment and Peacebuilding in War-Torn Societies: Lessons from the UN Environment Programme's Experience with Post-Conflict Assessment' in David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (Milton Park, Abingdon, Oxon; New York: Earthscan, 2012), 70; Environment Law Institute and UNEP, *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding, Policy Brief no 2* (ELI and UNEP, 2013), 2.

services, displaced populations, and the resulting survival strategies they adopt out of necessity.⁵

Referring to the case of Cambodia, Shimoyachi-Yuzawa found that in addition to the human toll, contamination from remnants of conflict is considered to be one of the most significant obstacles to post-conflict peacebuilding and development. It leads to human displacement; delays the return and resettlement of refugees and internally displaced persons ('IDPs'); and blocks access to vital resources and social services, including farmland, water, roads, schools, or hospitals.⁶ In response, mine action has become increasingly integrated into broader national programmes of reconstruction and development.

Similarly, by denying access to land, water sources, and other natural resources, the presence of remnants of conflict can put increased pressure on the resources that are still available, resulting in unsustainable natural resource management practices by communities.⁷ Migration of displaced populations to available safe land or already fragile ecosystems may lead to overharvesting and resource degradation.⁸ Additionally, remnants of conflict may release toxic substances into the soil, leading to further environmental damage.⁹

There is general recognition that durable peace cannot be achieved if the natural resources sustaining livelihoods and ecosystem services are damaged, degraded, or destroyed. On the contrary, environmental protection and the sustainable management of resources are important pathways to consolidate peace and promote longer-term development.¹⁰ Mine action¹¹ is a critical activity in the transition from conflict to peace, since clearance of remnants of conflict may start while conflict is still ongoing and last throughout the post-conflict phase and beyond. However, despite the achievements of mine action during the past decades at political, normative, and operational levels, remnants of conflict still affect more than sixty countries and will do so for many more years. In this regard, mine action can do a lot of 'good' to restore livelihoods and contribute to peacebuilding. However, its very nature and some of the methods used by mine action organizations also have the potential to cause unintended negative impacts on the environment. Mine action organizations, like all humanitarian actors, therefore need to consider the possible negative impacts of their operations and ensure they both 'do no harm' and do not lead to longer-term vulnerability and threats to livelihoods.

Remnants of conflict and mine action can cause damage to the environment, property, and individuals in the aftermath of armed conflict. Questions of liability for damage arise ineluctably. Interestingly, attention within the mine action sector has thus far focused on liability for injuries or fatalities rather than for environmental degradation.

⁵ UNEP (n 3) 15. In addition to a direct and indirect pathway, UNEP also identified the institutional impact of conflict on the environment such as the disruption of state institutions.

⁶ Nao Shimoyachi-Yuzawa, 'Linking Demining to Post-Conflict Peacebuilding: A Case Study of Cambodia' in Jensen and Lonergan (n 4) 181.

⁷ UNEP, *Lebanon. Post-Conflict Environmental Assessment* (UNEP, 2007), 155; Shawn Roberts and Jody Williams, *After the Guns Fall Silent: The Enduring Legacy of Landmines* (Washington, DC: VVAE, 1995), 11.

⁸ Conca and Wallace (n 4) 63, 70–1. ⁹ *ibid.* 70. ¹⁰ UNEP (n 3) 5, 19.

¹¹ Mine action comprises five complementary groups of activities: Mine Risk Education; Land Release/Mine Clearance; Victim Assistance; Stockpile Destruction; and Advocacy. In this chapter, we will only focus on mine clearance on land.

One prominent exception relates to the serious environmental damage resulting from Iraq's invasion and occupation of Kuwait in the early 1990s. As part of the compensation scheme under the United Nations Compensation Commission ('UNCC'), awards were granted to Kuwait to address the environmental impact of the conflict, including for clearance and survey of unexploded ordnance ('UXO') contamination. Given the nature of hazard of remnants of conflict, damage to individuals and property is more visible. Various ways are conceivable at inter-state and domestic levels for states and individual victims to claim for redress from the damage they experienced, including, in theory, by invoking violations of International Humanitarian Law ('IHL'), International Environmental Law ('IEL'), human rights law, or by suing manufacturers. The responsibility of armed non-state actors in non-international armed conflict ('NIAC') related to mine action poses a distinct challenge.

At the same time, it is acknowledged that residual contamination remains after the end of clearance operations and subsequent handover of land to the beneficiaries or the state. This is due to explosive devices moving onto cleared land, for instance through flooding, or having been missed during operations. Along with the formalization of the land release process in mine action in recent years, more emphasis has been put on determining whether and under which circumstances liability for potential damage to individuals and property lies with the responsible mine action organization and/or the state and at which point in time liability may be transferred. Several modalities are possible, but the normative framework and good practice indicate that, unless negligence by the mine action organization can be proven, strict liability of the state is generally considered to be the easiest and most cost-effective modality.

This chapter will tackle the nexus between mine action and the environment from an operational viewpoint by reviewing policies and good practice for environmental protection in post-conflict mine action and discussing its relationship to *jus post bellum*. In particular, it will study how legal requirements might be translated operationally into norms and standards and constitute an integral part of the broader 'do no harm' approach (Section 16.2). Subsequently, the chapter will examine the negative environmental impact of remnants of conflict on land as well as the potential damage to the environment resulting from mine clearance activities (Sections 16.3 and 16.4). The chapter will also examine how, at an operational level, the normative framework and good practice guide mine action organizations to ensure their operations do not result in further environmental harm (Section 16.5). Finally, Section 16.6 will address the issue of liability for environmental degradation and damage to individuals from remnants of conflict and in particular from their removal. Section 16.7 will summarize major findings.

16.2 Normative Framework

Before analysing what international law provides for post-conflict mine action, it is worth recalling that its general principles require all parties to a conflict to mitigate environmental harm to the widest extent possible. Also, IHL contains a number of provisions addressing the short- and long-term consequences of damage to the environment caused by the legacy of armed conflict.

16.2.1 The protection of the environment during armed conflict

IEL is the branch of international law aimed at protecting and preserving the environment. According to a legal analysis by the United Nations Environment Programme ('UNEP'), IEL could potentially be applied in times of armed conflicts, alongside IHL. The relationship between the two branches of law is, however, complicated by the fact that IEL is still maturing, at both domestic and international levels.¹²

An International Committee of the Red Cross ('ICRC') study details three rules of customary international law which apply to the protection of the environment in armed conflicts:

- General principles on the conduct of hostilities apply to the natural environment (rule 43).
- Due regard to the protection and preservation of the natural environment shall always be a consideration when choosing methods and means of warfare (rule 44).
- The use of methods and means of warfare that are intended, or may be expected, to cause widespread, long-term, and severe damage to the natural environment is prohibited (rule 45).¹³

These rules have also been codified in Additional Protocol I to the Geneva Conventions in Articles 35(3) and 55(1). Along these lines, the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (also referred to as the Convention on Certain Conventional Weapons—'CCW') reaffirms rule 45. It can indeed be argued that, due to their destructive impact on the environment, mines and cluster munitions may well go beyond the limits and provisions of Additional Protocol I.¹⁴

Various scholars and concerned organizations have reviewed environmental protection under IHL.¹⁵ In its study on the protection of the environment during armed conflict, UNEP's assessment is that 'a number of significant gaps and difficulties remain to be reconciled if the protection of the environment is to be enhanced within the IHL framework'.¹⁶ According to some authors, these difficulties are that: (i) the threshold of harm to the environment established in IHL is almost impossible to reach as it must meet three cumulative conditions (widespread, long-term effects, severe) and be assessed before launching the attack; (ii) no treaty norm explicitly addresses the issue of environmental damage in non-international armed conflicts; and (iii) the proportionality of harm to the environment deemed to be 'collateral damage' is difficult to

¹² UNEP, *Protecting the Environment During Armed Conflict. An Inventory and Analysis of International Law* (UNEP, 2009), 34.

¹³ ICRC, 'Customary IHL Database', at <http://www.icrc.org/customary-ihl/eng/docs/v1_rul> accessed 28 August 2015.

¹⁴ Handicap International, *What Rights for Mine Victims? Reparation, Compensation: From Legal Analysis to Political Perspectives* (Lyon: Handicap International, 2005), 20.

¹⁵ Michael Bothe, 'The Protection Of The Environment In Times Of Armed Conflict' (1991) 34 *German Yearbook of International Law* 54; Jay E. Austin and Carl E. Bruch (eds.), *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (Cambridge: Cambridge University Press, 2000).

¹⁶ UNEP (n 12) 28.

determine.¹⁷ The legal rules aimed to protect the environment in relation to armed conflict are rather a 'blunt tool' with parallel streams and, at times, lacking holistic implementation.¹⁸

16.2.2 *Jus post bellum*, the protection of the environment and mine action

Long-term consequences of mines and other remnants of conflict fall under the scope of the laws applicable in post-conflict settings. *Jus post bellum* has its most traditional roots in just war theory as a natural corollary of *jus ad bellum* and *jus in bello*.¹⁹ According to the just war theory, it is not only the decision to resort to war and its very conduct which has to be just, but also the termination of war.²⁰ Beyond this theory, *jus post bellum* recently gained attention in contexts of peacebuilding, post-conflict reconstruction, or transitional justice.²¹ The concept can close a normative gap related to the applicable law and the possible interaction between different bodies of law in transition from conflict to peace. A systemic gap might also be filled between the use of force and post-conflict responsibilities.²² The concept has not remained unchallenged though. Some scholars defend that the alleged legal void seems an artificially created lacuna or that linking post-conflict reconstruction to the legality of an intervention may run against current international law.²³ The concept might also be prone to politicization.²⁴ Others argue that *jus post bellum* tends to primarily rectify the wrongs of war instead of focusing on peacebuilding.²⁵

While some see *jus post bellum* as a system or body of law,²⁶ others may rather consider it as a concept. According to latter view, *jus post bellum* focuses on relevant laws, standards, and good practice applied during the transition from conflict to peace, hence stressing the importance of a holistic approach and the dual role of both hard law and

¹⁷ Michael Bothe, Carl E. Bruch, Jordan Diamond, and David Jensen, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92 *International Review of the Red Cross* 569, 578–9.

¹⁸ ILC, Third Report on the Protection of the Environment in Relation to Armed Conflict, UN Doc. A/CN.4/700, 3 June 2016, para. 266.

¹⁹ On an overview of the just war tradition from a historical perspective, see David D. Corey and J. Daryl Charles, *The Just War Tradition* (Wilmington, DE: ISI Books, 2012).

²⁰ Brian Orend, 'Jus Post Bellum' (2000) 31 *Journal of Social Philosophy* 117, 117–18.

²¹ Jennifer S. Easterday, Jens Iverson, and Carsten Stahn, 'Exploring the Normative Foundations of Jus Post Bellum: An Introduction' in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum – Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014), 1–2.

²² Carsten Stahn, 'Jus Post Bellum: Mapping the Discipline(s)' in Carsten Stahn and Jann K. Kleffner (eds.), *Jus Post Bellum. Towards a Law of Transition From Conflict to Peace* (The Hague: TMC Asser Press, 2008), 101–2.

²³ Eric De Brabandere, 'The Responsibility for Post-Conflict Reforms: A Critical Assessment of Just Post Bellum as a Legal Concept' (2010) 43 *Vanderbilt Journal of Transnational Law* 119, 149.

²⁴ Roxana Vatanparast, 'Waging Peace: Ambiguities, Contradictions, and Problems of a *Jus Post Bellum* Legal Framework' in Stahn, Easterday, and Iverson (n 21) 155–7.

²⁵ Seth Lazar, 'Skepticism about *Jus Post Bellum*' in Larry Marry and Andrew T. Forcehimes (eds.), *Morality, Jus Post Bellum, and International Law* (New York: Cambridge University Press, 2012), 218–22.

²⁶ Carsten Stahn, "'Jus Ad Bellum', 'Jus in Bello' ... 'Jus Post Bellum'?—Rethinking the Conception of the Law of Armed Conflict' (2006) 17 *European Journal of International Law* 921, 942.

soft law provisions.²⁷ This definition constitutes the underlying *jus post bellum* concept in this chapter and it will be demonstrated why such a holistic approach is indicated for mine action.

There are three international conventions relevant to mine action which apply *post bellum*: the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (also referred to as the Anti-Personnel Mine Ban Convention—‘APMBC’); the Convention on Cluster Munitions (‘CCM’); and the CCW. Interestingly, the APMBC and CCM contain substantive provisions for the post-conflict phase such as the clearance of remnants of conflict or assistance to victims, but, given that they prohibit the use of certain weapon systems, they are equally relevant to *jus in bello*. Hence, these legal instruments are a magnificent manifestation of the relevance of mine action when examining the transition from conflict to peace. Both of them also contain references to the protection of the environment.

The APMBC and the CCM require that requests for extensions to the deadlines for the clearance of areas contaminated by anti-personnel mines and cluster munitions shall specifically contain information on the environmental implications of that extension.²⁸ Both the APMBC and the CCM further require states parties to furnish reports on transparency measures being taken, which shall include reference to the applicable safety and environmental standards to be observed.²⁹ The CCM has an even stronger reference to environmental protection, contained in Article 3(2) on stockpile destruction, requiring states parties to ensure that destruction methods comply with the applicable international standards for protecting public health and the environment.

Despite the introduction of these limited provisions on environmental considerations, and even the stronger call for environmental protection in the CCM, the meetings of the states parties to both conventions have generally not addressed the issue of protecting the environment. The sole exception was the Cartagena Plan of Action for 2010–14, adopted at the Second Review Conference of the APMBC, where Action 9 on stockpile destruction required states to provide a plan to ensure compliance with their convention obligation in conformity with relevant safety and environmental standards.

Likewise, the environmental impact of clearance activities only temporarily emerged in the discussions under Protocol V to the CCW on explosive remnants of war (‘ERW’) that aims to provide for ‘remedial measures of a generic nature in order to minimise [their] risks and effects.’³⁰ In April 2009, at the Meeting of Experts of the High

²⁷ Jennifer S. Easterday, ‘Peace Agreements as a Framework for *Jus Post Bellum*’ in Stahn, Easterday, and Iverson (n 21) 382.

²⁸ Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, adopted 18 September 1997, entered into force 1 March 1999, 2056 UNTS 211 Art. 5(4)(c); The Convention on Cluster Munitions, adopted 30 May 2008, entered into force 1 August 2010, 2688 UNTS 39 Art. 4(6)(h). The initial deadline for a state party to the APMBC to destroy or ensure the destruction of all known anti-personnel mines in mined areas under its jurisdiction or control is ten years after entry into force of the convention for that state party. A state party to the CCM also has a maximum of ten years after entry into force of the convention for that state party to clear and destroy cluster munition remnants located in cluster munition contaminated areas under its jurisdiction or control.

²⁹ APMBC (n 28) Art. 7(1)(f); CCM (n 28) Art. 7(1)(f).

³⁰ Protocol on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, adopted 28 November 2003, entered into force 12 November 2006, 2399 UNTS 100, preambular paragraph 2.

Contracting Parties to Protocol V, the issue of environmental protection was discussed for the first time. During the Third and Fourth Conferences of the High Contracting Parties to Protocol V, in 2009 and 2010, states parties agreed to keep the potential environmental impact of ERW clearance under review.³¹ However, in subsequent conferences, the issue of environmental protection was removed from the agenda and no longer discussed in this forum.

Obligations under these three conventions form the basis of the draft principle on remnants of war of the Special Rapporteur of the International Law Commission ('ILC') on the protection of the environment in relation to armed conflicts.³²

16.2.3 The 'do no harm' approach and mine action

The few principles established under international law which provide for environmental protection are reflected in the policies and standards which guide the activities of mine action organizations on the ground. The question arises of how these policies and standards interpret the above-mentioned provisions and put into practice the 'do no harm' approach. The 'do no harm' approach requires that humanitarian actors take steps to ensure that the assistance they provide does not make a situation worse. It has become a cornerstone of humanitarian assistance and development, as well as peacekeeping.³³

Peacekeeping missions are often mandated to play a role in mine action activities³⁴ as part of a broader set of actions that peacekeeping troops carry out with a view to supporting long-term recovery or post-conflict peacebuilding. The Department of Peacekeeping Operations ('DPKO'), in collaboration with UNEP, started to address environmental concerns and developed an environmental policy in 2009—*Environmental Policy for UN Field Missions*. Accordingly, peacekeeping troops have to abide by a series of minimum operating standards for the protection of the environment, acknowledging the fact that dealing with natural resources as part of post-conflict peacebuilding is of paramount importance. In accordance with this policy, the DPKO is now responsible for ensuring that all missions integrate environmental

³¹ Third Conference of the High Contracting Parties to Protocol V on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Final Document, UN Doc. CCW/P.V/CONF/2009/9, 23 November 2009, para. 36; Fourth Conference of the High Contracting Parties to Protocol V on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Final Document, UN Doc. CCW/P.V/CONF/2010/11, 14 February 2011, para. 31.

³² Draft principle as proposed by the Special Rapporteur reads as follows: '1. Without delay after the cessation of active hostilities, all minefields, mined areas, mines, booby-traps, explosive ordnance and other devices shall be cleared, removed, destroyed or maintained in accordance with obligations under international law; 2. At all times necessary, the parties shall endeavour to reach agreement, both among themselves and, where appropriate, with other States and with international organizations, on the provision of technical and material assistance, including, in appropriate circumstances, the undertaking of joint operations necessary to fulfil such responsibilities.' ILC, Report of the International Law Commission, Sixty-eighth Session (2 May–10 June and 4 July–12 August 2016), UN Doc. A/71/10, footnote 1306.

³³ Mary B. Anderson, *Do No Harm: How Aid Can Support Peace—or War* (Boulder, CO: Lynne Rienner Publishers, 1999).

³⁴ UN Security Council Resolution 1925, UN Doc. S/RES/1925, 28 May 2010, para. 12s.

considerations and respect certain minimum standards. As for mine action activities carried out directly by peacekeepers, the policy highlights the challenges related to the disposal of stocks of chemicals, explosives, and ammunition. These have to be addressed in compliance with international legislation, such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The 'do no harm' approach in general finds therefore its concrete application in peacekeeping missions and is also specifically referred to in other policy and good practice handbooks for peacekeepers.³⁵

The normative framework in mine action comprises a series of norms and standards, in particular the International Mine Action Standards ('IMAS'), which are even enshrined in UN Security Council resolutions mandating peacekeeping missions. The mandate of the United Nations Mission in South Sudan ('UNMISS'), for example, requires the mission to 'support the government of South Sudan in conducting demining activities in accordance with IMAS'.³⁶

The sector-wide IMAS are not legally binding obligations. However, they do provide guidance for the industry and translate the principles included in IHL treaties, basic human rights, and clearance requirements into practical and detailed norms. IMAS are developed, reviewed, and adopted by a technical committee representing the whole mine action sector. They have become the relevant standards implemented by mine action organizations, and constitute the basis of national mine action standards. IMAS 10.70, the specific standard on environmental protection, acknowledges that

national authorities and demining organizations not only have a responsibility to ensure that demining operations are carried out in a safe, effective and efficient manner, but also in a manner that minimizes the impact on the environment. The aim should be to leave the environment in a state that is similar to, or where possible better than, before demining operations commenced.

The standard thus includes a powerful statement of the 'do no harm' approach in relation to environmental considerations.

It requires, for instance, that 'demining operations should be carried out without damaging property or infrastructure, in a manner that minimizes the impact on the environment', and that 'planning for demining operations shall take into account the effects of those operations, and any supporting activities, on the environment, and any possible damage to property or infrastructure, or harm to personnel'. It further details the responsibilities and obligations of national authorities and mine action organizations. Finally, other technical IMAS include references to environmental considerations, such as IMAS 11.10 on the destruction of stockpiled anti-personnel mines and IMAS 11.20 on open burning and open detonation stockpile destruction operations.

In its work, the mine action sector also draws on other relevant norms, such as the International Ammunition Technical Guidelines ('IATG') and the standards of the International Organization for Standardization ('ISO'), a network of national standards bodies. Drafted by a technical panel consisting of experts from the UN, international

³⁵ UN DPKO and UN DFS, *Civil Affairs Handbook* (United Nations, 2012), 70–1.

³⁶ UN Security Council Resolution 1996, UN Doc. S/RES/1996, 8 July 2011, para. 3c.

organizations, NGOs, and states, the IATG are used at the logistical level and cover technical requirements for safe, effective, and efficient storage, processing, transport, and disposal of ammunition. IATG 10.10 on Demilitarization and Destruction of Conventional Ammunition, for example, makes reference to IEL and environmental considerations. Finally, ISO standards contain regulations addressing the environment. They are generally adopted by a wide range of countries as part of their own regulatory frameworks. Some of the general requirements relevant to stockpile management and destruction of conventional ammunition have a relevant ISO standard. Furthermore, ISO 14000 series standards, on environmental management, set specific standards and guidelines on the protection of the environment that are an additional reference for mine action organizations.

In summary, it can be observed that *jus post bellum* contains few provisions addressing the environmental impact of mines and other remnants of conflict and mine action in international treaties. However, this does not imply that regulation of these matters is non-existent, as a more praxis-oriented body of norms and standards is emerging as a response to the evolution of the mine action sector. The ability of soft law to adjust constantly to new practices hence fills the gap which exists in hard law. This allows the practical implementation of the 'do no harm' approach, thus ensuring that environmental protection is duly taken into account. Mine action therefore emphasizes the importance of the dual role of hard law and soft law provisions for an adequate holistic *jus post bellum* framework.

16.3 Environmental Impact of Remnants of Conflict on Land

During armed conflict, belligerents' rights to choose methods or means of warfare are limited.³⁷ The principles surrounding the proportionality of an attack during hostilities is a related key provision of *jus in bello* enshrined in the Geneva Conventions.³⁸ However, explosive items such as mines and cluster munitions not only cause unacceptable harm to civilians during armed conflict, but can do so long after the conflict has ended. As a legacy of conflict, lying in the ground, they seriously affect the environment in various ways in post-conflict situations.³⁹ Given that the natural environment constitutes the basis for livelihoods, the damage caused by remnants of conflict hampers sustainable socio-economic development.⁴⁰

³⁷ Protocol additional to the Geneva Conventions of 12 August 1949, adopted 8 June 1977, entered into force 7 December 1978, 1125 UNTS 3 Art. 35.

³⁸ *ibid.* Art. 51.

³⁹ For the positive impact of contamination on the environment, see Asmeret A. Berhe, 'The Contribution Of Landmines To Land Degradation' (2007) 18 Land Degradation & Development 1, 7; Roberts and Williams (n 7) 93.

⁴⁰ Richard Matthew, Mark Halle, and Jason Switzer (eds.), *Conserving The Peace: Resources, Livelihoods And Security* (Winnipeg, Man.: International Institute for Sustainable Development, 2002), 16; Bruce Gray, 'Landmines: The Most Toxic and Widespread Pollution Facing Mankind' (Colloquium-Towards Ottawa and beyond: de-mining the region, University of Sydney, 14-17 July 1997), at <<http://www.ecn.ab.ca/~puppydog/bgray.htm>> accessed 28 August 2015; Carl E. Bruch, David Jensen, Mikiyasu Nakayama, Jon Unruh, Rebecca Gruby, and Ross Wolfarth, 'Post-Conflict Peace Building And Natural Resources' (2008) 19 Yearbook of International Environmental Law 58; GICHD and UNDP, *Leaving No One Behind. Mine Action and the Sustainable Development Goals* (Geneva: GICHD, 2017).

The potential impact of remnants of conflict and mine clearance under water as well as the destruction of stockpiles and ammunition has been demonstrated and would warrant consideration. It should indeed be noted that one of the draft principles of the ILC's Special Rapporteur on the protection of the environment in relation to armed conflicts addresses remnants at sea.⁴¹ For the purpose of this chapter, however, emphasis is put on contamination on soil and mine clearance on land due to their particularly significant environmental impact.

16.3.1 Access denial

The main consequence of contamination by remnants of conflict is to deprive local communities of access to land and natural resources. Valuable pasture can become inaccessible. This can, for instance, be illustrated by the impact of the cluster bomb air-strikes in Lebanon in 2006. Yet, these findings are also valid more generally. After the conflict with Israel in 2006, the Food and Agriculture Organization of the UN ('FAO') estimated that up to 26 per cent of the cultivated land was contaminated in southern Lebanon.⁴² This can potentially lead to overgrazing in accessible areas and subsequent habitat degradation. Land scarcity resulting from contamination has the potential to generate new socio-economic dynamics and set new cycles of poverty and environmental degradation in motion. Faced with growing livelihood pressures, local populations are likely to resort to unsustainable practices and intensify exploitation of the diminished areas available in order to meet short-term needs.⁴³

This finding is corroborated by the phenomenon of deforestation, which generally accelerates as an indirect consequence of contamination. Where arable land has been mined, selling forest and fruit trees gives way to immediate pressures to simply survive. Deforestation can, in turn, affect marshlands and water tables, which has an impact on fish and other wildlife. Thus, remnants of conflict can set in motion a chain of events leading to environmental harm in the form of habitat degradation or deforestation, possibly affecting entire species populations and altering food chains.⁴⁴

16.3.2 Soil degradation and loss of productivity

The terrestrial environment can be seriously affected when remnants of conflict explode. Exploding munitions degrade land by damaging and disrupting the soil structure that, in turn, exacerbates erosion and leads to increased sediment load in the

⁴¹ Draft principle as proposed by the Special Rapporteur reads as follows: '1. States and international organizations shall cooperate to ensure that remnants of war do not constitute a danger to the environment, public health or the safety of seafarers; 2. To this end States and organizations shall endeavour to survey maritime areas and make the information freely available.' ILC (n 32) footnote 1306.

⁴² FAO, *Lebanon: Damage and Early Recovery Needs Assessment of Agriculture, Fisheries and Forestry* (FAO, 2006), 10.

⁴³ UNEP (n 7) 155; Roberts and Williams (n 7) 11.

⁴⁴ Claudio Torres-Nachón, 'The Environmental Impacts of Landmines' in Kenneth Rutherford *et al.* (eds), *Landmines and Human Security. International Politics and War's Hidden Legacy* (Albany, NY: State University of New York Press, 2004), 197; Berhe (n 39) 12–13; Roberts and Williams (n 7) 11, 93, 197, 247.

drainage system.⁴⁵ Topsoil damage also has sustained impacts on moisture availability, vulnerability to water flows, erodibility, and productivity.⁴⁶ Soil productivity dramatically decreases if land is contaminated, as witnessed in Vietnam with a reduction of 50 per cent in rice production per hectare of affected land.⁴⁷

16.3.3 Chemical contamination

Besides its physical hazard as remnant of conflict, ammunition can cause chemical contamination, both when it functions or if it fails to function. When it explodes ammunition can produce contamination due to gases and ash resulting from the chemical reaction. Chemical contamination of a different kind also occurs when ammunition fails to function as the explosive contents undergo chemical breakdown over time, whether loose due to the impact or still in the ammunition casing, and at a rate influenced by the surrounding conditions. Any ammunition body fragments remaining in the environment for extended periods are subject to corrosion and weathering, subsequently releasing various heavy metals such as chromium, zinc, iron, and copper into the soil. In agricultural regions in particular these heavy metals can easily penetrate the soil, reach the water table, and pass into the human food chain.⁴⁸

16.4 Environmental Impact of Mine Clearance on Land

Mine action includes activities aimed at reducing the social, economic, and environmental impact of mines, cluster munitions, and other ERW;⁴⁹ it therefore addresses the different impacts explained above. In this way, mine action does a lot of 'good' by restoring livelihoods and contributing to peacebuilding. However, by its very nature, mine action involves direct interaction with the environment, through physical activities such as clearance, and indirect interaction, for instance through the effect it has on land newly released to beneficiaries.

Mine action activities can have an impact on the environment similar to that of other humanitarian operations. The mere presence of demining personnel on the ground and their temporary field camps might lead to over-exploitation of local resources such as water, wood, or food, and produce waste which, if not properly managed, can result in environmental degradation persisting long after the camp has left.

Clearance can be undertaken using a variety of methods and tools, each of which has its own characteristics and advantages. Many factors influence the choice of method in a given working environment. Whereas the choice of the correct methodology and

⁴⁵ Jim Monan, *Landmines and Underdevelopment: A Case Study of Quang Tri Province, Central Vietnam* (Kowloon, Hong Kong: Oxfam Hong Kong, 1995), 13; Gray (n 40) 5.

⁴⁶ Berhe (n 39) 8; UNEP, *A Rapid Assessment of the Impacts of the Iraq-Kuwait Conflict on Terrestrial Ecosystems. Part II: Kuwait* (UNEP, 1991); Rafaat Misak and Samira Omar, 'Environmental Damages from Minefields' (2008) 11(2) *Journal of Mine Action* 40, 40.

⁴⁷ Monan (n 45) 13.

⁴⁸ Volodymyr Kuznyetsov, 'Some Aspects of Environmental Interactions Related to UXO' (Unexploded Ordnance Detection and Mitigation Conference, II Ciocco, 20 July–2 August 2008).

⁴⁹ UNMAS, *IMAS 04.10. Glossary of Mine Action Terms, Definitions and Abbreviations* (UNMAS, 2nd edn, 2003), Art. 3.176.

technical tool is often guided by cost-efficiency considerations, the potential impact on the environment needs to be taken into consideration as well. The so-called mine action 'toolbox' to clear land is made of three different assets: animal detection systems ('ADS'), manual clearance, and mechanical systems. These assets can be used in conjunction with one another depending on the specific requirements of a task.

Dogs and rats are the most commonly used mine detection animals because of their ability to detect specific vapours associated with the explosive or other components of mines and munitions. ADS cannot replace deminers, but they are powerful tools when used in combination with manual and mechanical systems. Once an explosive item has been detected, it has to be removed manually or mechanically. The use of animals, therefore, does not avoid per se the potential environmental impact of other clearance tools.

When demining manually, only locations where the metal detector has indicated metal contamination will be subject to manual digging. Fertile topsoil has to be removed, soil and root systems are likely to be disturbed and lower vegetation may have to be cut in order to get access to a suspected or confirmed contaminated area. Erosion can result from this process. Manual clearance remains the preferred tool, especially in areas with dense vegetation where a primary environmental concern is to conserve as much vegetation as possible. Nonetheless, it is time-consuming and strenuous; consequently, mechanical systems can be used to speed up this process.

Whereas machines have considerable potential for increasing efficiency, they can have a greater impact on the soil and the ecosystem. A variety of mechanical systems is used (tiller systems, flails, or converted plant machinery) to process soil in the search for remnants of conflict. Inevitably, this disturbs and causes possible damage to soil conditions. Soil might often be moved to another location where it will be checked for explosive items or evidence of such. When using flails and tillers, the soil passes through those systems, even though it will remain in the same location after being processed. The consequences of such practice could take the form of various types of erosion, deforestation, changes to soil composition, and reduced soil fertility.

Mechanical systems remove or destroy vegetative cover which in turn can lead to increased water runoff and wind erosion. Tillage increases wind erosion rates by dehydrating the soil and breaking it up into smaller particles that can be picked up by the wind. Deforestation is closely linked to erosion. Trees may need to be taken out, causing the removal of litter that plays a crucial role in infiltration and protects soil from erosion and raindrop impacts. Litter also provides organic matter that is important to the stability of the soil structure.⁵⁰ Less fertile soils are naturally associated with losses in agricultural production.

Soil degradation occurs when its quality decreases due to changes in its depth, or in its physical or chemical properties. During mechanical clearance, the organic layer is generally processed as well as surface soil, and the physical or chemical properties of the soil might be changed or damaged. This can again affect soil fertility, rooting potential, and water-holding capacity.⁵¹ Not only can mechanical mine clearance result in

⁵⁰ Berhe (n 39) 8.

⁵¹ GICHD, *A Handbook of Mechanical Demining* (Geneva: GICHD, 2009), 133; Berhe (n 39) 8.

soil erosion and lead to other environmental damage, but there is also a risk of chemical pollution to soil and water. Contamination might be caused by detonations or destruction of explosive items in the ground or by leaking hydraulic fluids and fuel which can occur when refuelling demining machines.

16.5 Measures to Ensure Mine Clearance on Land Does No Harm to the Environment

In order not to undermine the positive contribution of mine action to people, livelihoods, and peacebuilding initiatives, and so as to address the potential impact of clearance operations such as those outlined above, mine action organizations, much like other humanitarian stakeholders, must ensure they 'do no harm' to the environment or livelihoods, and avoid increasing the long-term vulnerability of affected communities. At an operational level, measures can be taken to avoid or mitigate the potentially negative impact of mine clearance on the environment. On the basis of international legal obligations, IMAS complement the normative framework relevant to the mine action sector. Finally, the sector has also developed a set of operational good practice.

The first way of mitigating the environmental impact of clearance is to limit the use of machines to a strict minimum. Backed by IMAS 07.11, the mine action sector has developed the so-called 'land release' approach. This consists of a process of survey and clearance activities aimed at providing effective, efficient, and reliable information about which land requires attention, which does not, and how best to deploy precious technical assets. Land release promotes a system of escalating survey activities and only resorts to full clearance as a last option. With the land release approach, clearance thus only takes place where there is confirmed contamination. Even though the IMAS on land release does not particularly refer to environmental considerations, it constitutes an effective measure to avoid the potential negative consequences of clearance activities.

Based on the ISO 14000 standards, the mine action sector has developed specific standards for environmental protection. These do not only address air, water, and soil pollution or land use, but also tackle the reduction and disposal of waste and the reduction of energy consumption.⁵² The sector as a whole has complemented the normative framework through good practice at the operational level, and the Geneva International Centre for Humanitarian Demining's ('GICHD') *Handbook of Mechanical Demining* is a reference tool in this regard.

One measure that can be taken to reduce the harm and negative impacts from clearance operations is to reseed and replant areas with indigenous grasses immediately after operations. Another is to return processed soil layers to affected sites in the correct order so that the fertile top soil is once again the top layer. In the same vein, clearance should be scheduled so that the site can be cultivated as soon as possible after operations to ensure regrowth of a root system, which will, at least in part,

⁵² UNMAS, *IMAS 10.70. Safety & Occupational Health—Protection of the Environment* (UNMAS, 2007).

prevent erosion.⁵³ In general, the planning of a mechanical clearance operation should include a comprehensive environmental assessment as well as an environmental management process with a view to discussing the risks and control measures with the local communities.⁵⁴

IMAS also provide guidance on precautions to be taken with regards to possible chemical pollution. Organizations should take all reasonable care when selecting refuelling sites, for example, so as to ensure that diesel spillage cannot contaminate water sources. Furthermore, they should have clear regulations for the replacement of fuel and lubricants, and the measures to be taken with waste products.⁵⁵

16.6 Challenges and Ways to Address Liability for Environmental Degradation and Damage to Individuals from Remnants of Conflict and their Removal

During conflict, but especially in its aftermath, contamination from remnants of conflict can cause damage to the environment, individuals, and property as outlined in depth above. Thus, liability for such damage is very relevant as is the right for compensation for damaged parties and victims. Post-war justice is indeed one of the major principles advanced in *jus post bellum*.⁵⁶ Likewise, with the formalization of the land release process, liability has become increasingly important during the removal of remnants of conflict. The risk that even in a cleared area an explosive item could have been missed during clearance operations raises the question of who is liable for the damage such an item could or does cause.⁵⁷ This section will review liability issues in connection with damage to the environment, but more importantly to individuals, borne by states, mine action organizations, and producers of explosive items. It will analyse general liability regimes and explore to which extent they apply, by extension, to liability for contamination and mine clearance operations. Special focus will be dedicated to ways to engage responsibility of armed non-state actors in NIAC due to their unique role in such conflicts and the relevance of mine action in these contexts.

16.6.1 Liability for post-conflict contamination

Liability for contamination by remnants of conflict is a complex issue. Examples show that it has been a recurring and topical aspect of post-conflict recovery. In the case of contamination from unexploded ordnance resulting from training exercises by the British Army in Kenya, a number of Kenyan victims, for instance, filed suit with the High Court in London in 2002. In an out-of-court settlement, they received

⁵³ *ibid.* Art. 6.1; GICHD (n 51) 97, 129.

⁵⁴ Ursign Hofmann and Pascal Rapillard, “Do no harm” in Mine Action: Why the Environment Matters’ (2015) 19(1) *The Journal of ERW and Mine Action* 1, 7.

⁵⁵ UNMAS, *IMAS 09.50. Mechanical Demining* (UNMAS, 2006), Art 10.1; UNMAS (n 52).

⁵⁶ Brian Orend, ‘Jus Post Bellum: A Just War Theory Perspective’ in Stahn and Kleffner (n 22) 31–52.

⁵⁷ GICHD, *A Guide to Liability and Insurance in Mine Action* (Geneva: GICHD, 2011), 8–9.

a compensation payment of GBP 4.5 million, even though the British government did not accept full liability.⁵⁸

As noted in the study on the rights for mine victims by Handicap International, when establishing a right to reparation or compensation, this requires a breach of existing law. In all legal systems, actors agree multiple obligations consisting either of actions or omissions. If such obligations are not acted upon, the actor's responsibility or liability may be engaged. States can have differentiated kinds of responsibility or liability: fault-based liability where a fault is engaged, and strict liability without a need to prove fault. Claims against states for using mines and cluster munitions could be based on the responsibility of states for wrongful acts.⁵⁹ As defined by the non-binding Draft Articles on Responsibility of States for Internationally Wrongful Acts, 'an internationally wrongful act of a State [is] when conduct consisting of an action or omission (a) is attributable to the State under international law; and (b) constitutes a breach of an international obligation of the State.'⁶⁰ As a result, non-compliance with an international obligation prohibiting the use of mines or cluster munitions entails the responsibility of the state. In the case of the general prohibition of anti-personnel mines and cluster munitions, only states, but not individuals, can claim a wrongful act committed by another state. Such mechanism was built in the APMBC and CCM through which states parties can lodge a complaint for violation of the convention by a state party.⁶¹ However, this procedure has never been activated thus far.

In relation to the environment in times of armed conflict, Additional Protocol I to the Geneva Conventions is applicable when it comes to consider responsibility for and redress from damage to the environment posed by remnants of conflict. Indeed, if mines and cluster munitions create 'widespread, long-term and severe damage to the natural environment' (Art. 35(3)) and even more so 'are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population' (Art. 55(1)), then it might be argued that such means of warfare go beyond the tolerable limits established by IHL. In its study, Handicap International concludes that, having a substantive destructive impact on the environment, mines may well exceed these limits and provisions contained in Additional Protocol I could prohibit the use of mines, and arguably by extension cluster munitions, because of their damage to the environment.⁶²

The APMBC and CCM do not address the issue of liability and compensation, neither for environmental damage nor for damage to property and individuals. What both conventions stipulate, however, is the responsibility of the state, among others, (i) to clear all anti-personnel mines and cluster munitions respectively on the territory under its jurisdiction or control within a given period of time⁶³ and (ii) to provide assistance

⁵⁸ 'Maasai and Samburu Win Compensation from Britain for Landmine Victims' (*Cultural Survival*, July 2008), at <<https://www.culturalsurvival.org/news/maasai-and-samburu-win-compensation-britain-landmine-victims>> accessed 28 August 2015.

⁵⁹ Handicap International (n 14) 13–14.

⁶⁰ ILC, Report of the International Law Commission, Fifty-third Session (23 April–1 June and 2 July–10 August 2001), UN Doc. A/56/10.

⁶¹ APMBC (n 28) Art. 8; CCM (n 28) Art. 8.

⁶³ APMBC (n 28) Art. 5; CCM (n 28) Art. 4.

⁶² Handicap International (n 14) 20.

to victims.⁶⁴ Both conventions therefore rely on the duty of care by the state for its citizens rather than on liability and right for victims to claim for redress from damage from the state.⁶⁵ Interestingly, some scholars argue that *jus post bellum* should increasingly consider a duty of care.⁶⁶ This new normative grounding will be elaborated more in depth below.

From a *jus post bellum* perspective, it is warranted to note that the affected state bears the responsibility for its contamination (of mines which it may not have emplaced or cluster munitions which it may not have used). Thus, the international community has, *stricto sensu*, no duty to rebuild or to address damages in post-conflict setting: 'You broke it, you own it' does not apply.⁶⁷ Should decision-makers have to think about *post bellum* responsibilities, this may impact *jus ad bellum* considerations.⁶⁸ This situation is not met by the APMBC and CCM. Curiously though, both conventions still take into account a certain degree of international duty to rebuild by encouraging states in a position to do so to assist affected states. However, as mentioned earlier, these instruments of international law remain silent in relation to the environmental impact of contamination and do not address related questions of liability for such damage.

Breaches to IEL can also be a source for determining liability for damage to the environment from contamination from remnants of conflict. In general terms, 'the breach of an obligation of environmental protection established under international law engages responsibility of the State [including strict responsibility of the State ... in case of ultra-hazardous activities], entailing as a consequence the obligation to reestablish the original position [e.g. through mine clearance] or to pay compensation.'⁶⁹ More specifically, international environmental law creates obligations for states parties to relevant IEL conventions, including on the responsibility for damages caused to the environment. Consequently, if a link can be established between the damage to the environment caused by remnants of conflict and the effects of other hazardous and noxious substances regulated in IEL conventions, the latter could be applied by extension to the use of mines and cluster munitions and thus, establish responsibility for and redress from environmental damage. Since remnants of conflict have noxious effects on the environment, victims could therefore invoke breaches by states to their obligations under IEL they are bound by and claim reparations on this ground.⁷⁰

A third line of argumentation dealing with determining liability of damage caused by contamination regards the violation of fundamental human rights. Indeed, it is

⁶⁴ APMBC (n 28) Art. 6; CCM (n 28) Arts. 5–6.

⁶⁵ Michael Polkinghorne and James Cockayne, 'Dealing with the Risks and Responsibilities of Landmines and their Clearance' (2001) 25 *Fordham International Law Journal* 1187, 1194–5.

⁶⁶ Carsten Stahn, 'Jus Post Bellum Symposium: Jus Post Bellum and the Ethics of Care' (*Opinio Juris*, 9 May 2014), at <<http://opiniojuris.org/2014/05/09/jus-post-bellum-symposium-jus-post-bellum-ethics-care>> accessed 28 August 2015.

⁶⁷ On different approaches to the responsibility to rebuild in *jus post bellum* see for instance Garry J. Bass, 'Jus Post Bellum' (2004) 32 *Philosophy & Public Affairs* 384–412; James Pattison, 'Jus Post Bellum and the Responsibility to Rebuild' (2013) 45 *British Journal of Political Science* 635–61.

⁶⁸ Larry Mary, *After War Ends. A Philosophical Perspective* (Cambridge: Cambridge University Press, 2012), 168–9.

⁶⁹ International Law Institute, *Responsibility and Liability under International Law for Environmental Damage* (1997), Arts. 1 and 4.

⁷⁰ Handicap International (n 14) 18–20.

recognized that mines or cluster munitions laid in or around populated areas and agricultural land pose a substantial risk to the health of the affected population and can very directly affect the exercise of a number of political, economic, social, civil, and cultural rights. These rights are protected by the Universal Declaration of Human Rights and/or the First Optional Protocol to the International Covenant on Civil and Political Rights ('ICCPR'). As a result, victims, including those people whose land has become unusable due to contamination, can invoke, in principle, the violation of fundamental rights and claim for compensation for the harm they have experienced.

Fourthly, liability of producers of mines or cluster munitions may also be invoked in a claim for compensation, although rather for harm to individuals than for damage to the environment. Assuming that manufacturers produce such devices for profit, they are in no way different from producers of other articles. According to product liability theories in US law, it could be argued that producers were negligent and breached their duty of care, if they failed to reduce the risk of injury to civilians by not adapting the device's design to include available safety features (e.g. self-destruction or self-neutralization mechanisms). Such argument would obviously be morally problematic 'justifying' the potential use of so-called smart mines. It seems, however, that these safety mechanisms have existed since the 1960s. Therefore, producers could be held liable for injuries from mines produced thereafter. However, such liability implies that the victim must have proof of both general and specific causation which might be particularly challenging. Because the mine causing the injury generally explodes into pieces, it becomes nearly impossible for the plaintiff to determine the particular producer of the device.⁷¹

Also strict liability of the producer, might, in theory, be considered. Both defective product liability and liability for abnormally dangerous activity apply. Public policy interests necessary to determine defective product liability (such as the costs of injury to the victim in comparison to the ability to insure the risk of such injury by the producer) are applicable to mines and cluster munitions. Similarly, the production of such devices might be defined as an abnormally dangerous activity in which case the producer would be liable for all injuries resulting therefrom. The producers of mines and cluster munitions have indeed created an enormous risk of civilian injury or even death, while profiting from creating such risk. With regards to invoking strict liability, the challenge arises that many manufacturers only produce component parts of the device. This makes the establishment of liability difficult. More generally, mine and cluster munitions are produced for the military purpose of injuring people, or threatening to do so. Producers may act as the government contract defence with sovereign immunity potentially being extended to them.⁷² As a consequence of the above and due to further jurisdictional, procedural, and practical difficulties, there does not seem to be any indication that a lawsuit invoking the liability of a producer has yet been filed.

⁷¹ Elke Schwager, *Ius Bello Durante et Bello Confecto. Darstellung am Beispiel von Entschädigungsansprüchen der Opfer von Antipersonenminen* (Berlin: Duncker & Humblot, 2008), 254; Richard R. Murray and Kelley L. Fabian, 'Compensating the World's Landmine Victims: Legal Liability and Anti-Personnel Landmine Producers' (2003) 33 *Seton Hall Law Review* 303, 336–40.

⁷² Murray and Fabian (n 71) 342–3, 367.

16.6.2 Responsibilities of armed non-state actors in non-international conflicts

In the following section, we will explore how responsibility of armed non-state actors could be engaged in general. The distinction between international armed conflict and NIAC has blurred over time. Nowadays, not only states, but also armed groups are considered to be holders of rights and obligations in internal conflict situations.⁷³ In fact, it has now become uncontroversial that armed groups are bound by customary IHL.⁷⁴ In addition, some treaties such as the CCW have been amended to also regulate NIAC.⁷⁵

Common Article 3 to the four Geneva Conventions, whose rules are part of customary IHL, for instance, prohibits ‘violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture’ with respect to persons taking no active part in the hostilities. It can be argued that the use of explosive devices such as mines is a form of violence to the life of a person. In addition to this provision, the rules regulating the conduct of hostilities such as the principles of distinction and proportionality are also part of customary IHL applicable to NIAC and hence to armed groups.⁷⁶ A major drawback is, however, that IHL can only apply if the threshold conditions (protracted armed conflict and certain organizational capacity of the armed group) are fulfilled.⁷⁷

In addition to IHL, the question arises whether human rights law may apply. Although it is difficult to establish direct legal human rights obligations of such groups in principle—with an exception in instances where they exercise elements of government functions with de facto authority over a population—there seems to be a growing tendency to hold those groups accountable for human rights violations committed in the course of armed conflicts, in particular in relation to *jus cogens*.⁷⁸

Consequently, by using mines or cluster munitions, armed groups are likely to violate customary IHL principles such as distinction and proportionality, or the prohibition of violence to life and person. Armed groups also seem to be bound by the relevant provisions regarding the protection of the environment including rule 45 prohibiting the use of methods or means of warfare that are intended or expected to cause widespread, long-term, and severe damage to the environment.⁷⁹ Analysis was offered above on the extent to which this environmental provision could apply to the use of mines.

Jus post bellum might provide an interesting ethics of care approach to responsibility, particularly relevant in the context of non-state actors. Traditionally, the ethics-based approach has mainly focused on the wrongdoing of the agent in relation to

⁷³ Kristen Boon, ‘The Application of Jus Post Bellum in Non-International Armed Conflict’ in Stahn, Easterday, and Iverson (n 21) 263–4.

⁷⁴ Annyssa Bellal, Gilles Giacca, and Stuart Casey-Maslen, ‘International Law And Armed Non-State Actors in Afghanistan’ (2011) 93 *International Review of the Red Cross* 47, 56.

⁷⁵ Andrew Clapham, *The Rights and Responsibilities of Armed Non-State Actors: The Legal Landscape & Issues Surrounding Engagement*, at <<http://ssrn.com/abstract=1569636>> accessed 28 August 2015.

⁷⁶ Bellal, Giacca, and Casey-Maslen (n 74) 62.

⁷⁷ William A. Schabas, ‘Punishment of Non-State Actors in Non-International Armed Conflict’ (2002) 26 *Fordham International Law Journal* 907, 915.

⁷⁸ Bellal, Giacca, and Casey-Maslen (n 74) 67–73.

⁷⁹ Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law. Volume I: Rules* (Cambridge; New York: Cambridge University Press, 2005), 151.

responsibility such as in the context of sovereignty as responsibility. The shortcomings of such an agent-focused approach might be overcome by the concept of ethics of care. It indeed shifts emphasis from the agent to the 'other', those impacted by the intervention, while looking at empathy and concern.⁸⁰

Indeed, the notion of care underpins existing humanitarian norms such as the precautionary principle. The regime governing the protection of the environment, for instance, comprises a duty or, for some scholars, strict liability to remedy environmental damage independently from respect of *jus ad bellum* and *jus in bello*.⁸¹ Also many peacebuilding activities rely on the notion of care. Mine action is a case in point in this *jus post bellum* attempt to invoke an ethics of care to armed groups. Through a deed of commitment, the NGO Geneva Call allows them to abide by IHL norms to ban anti-personnel mines and to remove the mines they have emplaced. Such regulatory instruments can be an important contribution to framing the conduct of armed groups in terms of responsibility through ethics of care. Even more critical scholars recognize that care ethics can offer guidelines for ethical forms of relations among individuals, groups, and nations.⁸²

Explicit recognition of specific obligations by such groups as in the case of Geneva Calls' Deed of Commitment may change the debate about the groups' responsibility under international law.⁸³ Some scholars also highlight the potential advantages of engaging non-states actors in law-making. This would increase the sense of a norm's ownership by non-state actors. The Deed of Commitment in mine action has reportedly changed groups' behaviour with spillover effects on other groups, but also created the conditions for states to sign the APMBC, for instance in Sudan.⁸⁴ What remains to be scrutinized in further research is the question to which extent non-state actors can be held liable and how this liability may be enforced. Scholars examining individual liability for international crimes offer some inspiring views on the broader issue of non-state actors in NIAC.⁸⁵

16.6.3 Enforcing state liability for incidents due to contamination

After having reviewed the various ways to establish liability stemming from post-conflict contamination, this following section will scrutinize how such liability can be enforced at international and domestic levels.

The only case of inter-state claims for compensation on the ground of environmental damage due to contamination from remnants of conflict recorded thus far are the compensations for the environmental impact from the invasion and occupation of Iraq granted to Kuwait and Kuwaiti individuals by the UNCC. Indeed, Security Council

⁸⁰ Stahn (n 66).

⁸¹ Douglas Lackey, 'Postwar Environmental Damage: A Study in *Jus Post Bellum*' in Larry Mary and Zachary Hoskins (eds.), *International Criminal Law and Philosophy* (New York: Cambridge University Press, 2010), 144.

⁸² Sigal Ben-Porath, 'Care Ethics and Dependence—Rethinking *Jus Post Bellum*' (2008) 23 *Hypatia* 61, 65.

⁸³ Clapham (n 75) 34.

⁸⁴ Anthea Roberts and Sandesh Sivakumaran, 'Lawmaking by Nonstate Actors: Engaging Armed Groups in the Creation of International Law' (2012) 37 *Yale Journal of International Law* 107, 126–31.

⁸⁵ Schabas (n 77) 907–33.

resolution 687 states that ‘Iraq ... is liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq’s unlawful invasion and occupation of Kuwait.’⁸⁶ Therefore, and bearing in mind the unprecedented damage to the environment, it was possible to address environmental claims. The UNCC⁸⁷ received in total 2.69 million claims over approximately US\$ 352.5 billion of which 1.5 million were awarded with a total of US\$ 52.4 billion. About US\$ 5.2 billion were awarded to F4 claims for damage to the environment.⁸⁸

In recognition of the need for large-scale environmental remediation and restoration, the UNCC awarded about US\$ 3 billion to the State of Kuwait for six claims for this purpose. Four claims included UXO clearance and survey activities. Nonetheless, compensation for environmental damage under the mandate of the UNCC has a particular legal background, given that it is linked directly to a Security Council resolution. No liability for environmental damage was to be proven.⁸⁹ Iraq violating the *jus ad bellum*, a breach to the *jus in bello* was generally not seen as required to claim for redress.⁹⁰ To date, the UNCC’s compensations are a rather standalone case in which liability for damage to the environment due to remnants of conflict, especially UXO, has been established and compensated.

Physical damage to persons and property is the most visible and frequent impact of contamination from remnants of conflict and the evidence base for liability, and the inter-state redress resulting from it, has been more considered and documented than liability for environmental damage. In fact, the UNCC did not only file claims for the latter, but, under D claims (claims for damages above US\$ 100,000), also for damage to individuals caused by mines and ERW. Being an inter-state redress mechanism, the claims by individuals were submitted by their governments. As mentioned above, it is important to bear in mind that compensation is not awarded because of the use of mines, but more generally on the basis of the act of aggression by Iraq.

The International Court of Justice (‘ICJ’) provides another means for enforcing liability for and redress from damage to individuals and property at inter-state level. Although it lacks power of compulsion, its rulings may be considered as a source of law. Whereas there has not been any ruling yet on the liability for damage caused by landmines, the Court pronounced itself on at least two cases involving naval mines.⁹¹ In the first case, the ICJ ruled that Albania was responsible, under international law, for the damage of two British warships and the killing of staff. Indeed, Albania omitted to inform the crew about the existence of unanchored automatic submarine mines (although considered to be aware thereof), therefore violating ‘elementary considerations of humanity, the principle of the freedom of maritime communication, and every State’s obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States.’⁹² In the second case, the ICJ ruled that the United States, when

⁸⁶ UN Security Council Resolution 687, UN Doc. S/RES/687, 8 April 1991, para. 16.

⁸⁷ See chapter 14 in this volume.

⁸⁸ UNCC, ‘Reports and Recommendations of the Panels of Commissioners’, at <<http://www.uncc.ch/reports-and-recommendations-panels-commissioners>> accessed 28 August 2015.

⁸⁹ Handicap International (n 14) 25. ⁹⁰ Schwager (n 71) 115.

⁹¹ Handicap International (n 14) 22–3.

⁹² *Corfu Channel Case (UK v. Albania)* (Merits), Judgment of 9 April 1949, ICJ Reports 1949, 22.

laying mines in Nicaraguan ports in 1984 without any public and official warning to international shipping, breached 'its obligations under international customary law not to use force against another State, not to intervene in its affairs, not to violate its sovereignty and not to interrupt peaceful maritime commerce.'⁹³

Potentially, there are also means for international direct redress. Liability for damage caused by remnants of conflict can be established and compensation paid to victims specifically when referring to a violation of human rights. For instance, should some rights have been violated, human rights courts such as the Inter-American Court of Human Rights or the European Court of Human Rights can hold states under their jurisdiction liable and rule the payment of reparation. Similarly, nationals of signatories to the ICCPR have the possibility to address claims to the Human Rights Committee for breach by their state to respect, for instance, their right to life, although successful claims would not be binding to the state. However, it does not seem that violation of fundamental human rights from contamination from mines or cluster munitions has been invoked yet to claim for redress.⁹⁴

Under national law, the issue of liability and compensation involves reasons for action by states rather than obligations per se. For instance, obligations of states who agreed to be bound by the APMBC are obligations to other states parties and not necessarily to their nationals. Redress from a state's failure to discharge its convention obligations must therefore be sought rather through inter-state mechanisms (see above). Nonetheless, a state's constitution is likely to guarantee certain rights such as the state's responsibility to protect the welfare of its citizens. Furthermore, domestic tort law can establish liability for the state as occupier of land for incidents occurring thereon. Likewise, land owners or occupiers of land may have rights against the state for incidents happening on land sold or leased by the state. Of course, states may eventually enjoy state immunity from suit or execution.⁹⁵

16.6.4 Liability during and after removal of remnants of conflict

During and after clearance operations, liability for direct environmental damage has not yet been invoked in lawsuits and neither studied in mine action. The consequence of such damage, however, often affects the physical integrity of people. As a matter of fact, liability for injuries of individuals during and especially post-clearance has been more considered.

During clearance operations, liability for accidents due to negligence, for instance a lack of adequate precautionary measures, or strict liability for performing dangerous activities even without negligence, normally falls on the mine action organization undertaking the task. It is required to use accredited assets and follow approved Standard Operating Procedures which are based on national standards. During clearance activities, the organizations are therefore liable. However, the state might sometimes also be

⁹³ *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)* (Merits), Judgment of 27 June 1986, ICJ Reports 1986, 147.

⁹⁴ *Handicap International* (n 14) 27; *Polkinghorne and Cockayne* (n 65) 1197–8.

⁹⁵ *Schwager* (n 71) 188; *Polkinghorne and Cockayne* (n 65) 1194–5.

held liable for accidents due to negligence, for instance in the form of a lack of requirements for safety measures to be taken by the mine action organization.⁹⁶

Whereas during mine clearance and survey activities, liability is less contested, this issue becomes even more relevant in the post-clearance phase when clearance has terminated and the cleared areas have been handed over to the beneficiary, normally the state. Who is liable if there is an accident on supposedly cleared land? It is recognized that even after completion of clearance, residual risk and contamination remain. Residual risk can be defined as ‘the risk remaining following the application of all reasonable effort to identify, define, and remove all presence and suspicion of mines/ERW’.⁹⁷ This may result from explosive devices being moved onto the cleared land, for instance through flooding, because they were initially located underneath the required depth for clearance or simply because they have been missed by the mine action organization. States parties to the APMBC expressly acknowledge this fact when submitting their voluntary declaration of completion of their clearance obligations under Article 5. In the past, uncertainties relating to liability for residual risk may have delayed states from efficiently meeting their international clearance obligations and led to substantive quality control and ‘over-clearance’ resulting in further—and eventually avoidable—environmental degradation.⁹⁸ This is one of the driving factors for the development and outreach of good practice in this regard.

Following soft law in the form of IMAS and good practice, mine action organizations that strictly adhere to detailed national standards and have a well implemented tasking system in place should not be liable once the land has been officially handed over. The normative framework is unambiguous, since ‘for humanitarian operations no residual risk should lay with the demining organisation after the National Mine Action Authority (‘NMAA’) has formally accepted the cleared land. The handover of the cleared land shall be the mitigation of liability point for the demining organisation.’⁹⁹ National standards, as outlined in Section 16.2.3, should be based on IMAS.

Therefore, NMAAs are strongly recommended to clarify liability issues, stipulating that mine and ERW contamination is ultimately the responsibility of the state, including general responsibility to accept accountability towards, and liability and compensation for victims, for areas which have been cleared and handed over to the national authority or local population. Authorities are also advised to clarify that a mine action organization should not bear liability for missed mines or accidents if it appears that it has followed the relevant land release standards and, thus, made all reasonable efforts to ensure that the released area was safe.¹⁰⁰ This follows the assumption that the state ultimately bears a duty of care of its citizens after clearance in the same way as it does for pre-clearance contamination.¹⁰¹

⁹⁶ GICHD (n 57) 37; Polkinghorne and Cockayne (n 65) 1201; Pehr Lodhammar, ‘Legal Aspects of the Land Release Process’ (2013) 17(1) *The Journal of ERW and Mine Action* 20, 20.

⁹⁷ UNMAS (n 49) Art. 3.249. ⁹⁸ Lodhammar (n 96) 20.

⁹⁹ UNMAS, *IMAS 08.30. Post-clearance Documentation* (UNMAS 2nd edn, 2003), Art. 4.4; UNMAS, *IMAS 07.11. Land Release* (UNMAS, 2013), Art. 11.

¹⁰⁰ UNMAS, *IMAS 07.11. Land Release* (n 99) Art. 11; GICHD (n 57) 9–10; Lodhammar (n 96) 21.

¹⁰¹ Sean Moorehouse, ‘Land Release Liability’ (2014) 18(2) *The Journal of ERW and Mine Action* 4, 6.

After handover, the easiest and most cost-effective way of dealing with liability issues is when the state assumes responsibility for the released land, including for dealing with residual risk and compensation claims by victims. Strict liability of the state avoids the often complex assessment of whether the mine action organization acted with negligence. If this occurs, it would be much easier for the state to sue the organization than if victims need to do so by themselves. Other ways of dealing with residual liability would be shared liability between states and organizations or time-limited liability of the latter alone, but they have important disadvantages, especially considering insurance. Insurance for shared liability or liability for a given period of time after clearance is likely to be expensive and may discourage organizations from carrying out activities.¹⁰²

On the other hand, the normative framework in mine action also stipulates that an organization is generally liable for damages, if the accidents stemming from missed mines or ERW were caused by wilful or criminal misconduct, gross negligence, reckless misconduct, a conscious, flagrant indifference to the rights or safety of the harmed individual, or if the organization grossly deviated from an agreed land release approach.¹⁰³ The role of the organization in such scenarios is exemplified by an accident in the then Southern Sudan in which a UN employee was harmed. Following the accident and UN investigation, the victim sued the contracted mine action organization which carried out clearance and declared the area safe. The plaintiff's main claims included, among others, negligence, professional negligence, and negligence per se. This case was settled and the UN employee compensated before the responsible court could make a judgment.¹⁰⁴

In summary, it has been demonstrated that liability for environmental damage from both contamination and clearance has not yet been considered as substantively as liability for damage to individuals and property. With regards to liability for residual contamination, the importance of the dual role of hard and soft law for a holistic *jus post bellum* framework can once more be emphasized. In fact, the mine action sector has tried to regulate itself through an industry-wide normative framework. Based on established good practice and considering the various ways of dealing with residual risk liability, strict liability of the state is generally considered to be the easiest and most cost-effective pathway.¹⁰⁵

16.7 Conclusion

Mine action provides an early entry point for positive interventions in the transition from conflict to peace. For instance, mine action, particularly clearance, fosters peace-building efforts by contributing to the social reintegration of former combatants (being employed as deminers) or the repatriation of refugees and IDPs, and offers opportunities for promoting cooperation and dialogue and building confidence.¹⁰⁶ More

¹⁰² Pehr Lodhammar (n 96) 21–2. ¹⁰³ UNMAS, *IMAS 07.11. Land Release* (n 99) Art. 11.

¹⁰⁴ *Fantham v. RONCO (2011) 1:2011cv00762*. ¹⁰⁵ Lodhammar (n 96) 22.

¹⁰⁶ Kristian Berg Harpviken and Rebecca Roberts, 'Conclusions' in Kristian Berg Harpviken and Rebecca Roberts (eds.), *Preparing the Ground for Peace. Mine Action in Support of Peacebuilding* (Oslo: PRIO, 2004), 55.

importantly in this context is the fact that by reopening access to resources and livelihoods, mine action contributes significantly both to basic safety and security and to economic revitalization—two core elements of any peacebuilding process.

Mine action can do a lot of ‘good’, but by its very nature, it involves direct and indirect interaction with the environment and thus can potentially have a negative impact on it. Clearance of remnants of conflict can affect ecosystems and can negatively impact vegetation or the composition and fertility of soil. In the past, the mine action sector’s primary focus lay particularly on developing methods and tools to conduct operations safely, efficiently, and effectively. Over more than two decades, as the sector has matured and acquired significant expertise and experience, the environmental concerns linked to mine clearance operations have received increasing attention. This is also related to the recognition in peacebuilding and mine action that environmental protection, alongside sustainable management of resources, is an important pathway to promote durable peace and longer-term development. Today, more than ever, mine action organizations are aware of the imperative to ensure that they ‘do no harm’ through their activities. However, further mainstreaming of environmental considerations, including their liability ramifications, and a more systematic monitoring of their application are critical. To do this, it is important to gather more evidence and develop good practice.¹⁰⁷

This greater focus on the environment in mine action is reflected in discussions at policy and normative levels. *Jus post bellum* only provides limited hard law provisions with regards to post-conflict mine action. Indeed, mine action could be used as a case study to reinforce the growing recognition that environmental considerations in *jus post bellum* deserve a stronger legal focus. However, practice in mine action also demonstrates that the importance of the dual role of hard and soft law and the particular relevance of standards and good practice for an adequate holistic *jus post bellum* framework cannot be underestimated. The growing area of scholarship on *jus post bellum* increases the understanding and practical resolution of the immense challenges faced by societies at the end of war.¹⁰⁸ Mine action has some interesting and practical insights to provide to this debate.

¹⁰⁷ Angela de Santis and Ursin Hofmann, ‘Environmental Risks of Remnants of Conflict: How to “do no harm” in Mine Action’ in Marc Stal *et al.* (eds.), *IDRC 2014. Extended Abstracts, Oral Presentations, Special Panels, Sessions and Workshops, 24–28 August 2014, Davos, Switzerland* (Global Risk Forum, 2014), 334.

¹⁰⁸ Andrew T. Forcehimes and Larry Marry, ‘Conclusion’ in Marry and Forcehimes (n 25) 256.

‘After the War is Before the War’

The Environment, Preventive Measures Under International Humanitarian Law, and their Post-Conflict Impact

Anne Dienelt*

17.1 Introduction

Post-conflict action is not only about restoration, compensation, and responsibility; it is also about prevention, especially when addressing environmental protection in relation to armed conflicts. Since restoration is not always possible, and compensation is not able to preserve and protect the natural environment, action is required at the earliest stage possible, while bearing in mind the lessons taught by previous conflicts, linking preventive measures under international humanitarian law (IHL) with the post-conflict phase.¹

IHL, the law mainly regulating the during-armed conflict phase, also reaches out to the phases before and after an armed conflict: some of its provisions contain obligations that can only be implemented and executed before² and/or after³ an armed conflict, hence during peacetime. This exemplifies that the traditional dichotomy of peacetime and wartime law has been dissolved; there are no clear boundaries.⁴ In

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¹ Cf. Marie G. Jacobsson, Third Report on the Protection of the Environment in Relation to Armed Conflicts, International Law Commission, sixty-eighth Session, , A/CN.4/700, 3 June 2016, paras. 98 and 267 stressing the connection and interlinkage between the pre- and post-conflict phase.

² For example, the weapons review according to Art. 36 AP I or the training of forces according to Arts. 47 GC I, 48 GC II, 127 GC III, 144 GC IV, 83 AP I as well as customary international law, see Jean-Marie Henckaerts and Louise Doswald-Beck, *Customary International Humanitarian Law, Volume 1: Rules* (Cambridge: Cambridge University Press, 2009), rule 142.

³ For example, prisoners of war according to Arts. 33, 34, 74, 78, 85, 86, 87, 88, 89, 90, 91 AP I.

⁴ See Serena Sharma, ‘Reconsidering the Jus ad Bello/Jus in Bello Distinction’ in Carsten Stahn and Jann Kleffner, *Jus Post Bellum—Towards a Law of Transition From Conflict to Peace* (Leiden: T.M.C. Asser Press, 2008), 9–30. See also Carsten Stahn, ‘“Jus Ad Bellum”, “Jus in Bello” ... “Jus Post Bellum”?—Rethinking the Conception of the Law of Armed Force’ (2006) 17 *European Journal of International Law* 921–43, 923–4; Carsten Stahn, ‘Just Post Bellum: Mapping the Discipline(s)’ (2007) 32 *American University International Law Review* 322–3. Regarding environmental protection in relation to armed conflict, the International Law Commission (‘ILC’) *inter alia* stated that there are ‘no clear-cut boundaries between the various phases’.

recent times, armed force has thus been conceptualized in *jus ad bellum*, *jus in bello*, and *jus post bellum*.⁵

Turning to the post-conflict phase, the concept of ‘justice after war’ defines the *jus post bellum*.⁶ ‘Justice after war’ is based on the idea that a state of justice is reached by or after war.⁷ ‘Justice after war’, if taken seriously and in a spirit to prevent future conflicts, also entails an environmental post-war assessment as well as monitoring of the conduct of hostilities regarding its environmental consequences. An environmental post-war assessment has several benefits. It allows to extract lessons learned, which can *inter alia* be applied to training curricular and military manuals. They can also be considered in the course of a weapons review according to Article 36 of Additional Protocol I (‘AP I’) when comparing weapons and their effects in a war theatre. In addition, monitoring the first deployment of new weapons and means and methods of warfare can result in revising and updating weapons reviews and weapons instructions after a conflict, even though Article 36 AP I does not explicitly require so. An assessment and monitoring can also be useful when drafting agreements on protected zones that can include parts of the natural environment and environmental hotspots. In sum, such an assessment as well as monitoring can contribute to justice after war. But is this legally required?

In this chapter, I analyse possible legal bases for this argument by studying preventive measures under IHL and their post-conflict impact.⁸ When using the term preventive measures, I refer to prevention as such as well as measures under IHL that apply during peacetime in preparation of an armed conflict, such as the weapons review according to Article 36 AP I. I will show that preventive measures regarding the environment go beyond precautions in an attack according to Article 57 AP I. The focus of this chapter is set on the impact on the country of deployment and the environmental damage therein; other consequences, such as those on the troops deployed, are not addressed.⁹

referring to its temporal approach of the pre-conflict, during conflict, and post-conflict phase, see Report of the International Law Commission on the work of its sixty-eighth Session, ILC Report, A/71/10, 2 May–10 June and 4 July–12 August 2016, chapter 10, para. 147.

⁵ See, for example, Stahn (n 4).

⁶ For *jus post bellum*, see the recent doctrine by Gary Bass, ‘Just Post Bellum’ (2004) 32 *Philosophy & Public Affairs* 384; Guglielmo Verdirame, ‘What to Make of Jus Post Bellum: A Response to Antonia Chayes’ (2013) 24 *European Journal of International Law* 307–13; Carsten Stahn, Jennifer S. Easterday, and Jens Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, Oxford, 2014) Stahn (n 4). More critical Antonia Chayes, ‘Chapter VIII/2: Is Just Post Bellum Possible?’ (2013) 24 *European Journal of International Law* 291–305; Ruti Teitel, ‘Rethinking Jus Post Bellum in an Age of Global Transitional Justice: Engaging with Michael Walzer and Larry May’ (2013) 24 *European Journal of International Law* 335–42.

⁷ This relates to just war theory and is based on a moral paradigm, see, for example, Brian Orend, ‘Justice after War’ (2002) 16 *Ethics & International Affairs* 43, 117, Bass (n 6). Teitel, on the other hand, argues that *jus post bellum* should be understood in broader terms, include forward-looking aims rather than restorative *ex post* justice, Teitel (n 6).

⁸ This chapter is part of a broader research project on the interplay of IHL, international environmental law, and human rights law in relation to environmental protection and armed conflicts.

⁹ For example, the consequences the US veterans from the Vietnam War are still suffering from today, see Clyde Haberman, ‘Agent Orange’s Long Legacy, for Vietnam and Veterans’ *New York Times* (11 May 2014), at <[http://www.nytimes.com/2014/05/12/us/agent-oranges-long-legacy-for-vietnam-and-veterans.html?action %20=click&module=Search®ion=searchResults&mabReward=relbias%253Ar&url=http%](http://www.nytimes.com/2014/05/12/us/agent-oranges-long-legacy-for-vietnam-and-veterans.html?action=%20=click&module=Search®ion=searchResults&mabReward=relbias%253Ar&url=http%253A%2F%2Fwww.nytimes.com%2F2014/05/12/us/agent-oranges-long-legacy-for-vietnam-and-veterans.html)

In the first section, I give an overview of preventive measures in international armed conflicts regarding environmental protection: training, protected zones (e.g. demilitarized zones) as well as the legal review of new weapons and means and methods of warfare according to Article 36 AP I are examined. In the second section, I turn to post-conflict scenarios and whether preventive measures under IHL play a role in the transition from conflict to peace. All measures discussed are *de lege lata*; however, they have not or have only rarely been used to protect the natural environment in practice. This chapter is aimed at giving incentives to practitioners dealing with the topic.

17.2 Preventive Measures Under IHL

The Geneva Conventions¹⁰ ('GC') and their Additional Protocols¹¹ ('AP') contain quite a few provisions that address IHL obligations that apply during peacetime, either as preventive measures or in preparation of an armed conflict. They do not only bind belligerent states, but all states parties to the GC and AP I.¹² These provisions belong to the body of IHL, whose application is triggered by the threshold of an armed conflict according to common Article 2 GC. Some of them are also applied in peacetime, outside the context of armed conflicts. These preventive or preparatory measures include the training of forces, the marking of specific sites/zones, and the review of new weapons and means and methods of warfare, which will be analysed in the following subsections with regard to their relevance for environmental protection in context of armed conflicts.

17.2.1 Training of forces

One of the main problems regarding environmental protection and armed conflicts is the low degree of awareness and knowledge regarding environmental protection on behalf of the parties to a conflict.¹³ While commanders and soldiers only think in

253A%252F%252Fquery.nytimes.com%252Fsearch%252Fsite%252F%253Dclick%252Fregion%253DMast&r=0> accessed 13 March 2015.

¹⁰ Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (GC I), 75 UNTS 31, entered into force 21 October 1950; Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (GC II), 75 UNTS 85, entered into force 21 October 1950; Geneva Convention relative to the Treatment of Prisoners of War (GC III), 75 UNTS 135, entered into force 21 October 1950; Geneva Convention relative to the Protection of Civilian Persons in Time of War (GC IV), 75 UNTS 287, entered into force 21 October 1950.

¹¹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (AP I), 1125 UNTS 3, entered into force 7 December 1978; Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (AP II), 1125 UNTS 609, entered into force 7 December 1978.

¹² See Arts. 6, 36, 43, 80, 81, 82, 83, 84 AP I that have been applied continuously since the entry into force of AP I; Arts. 18, 56, 58, 66, 79, and annexes I and II to AP I that require preparatory measures.

¹³ Even though states are becoming more and more interested in the topic, for example a pledge by the five Nordic countries during the thirty-first International Conference of the Red Cross and Red Crescent in 2011 in which they pledged '[o]n the basis of recent armed conflicts, to undertake and support a concerted study highlighting the relevance of the existing legal framework for the protection of the natural environment in contemporary armed conflicts, and identifying any gaps in that context. 2. To co-ordinate and host a meeting of experts, and on this basis prepare a report, to propose, if appropriate, areas in which the legal protection of the natural environment may be clarified and, if necessary, reinforced,' at

terms of military objectives and civilians and civilian objects,¹⁴ a distinctive dichotomy of IHL, they are not consciously aware of the fact that many IHL provisions already protect parts of the natural environment as civilian objects.¹⁵ For its basic protection, the natural environment is linked to the survival and protection of the civilian population.¹⁶ Civilians depend on it during and after an armed conflict: the environment nourishes them, grants them protection, serves as a source of life and a livelihood. The effects of armed conflicts on the environment often last longer than a war, affecting the population in a severe manner for decades.¹⁷ Hence, raising awareness by highlighting the existing legal regime and in how far it protects the natural environment as a civilian object in military manuals and military curricular is of outmost importance: 'education was a better guarantee of respect for these rules than any sanction could ever be.'¹⁸

In the course of the training of forces the rules regulating the conduct of hostilities under the law of international armed conflicts are taught and included in military manuals.¹⁹ This obligation is twofold: first, it contains the obligation to teach IHL within states' armed forces, and second it contains the obligation of commanders to also

<http://www.un.org/en/ga/sixth/67/StatProtGeneva/Sweden_Eng.pdf > accessed 15 April 2015. Other states are still reluctant and critical, see statements in the sixth Committee, by France (UN Doc. A/C.6/69/SR.22, para. 32), the Russian Federation (UN Doc. A/C.6/69/SR.25, para. 99), or Spain (UN Doc. A/C.6/69/SR.26, para. 104).

¹⁴ Other actors in the field use a different terminology. Civil society, for instance, talks in drivers of conflicts, while the military talk in military objectives. In fact, they do relate to the same protected goods, *inter alia* parts of the natural environment.

¹⁵ Cordula Droege and Marie-Louise Tougas, 'The Protection of the Natural Environment in Armed Conflict—Existing Rules and Need for Further Legal Protection' (2013) 82 *Nordic Journal of International Law* 1. Nikolai Jorgensen, 'Protection of Fresh Water in Armed Conflict' (2007) 2 *Journal of International Law and International Relations* 65ff; Karen Hulme, *War Torn Environment: Interpreting the Legal Threshold* (Leiden; Boston: Martinus Nijhoff Publishers, 2004), 300ff. See also draft principle I(3) of the the ILC's project on Protection of the Environment in Relation to Armed Conflicts in which the ILC confirms in the Commentary this dichotomy by allowing for attacks on the natural environment only in cases where it has become a military objective, see Text of the Draft Principles on the Protection of the Environment in Relation to Armed Conflicts provisionally adopted so far by the Commission, draft principle 9[II-1], paras. 12 and 13 in ILC Report, A/71/10, 2016 (n 4) chapter 10.

¹⁶ Cf. Art. 55(1) AP I. In how far the environment is protected for the sake of itself, as a legal entity, cannot be discussed in-depth at this point, but part of the broader research project this chapter is based upon.

¹⁷ See, for example, the consequences of the armed conflict in Vietnam. See also Jay Austone and Carl Bruch, *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (Cambridge/New York: Cambridge University Press, 2000).

¹⁸ Yves Sandoz, Christophe Swinarski, and Bruno Zimmermann (eds.), *Commentary to the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (1986), para. 3370. See also the preamble to Resolution 22 of the Diplomatic Conference of Geneva of 1974–1977, which states: 'Convinced that a sound knowledge of international humanitarian law is an essential factor for its effective application, confident that widespread knowledge of that law will contribute to the promotion of humanitarian ideals and a spirit of peace among nations', printed in ICRC, *Official records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts, Geneva (1974–1977) Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts* (Geneva: Swiss Federal Political Dept.), Vol. I, 215. See also Michael Bothe, 'Warum wird humanitäres Völkerrecht eingehalten oder verletzt? Perspektiven der Durchsetzung des humanitären Völkerrechts—neue Entwicklungen und kritische Bilanz' (2015) 28 *Humanitäres Völkerrecht—Informationsschriften/Journal of International Law of Peace and Armed Conflict* 55.

¹⁹ According to Art. 47 GC I, Art. 48 GC II, Art. 127 GC III, Art. 144 GC IV, Art. 83 AP I as well as customary international law, see Jean-Marie Henckaerts and Louise Doswald-Beck (n 2) rule 142. Moreover, Arts. 6, 82, 87(2), 84 AP I indirectly refer to the dissemination of IHL.

instruct the armed forces under their command accordingly.²⁰ I will address the first obligation, assuming that once commanders are aware of the rules regulating environmental protection, they will give instructions likewise.

A. IHL explicitly protecting the natural environment

I will briefly address the legal framework in IHL providing for environmental protection in international armed conflicts that has to be taught during legal training.²¹ Articles 35(3) and 55(1) AP I address and protect the natural environment explicitly as well as the 1976 Convention on the Prohibition of Military or Any Hostile Use of Environment Modification Techniques ('ENMOD Convention').²² Moreover, the natural environment is generally protected as a civilian object and *via* the core principles of IHL, representing an implicit legal protection of the environment.

Turning first to AP I, it should be kept in mind that AP I only applies to the effects of warfare on civilian objectives or military targets located on land, thus excluding naval warfare as well as air warfare.²³ However, the 1994 San Remo Manual on International Law Applicable to Armed Conflicts at Sea²⁴ as well as the 2010 Harvard Manual on International Law Applicable to Air and Missile Warfare²⁵ contain both provisions on environmental protection for their respective fields by including a prohibition of wanton destruction of the natural environment and the obligation to pay due regard to the natural environment.

Article 35(3) AP I limits the methods and means of warfare in order to protect the natural environment. It prohibits 'methods or means of warfare which are intended or may be expected to cause such damage widespread, long-term and severe damage to the natural environment.' Article 55(1) AP I contains the same wording regarding the threshold, but additionally links it to the health and survival of the civilian population.²⁶

²⁰ Henckaerts and Doswald-Beck (n 2) rule 142.

²¹ For in-depth analyses, see Droegge and Tougas (n 15); Julian Wyatt, 'Law-Making At The Intersection Of International Environmental, Humanitarian And Criminal Law: The Issue Of Damage To The Environment In International Armed Conflict' (2010) 92 International Review of the Red Cross 593; Michael Bothe *et al.*, 'International Law Protecting The Environment During Armed Conflict: Gaps And Opportunities' (2010) 92 International Review of the Red Cross 569; Dieter Fleck, 'The Protection of the Environment in Armed Conflict: Legal Obligations in the Absence of Specific Rules' (2013) 82 Nordic Journal of International Law 7ff; Hulme (n 15) 71 ff.

²² Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques, 1108 UNTS 151 / [1984] ATS 22, adopted on 10 December 1976, entered into force 5 October 1978.

²³ Stephanie Simonds, 'Conventional Warfare and Environmental Protection: A Proposal for International Legal Reform,' (1992) 29 Stanford Journal International Law 183.

²⁴ Rule 44, San Remo Institute, San Remo Manual on International Law Applicable to Armed Conflicts at Sea, 12 June 1994, (1995) 309 International Review of the Red Cross 583–94.

²⁵ Rules 88 and 89, 2009 Harvard Initiative, 'Manual on International Law Applicable to Air and Missile Warfare', at <https://www.google.de/search?q=harvard+aire+warfare&rlz=1C5CHFA_enDE667DE667&oq=harvard+aire+warfare&aqs=chrome..69i57.5492j0j7&sourceid=chrome&ie=UTF-8> accessed 13 March 2015.

²⁶ Art. 55 AP I follows an anthropocentric approach, in contrast to Art. 35(3) AP I. Art. 55 AP I links environmental protection with the protection of civilians, it reads as follows: 'and to prejudice the health or survival of the population'. In addition, Art. 55 AP I is placed in Part I Section I on the general protection of civilians from hostilities.

The wording and the definitions of these provisions are disputed. Starting with ‘natural environment’, this term was not defined by the drafters of AP I.²⁷ For the purposes of this chapter, I will rely on a definition that refers to ‘humans, animals, vegetation, water, land and the ecosystem as a whole.’²⁸ This definition is supported by the *travaux préparatoires* of AP I: during the negotiations, the Working Group ‘Biotope’, which was in charge of the environment, also referred to ‘ecosystems.’²⁹ The inclusion of ecosystems only stresses the intertwined circles of nature, humans, and animals, that continuously affect each other, and also highlights the importance of the environment for humans.

The threshold of ‘widespread, long-term and severe damage to the natural environment’ included in Articles 35(3) and 55(1) AP I sets a very high standard that has never been reached, not even during the Vietnam War or the 1991 Gulf War.³⁰ According to the *travaux préparatoires*, the wording ‘long-term’ in the sense of AP I relates to a period of time measured in decades; ‘widespread’ and ‘severe’ were not defined, no agreement could be reached during the negotiations as to their definitions.³¹ All three conditions have to be fulfilled cumulatively and set an absolute standard, not allowing any exceptions based on military necessity or proportionality.³² The *travaux* reveal that this was actually intended by the states. The practical relevance of these norms is almost meaningless if taken word by word.

In contrast, Article 1 ENMOD Convention, which also applies to situations of armed conflicts and was adopted just a few months before AP I, is aimed at protecting the natural environment from being turned into a weapon itself.³³ The scenarios ENMOD Convention addresses resemble sci-fi movies, but geo-engineering is reality today.³⁴ Nevertheless, these techniques are only rarely used in a war theatre.

²⁷ See Hulme (n 15).

²⁸ Claude Pilloud *et al.*, *Commentary On The Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (Leiden: Martin Nihoff Publishers, Leiden, 1987), Art. 35, para. 1443. Broader definitions of the term ‘natural environment’ also refer to human health, which, in consequence, then links to other provisions protecting medical personnel, hospitals etc.

²⁹ Pilloud (n 28) Art. 35, para. 1450. However, the reference to ecosystems was eventually deleted by Committee III. Moreover, when looking at the other terms in this context, such as Art. 35(3) AP I, the Rapporteur defined ‘long-term’ as measured in decades, linking it to ecological catastrophes, thus confirming the inclusion of ecosystems in the definition of ‘natural environment’, See Pilloud (n 28) Art. 35, para. 1455 as well as remarks in fn. 120.

³⁰ According to the prevailing opinion, the past conflicts do not meet the prerequisites of AP I or ENMOD. It is difficult to imagine what exactly has to be done to qualify according to Art. 35(3) AP I, see Countries, ‘Report of the ILC on the Work of its Sixty-third and sixty-fifth Sessions, Chap. IX, 4 November 2013, 5.59.2, fn. 153; Laurence Boisson de Chazournes, ‘International Environmental Law at the Beginning of the 21st Century’, (2006) 100 *American Society of International Law and Procedure* 303, para. 15; Yoram Dinstein, ‘Protection of the Environment in International Armed Conflict’, (2001) *Max Planck UNYB* 543ff.

³¹ Pilloud (n 28) Art. 35, para. 1452.

³² Philippe Sands, ‘International Law in the Field of Sustainable Development’ (1995) 65 *British Yearbook of International Law* 303 on the interpretation; Hulme (n 15) 77.

³³ Geo-engineering for the purposes of warfare might become more relevant in the future, since states are exploring the possibilities geo-engineering offers. However, a certain level of environmental protection is already in place under ENMOD Convention as well the principles of proportionality and military necessity. See, for example, Hulme (n 15) 92ff.

³⁴ And its regulation is already discussed—see, for example, David Victor, ‘On The Regulation Of Geoengineering’ (2008) 24 *Oxford Review of Economic Policy* 322.

Article 1 ENMOD Convention uses a similar wording but follows a different intention: it prohibits 'widespread, long-lasting or severe effects' caused by means of warfare. However, these conditions do not have to be fulfilled at the same time; they are alternating conditions.³⁵ The definitions³⁶ of the very similar terms of both treaties differ. In ENMOD Convention, 'long-lasting' refers to several months or a season, 'widespread' 'encompasses an area on the scale of several hundred square kilometers' and 'severe' 'involves serious or significant disruption or harm to human life, natural economic resources or other assets'.³⁷ Hence, even though the provisions appear to be very similar, they have a very different meaning. But both, in the end, lack practical relevance.

The International Court of Justice ('ICJ') in its 1996 Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons* ('AO on Nuclear Weapons') addressed the environment and armed conflict as well. The Court rephrased and summarized Articles 35(3) and 55(1) AP I by stating:

Taken together, these provisions embody a general obligation to protect the natural environment against widespread, long-term and severe environmental damage; the prohibition of methods and means of warfare which are intended, or may be expected, to cause such damage; and the prohibition of attacks against the natural environment by way of reprisals.³⁸

The ICJ did not take the opportunity to define and clarify the provisions. Their application to real life scenarios is still disputed and it is not clear which military operation might trigger the application of the threshold of these provisions.

The 2005 ICRC Study on Customary IHL and its rules 43, 44, and 45 arguably confirmed their customary status.³⁹ While rule 45 refers to the wording of Article 35(3) AP I and confirms its customary status, the study contains two more rules addressing environmental protection: rule 43 stresses the application of the general rules to the environment, meaning *inter alia* the principle of distinction. Rule 44 contains the principle of due regard to the protection of the natural environment, a rather vague obligation.⁴⁰

In sum, IHL protects the natural environment explicitly to some degree. It is noteworthy that states felt the need to address this topic in AP I. This allows today, despite the challenging threshold, to include the topic in military curricular.

³⁵ See the wording 'and' (Arts. 35(3) and 55 API) in comparison to 'or' (Art. 1 ENMOD).

³⁶ See Pilloud (n 28) Art. 35, fn. 120 with further references.

³⁷ Understanding Relating to Article I, Report of the Conference of the Committee on Disarmament, UN GAOR, Thirty-first Session, Supp. No. 27, UN Doc. A/31/27 (1976), 91–2, reprinted in Dietrich Schindler and Jiri Toman, *The Laws of Armed Conflicts* (Cambridge: Cambridge University Press, 1989), 168.

³⁸ Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, Judgment of 8 July 1996, ICJ Reports 226. For further analysis of this Advisory Opinion, see contributions in Laurence Boisson de Chazourne and Philippe Sands, *International Law, the International Court of Justice and Nuclear Weapons* (Cambridge: Cambridge University Press, 1999).

³⁹ Henckaerts and Doswald-Beck (n 2). ⁴⁰ *ibid.*

B. *Protection of the natural environment as a civilian object*

Moreover, the core principles of IHL protect the environment,⁴¹ and in particular the principle of distinction.⁴² This principle requires a differentiation between civilians/civilian objects and combatants/military objectives to determine a lawful object of an attack.⁴³ The environment is protected as a civilian object, unless it becomes a military objective.⁴⁴ Military objectives, according to Article 52(2) AP I and rule 8 of the ICRC Customary IHL Study, can be anything in a combat setting that contributes to a military advantage by its 'nature, location, purpose or use' to military action and whose destruction, capture, or neutralization is of military character and is considered a military objective. Rule 9 and Article 52(2) AP I state that all other objects are civilian and, in consequence, enjoy protection during combat. Civilian objects hence cannot lawfully be targeted; only in cases of proportionate attacks that lead to collateral damage, civilian objects and thus the environment can be lawfully affected by warfare.

C. *Summary*

In sum, treaty and customary law provide for legal protection of the environment in relation to armed conflict. This protection can be summarized in two categories: first, explicit protection of the environment by Articles 35(3) and 55(1) AP I and rules 43, 44, and 45 of the 2005 ICRC Study on Customary IHL. Second, the environment is protected more generally by all provisions protecting civilian objects.

Returning to the topic of training, for states to comply with IHL, the above mentioned provisions need to be included and addressed in military curricula and military manuals. In turn, environmental considerations will also be included in the general assessment conducted by commanders. At the same time, the awareness of military forces for the topic will rise. Some states already address questions of environmental protection in their military curricular and military manuals,⁴⁵ however, the indirect and secondary protection of the natural environment as a civilian object needs to be stressed as well, in particular the role the core principles of IHL play.

⁴¹ Droege and Tougas (n 15) 21ff.

⁴² Cf. Marie G. Jacobsson, Second Report on the Protection of the Environment in Relation to Armed Conflicts, International Law Commission, Sixty-seventh Session, A/CN.4/685, 28 May 2015, paras. 147–51.

⁴³ Dieter Fleck and Michael Bothe, *The Handbook of International Humanitarian Law* (Oxford University Press, 2nd edn, 2013), para. 132.

⁴⁴ Droege and Tougas (n 15) 24. See also draft principle 9[II-1] and its commentary, Text of the Draft Principles on the Protection of the Environment in Relation to Armed Conflicts provisionally adopted so far by the Commission, paras. 12 and 13 in ILC Report, A/71/10, 2016 (n 4) chapter 10.

⁴⁵ See, for example, The Federal Ministry of Defence of the Federal Republic of Germany, 'Law of Armed Conflict Manual—Joint Service Regulation (ZDv) 15/2' (May 2013), Section 7, 343ff; UK, Ministry of Defence, 'The Joint Service Manual of the Law of Armed Conflict' JSP 383 (UK, 2004), paras. 5.29ff; United States, 'Operational Law Handbook 2014' in David H. Lee (ed.), *International and Operational Law Department* (Charlottesville, Virginia: The Judge Advocate General's Legal Centre and School, 2014), chapter 19; NATO, 'NATO Legal Deskbook' (2nd edn, 2010), Part XVII.

Interestingly, the ILC in its work on the topic did not refer to training in its draft principles on the topic.⁴⁶

17.2.2 Marking of protected sites and zones

While the training of the forces is aimed at guaranteeing the implementation of IHL during armed conflicts by the armed forces, the marking of specific sites is intended to protect vulnerable sites that could be destroyed in the course of combat but serve a higher purpose beyond winning the conflict.⁴⁷ The installation of so-called demilitarized zones (Art. 60 AP I),⁴⁸ and non-defended localities (Art. 59 AP I) can serve as a tool to improve the level of environmental protection during armed conflicts. Their original purpose was to create a refuge from combat settings⁴⁹ and aimed at humanitarian protection.⁵⁰ These zones/localities cannot only be used to protect civilians and the wounded and sick,⁵¹ they can also serve as a tool to protect sites based on their social, economic, or scientific value, as it has been discussed during the negotiations to AP I.⁵²

The ILC during its sixty-seventh session⁵³ discussed the issue of 'protected zones' in context of preventive measures and agreed on two draft principles on protected zones, without limiting itself to a specific type of zone.⁵⁴ The choice of term used by the ILC clarifies its broader understanding of protected zones, not limited to Articles 59 and 60 AP I and including *inter alia* bilateral/multilateral agreements not connected to armed conflicts specifically.⁵⁵ Draft principle 5 is placed in Part I on general principles, while draft principle 13 is placed in Part II of the report addressing principles applicable during armed conflict, stressing the correspondence between the pre-conflict and the during conflict phases.⁵⁶ Nevertheless, since this chapter is focused on preventive measures under IHL, only the Geneva law and undefended localities and demilitarized zones are analysed.

A. Undefended localities, Article 59 AP I

Article 59 AP I as well as rule 37 of the ICRC Study on customary IHL protect undefended localities that are situated in a zone near the line of combat (Art. 59(2) AP I).

⁴⁶ For the provisionally adopted draft principles and the other draft principles that are still being discussed within the ILC, see ILC Report, A/71/10, 2016 (n 4) chapter 10, paras. 135, 138, 159–61.

⁴⁷ They were intended to be used as refuge for the wounded and sick, for cultural sites, natural sites, etc.

⁴⁸ This does not refer to the demilitarized zones in Korea or the Middle East, which are the result of a peace agreement after a conflict.

⁴⁹ Pilloud (n 28) Part IV, Section I, Chapter V, para. 2259. ⁵⁰ *ibid.* Art. 60, para. 2303.

⁵¹ Fleck and Bothe (n 43) para. 512.

⁵² Bothe *et al.*, *New Rules For Victims of Armed Conflicts—Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949* (Leiden: Martin Nijhoff Publishers, 1982) 375.

⁵³ Cf. Draft Principle 5, ILC Report, A/71/10, 2016 (n 4) chapter 10, para. 189. Earlier in 2015, the Special Rapporteur had included a section on 'protected zones and areas' in her Second Report on the Protection of the Environment in Relation to Armed Conflicts, Sixty-seventh Session, 2015, A/CN.4/685 (n 42) part IX.

⁵⁴ Text of the Draft Principles on the Protection of the Environment in Relation to Armed Conflicts Provisionally Adopted so far by the Commission in Report of the International Law Commission on the work of its Sixty-eighth Session, ILC Report, A/71/10, 2016, chapter 10 (n 3) para. 189.

⁵⁵ For other types of protected zones/areas, such as nuclear-weapon-free zones or natural heritages zones, see Jacobsson (n 42) part IX.

⁵⁶ *ibid.* draft principle 13, 339, para. 1.

They are declared unilaterally and cover localities without any military presence or military objectives inside. The definition of the term ‘localities’ in the sense of Article 59 AP I includes inhabited localities, which does not apply to most environmental hot-spots. Localities are ‘wider than single buildings but narrower than a whole city or town’, hence referring to populated urban settings.⁵⁷ An undefended locality does not have to be an entire city or town, it can be a distinct part within a city as well.⁵⁸ With regards to the natural environment, undefended localities thus include only parts of the environment that are situated in urban settings. Environmental hotspots, usually situated in unpopulated areas, will not be accorded protection based on Article 59 AP I.

B. *Demilitarized zones, Article 60 AP I*

Demilitarized zones in the sense of Article 60 AP I, on the other hand, are neither restricted to populated areas nor limited in their size; they can extend to any area. These zones are solely based on an agreement between the belligerent parties according to Article 60(1) AP I. They are usually situated in the hinterland, far away from the line of combat.⁵⁹ To acquire the status, a withdrawal of forces and equipment has to be conducted; no military objectives are allowed in a demilitarized zone.⁶⁰ In turn, a demilitarized zone cannot be lawfully targeted anymore.⁶¹ Moreover, the protection also extends to the surroundings of a demilitarized zone, making the protected area even larger.⁶²

During the negotiations, the German representative highlighted the idea to not only protect the civilian population and the wounded and sick combatants, but to use a demilitarized zone ‘to serve to protect the economic and cultural values, represented by the localities themselves.’⁶³ The representative of Uruguay made a very similar proposal, suggesting to amend Article 60 AP I to include ‘places which are inhabited or are of particular interest from the artistic, archeological, historical or religious point of view’. Poland’s delegation wanted to cover geographical areas that could be composed of scattered dwellings or a number of separate villages.⁶⁴ Hence, it appears reasonable to install demilitarized zones in order to protect environmental hotspots, such as natural reserves or natural parks. These zones are also protected under customary international law, as analysed in rule 36 of the ICRC Study on Customary IHL.

However, Article 60 AP I entails some problems: chances to conclude such an agreement while a conflict is ongoing are rather low.⁶⁵ Hence, the negotiation of specially protected zones in peacetime is advisable. But this causes other difficulties: the identification of the parties to the agreement establishing the zone is quite problematic, at least in the pre-conflict phase. How to identify potential belligerent parties? One possible solution is to agree among neighbouring states on demilitarized zones to *inter*

⁵⁷ Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (Cambridge: Cambridge University Press, 2010), 109.

⁵⁸ *ibid.* ⁵⁹ Bothe *et al.* (n 52) Art. 60, para. 2.1. ⁶⁰ Pilloud (n 28) Art. 60, para. 2305.

⁶¹ Fleck and Bothe (n 43) para. 626. ⁶² *ibid.* para. 512.

⁶³ Howard Levie, *Protection Of War Victims: Protocol 1 to the 1949 Geneva Conventions* (New York: Oceana Publications, 1979), 376.

⁶⁴ *ibid.* 375. ⁶⁵ Pilloud (n 28) Part IV, Section I, Chapter V, para. 2262.

alia prevent environmental damage in cases of armed conflicts and exempt them from combat zones. Admittedly, the combat zone in a pre-conflict setting will still be unclear. Another option could be in the rise of an armed conflict, as a *quid pro quo*, to negotiate demilitarized zones for the benefit of all parties.

C. Summary

While undefended localities (Article 59 AP I) protect parts of the natural environment in urban settings, states can establish demilitarized zones in terms of Article 60 AP I. The moment of creation of such a zone is crucial; at the same time it faces severe challenges. How to identify possible belligerent parties? What territory should be protected as a protected zone, without highlighting individual vulnerable points? A creation post-conflict in peace agreements, not based on Article 60 AP I, to restore justice and to prevent future damage to the environment might solve some of these aspects and will be discussed in detail in the second section of this chapter.

17.2.3 Weapons review, Article 36 AP I

Article 36 AP I requires the High Contracting Parties of AP I to conduct a legal review of their 'new weapon, means or method of warfare.'⁶⁶ It is conducted in preparation of an armed conflict, hence Article 36 AP I contains an obligation that applies in times of peace before an armed conflict takes place.⁶⁷ This gives reason to discuss Article 36 AP I in the course of this chapter.⁶⁸ The review of new weapons or means or methods of warfare is intended to guarantee a lawful conduct of hostilities while making sure that in the course of the study and development of new weapons the legal framework regulating their deployment is taken into account. It thus has a similar purpose as the preventive measures discussed above; they have in common that they intend to reduce violations of IHL during combat, and they apply and are implemented before an armed conflict takes place, hence during peacetime. The weapons review is thus considered together with the other preventive measures.

Weapons that are *per se* illegal under IHL are supposed to be ruled out at the earliest stage possible. Article 36 AP I refers to the legal background against which the review has to be conducted. This includes all prohibitions 'by any other rule of international law applicable to the High Contracting Party'. It is agreed today that not only IHL, but also human rights law has to be considered during the weapons review.⁶⁹ Moreover, the UN International Law Commission has stated that there exists

⁶⁶ In the following, I will only refer to new weapons; this, however, also includes new means and methods of warfare.

⁶⁷ Szasz states that it should be fully applicable in pre-conflict situations while acknowledging that it cannot be easily applied during hostilities, see Richard Grunawalt *et al.*, *Protection Of The Environment During Armed Conflict* (Newport, Rhode Island: Naval War College, 1996), 282.

⁶⁸ The ILC did not include a draft principle on Art. 36 AP I or on a weapons review in its work, even though it considered the issue at some point during informal consultations, in which the author participated.

⁶⁹ Stuart Casey-Masley (ed.), *Weapons Under International Human Rights Law* (Cambridge: Cambridge University Press, 2014), 421–8.

a presumption that international environmental treaty law among other fields of international law continues to apply during armed conflicts.⁷⁰ Thus, the body of law that has to be considered in the course of a weapons review according to Article 36 AP I entails IHL,⁷¹ human rights law, and also international environmental law.⁷²

Moreover, apart from the legal background, the situation Article 36 AP I addresses is quite different than most situations addressed by IHL, allowing for a more time-consuming decision. Usually, IHL addresses situations in which commanders have to decide quickly, on the basis of very little information. The situation in which a legal review of new weapons is conducted is quite different, allowing for extensive testing in an ideal setting, based on comparative analyses while relying on cooperations with various experts, such as engineers, medical, and also environmental experts.⁷³ This special situation allows for new approaches and involves a high potential when discussing environmental protection in the context of armed conflicts.

17.2.4 Summary

The training of forces, the marking of protected sites and zones as well as the weapons review are preventive measures under IHL that are conducted in peacetime. They can contribute to protect the environment in relation to armed conflict. Highlighting the civilian nature of the environment in training will raise awareness among the armed forces. Environmental hot spots can be included in demilitarized zones in the sense of Article 60 AP I, even though this bears some risks since they become more visible. The weapons review requires environmental considerations and consultations with environmental experts contribute to a higher level of environmental protection. But in how far are these measure relevant to post-conflict situations and on what legal bases? Can they contribute to the idea of justice after war?

17.3 Preventive Measures Under IHL and their Post-Conflict Impact

IHL contains post-conflict provisions that continue to apply even after the termination of an armed conflict. They regulate certain situations and topics, such as the provisions

⁷⁰ ILC, Draft Articles on the Effects of Armed Conflicts on Treaties (Yearbook of the International Law Commission, 2011, Vol. II, Part Two: 2011), Art. 7 together with the Annex lit. g, Commentary para. 2.

⁷¹ Specifically Arts. 36 and 51(1) AP I in the context of environmental protection as well as the IHL principles, see Section 17.2.1 A and B of this chapter.

⁷² A legal analysis of these different fields of law and their possible interplay is part of a broader research project I am conducting. It is soon to be published as a doctoral thesis.

⁷³ ICRC, *A Guide to the Legal Review of New Weapons, Means and Methods of Warfare - Measures to Implement Article 36 of Additional Protocol I of 1977* (Geneva: ICRC, 2006), 6,17; William Parks, 'Conventional Weapons and Weapons Reviews' (2007) 8 Yearbook of International Humanitarian Law 127f; Justin McClelland, 'The Review Of Weapons In Accordance With Article 36 Of Additional Protocol I' (2003) 85 International Review of the Red Cross 411; Isabelle Daoust *et al.*, 'New Wars, New Weapons? The Obligation of States to Assess the Legality of Means and Methods of Warfare' (2002) 84 International Review of the Red Cross 352.

on prisoners of war.⁷⁴ The transition from an armed conflict to peace, from *jus in bello* to peacetime law, is far from clear and cannot simply be addressed by referring to either law.⁷⁵ Hence, organizing frameworks and principles that regulate a post-conflict phase—the transition from conflict to peace—need to be discussed. I argue that this debate should also include preventive measures under IHL that impact post-conflict settings.

Whether the above analysed provisions relating to environmental protection also impact the period after an armed conflict will be analysed in the following sub-sections.

17.3.1 Training and its post-conflict impact

In general, training has a 'continued' function, as I refer to it. States continuously train their armed forces, refreshing their skills, preparing them for new war theatres, new technologies and developments. These changes encourage states to update their military manuals and military curricular, which serve as educational tools.⁷⁶ These updates are also based on lessons learned from previous conflicts, the reactions of other states to the conducted hostilities, as well as on practice by and within the UN. There is, however, no explicit legal obligation in the conventions to update them, but logic requires updating military manuals and curricular as to modifications in law, custom, and policy as well as new weapons and technologies. A post-conflict impact can thus be confirmed.

17.3.2 Protected zones and their post-conflict impact

In post-conflict settings, lessons learned are a valuable source for future conflicts and the implementation of IHL. Especially in the context of undefended localities, since they are based on a unilateral act, in the hands of and at the discretion of each individual state, if installed wisely they can improve the degree of *de jure* and *de facto* protection, also when it comes to the protection of the environment. Analysing their 'success' once a conflict has ended can help to analyse what is to be considered and improved in the future.

Turning to demilitarized zones, as stated above, a mutual pre-conflict agreement on a demilitarized zone according to Article 60 AP I can pose problems identifying its prospective parties. Neighbouring states can conclude such an agreement in a pre-conflict setting, but the identification of such zones still poses problems. For states that do not share borders, it is even more difficult to determine with which state they might enter into an armed conflict with in the future. In a post-conflict setting, however, after having analysed the impact of the armed conflict and vulnerable spots, the former belligerent parties can agree to conclude an agreement on a demilitarized zone, detached from Article 60 AP I and the Geneva law.

The demilitarization of a specific zone post-conflict—perhaps the most realistic option for a protected zone—can be done in the course of negotiations of peace

⁷⁴ See Arts. 33, 34, 74, 78, 85, 86, 87, 88, 89, 90, 91 AP I. See also Bothe *et al.* (n 52) Art. 3, 157. For the *jus post bellum* and prisoners of war, see Bass (n 6).

⁷⁵ Stahn (n 4).

⁷⁶ See ICRC Customary IHL Study, Practice Relating to Rule No. 142, Section A. III, in Henckaerts and Doswald-Beck (n 2).

agreements.⁷⁷ A peace agreement, however, will most certainly not be concluded on the basis of Article 60 AP I, but independently from the Geneva law. Outside the context of Article 60 AP I, belligerent parties are free to agree on protected zones as well.⁷⁸ This kind of zone cannot only protect civilians and civilian objects; the parties can also decide to leave certain areas and sites out of the conduct of hostilities. The Antarctic and the Åland Islands, for instance, are demilitarized zones, based on international treaties and detached from Article 60 AP I.⁷⁹ The border between North and South Korea is demilitarized as well, based on a mutual agreement from 1953, thus not referring to the only later adopted Article 60 AP I either. This particular protected zone at the Korean border has interestingly created a *de facto* 'nature reserve',⁸⁰ even though back then the parties to the armistice agreement were not aware of, or at least did not intend, the environmental consequences the establishment of the zone would have.⁸¹ Used deliberately, demilitarized zones can serve in post-conflict settings to, at least, restore the environment. Interestingly, the Special Rapporteur in her third report did not address the creation of protected zones in peace agreements, but focused on the role peace agreements can play in protecting and managing the environment in post-conflict settings,⁸² which is an important issue as well.

It should be borne in mind, however, that the 'privileged' protection granted to medical personnel and their marking has made them more vulnerable than ever, as shown by today's non-international armed conflicts. Attacks on medical personnel have increased over the past years, some non-state actors tend to hit the opponent where it hurts most, even if this means illegal conduct.⁸³ This has resulted in actually not marking health care personnel anymore in the field. This risk should be kept in mind when discussing the marking of environmental hotspots.

17.3.3 Article 36 AP I and its post-conflict impact

Article 36 AP I has a good chance of improving the current situation if taken seriously in a post-conflict setting. I argue that monitoring of new weapons and means

⁷⁷ Cf. Jacobsson (n 1) paras. 154–60.

⁷⁸ The ILC's Special Rapporteur categorized demilitarized zone into three types, demilitarized areas under the sovereignty of a state, demilitarized areas place under the control of a limited group of states or international organs, and demilitarized areas outside national jurisdiction, see Jacobsson (n 40) para. 214.

⁷⁹ Fleck and Bothe (n 43) para. 513.

⁸⁰ Hanson *et al.* (n 74) 584; Machlis and Hanson (n 74) 732. Moreover, media is covering the topic from time to time as well, see <<http://www.theguardian.com/environment/2012/apr/13/wildlife-thriving-korean-demilitarised-zone>> accessed 6 April 2015.

⁸¹ Hanson *et al.*, 'Warfare In Biodiversity Hotspots' (2009) 23 *Conservation Biology* 578, 584; Gary Machlis and Thor Hanson, *Warfare Ecology—A New Synthesis for Peace and Security* (Berlin, Heidelberg: Springer, 2011), 732. Moreover, media is covering the topic from time to time as well, see <<http://www.theguardian.com/environment/2012/apr/13/wildlife-thriving-korean-demilitarised-zone>> accessed 6 April 2015.

⁸² Cf. Draft Principle III-1, ILC Report, A/CN.4/700, 2016 (n 1) chapter 10, paras. 154–60.

⁸³ This problem has been addressed, *inter alia*, by the International Review of the Red Cross in two special issues on 'Violence Against Health Care', see, 'Humanitarian Debate: Law, Policy, Action—Violence Against Health Care, Part I: The Problem and the Law' International Review of the Red Cross (2013) and the second issue, 'Humanitarian debate: Law, Policy, Action—Violence Against Health Care, Part II: The Way Forward' International Review of the Red Cross (2013). The same is true for cultural heritage in armed conflicts, see

and methods of warfare is legally required after their first deployment and can improve the situation on the ground regarding the environment.

First of all, a monitoring or an observation of the environmental consequences of armed conflicts can be used as a means within the conduct of the weapons review. It is very useful in a comparative study with already deployed weapons and their effects in the field when analysing the legality of new weapons and their anticipated effects.

Second, such monitoring can also be used to re-evaluate and revisit the original review to see whether the anticipated effects have materialized during the first deployment. In the course of the review, recommendations or instructions are issued for the approval of new weapons, for example, restricting it to lawful deployment only. These recommendations or instructions, based on the anticipated effects, might need revision. The re-evaluation, resulting from the monitoring, can thus lead to a revision of the original review. Moreover, new findings can also result in changes for other weapons, meaning a re-evaluation and revision as well.

Third, depending on new treaty obligations or changes in policy, the deployment of a new weapon or means or method of warfare can be illegal, thus requiring a revision. In cases of modifications to existing weapons or means and methods of warfare, a new review is required anyway. Some authors refer to this as a 'change of circumstances'.⁸⁴ The following sub-section of the chapter will analyse possible legal bases for such an assertion.

A. *Monitoring*

Article 36 AP I has only rarely been implemented by states.⁸⁵ The vague obligation to 'determine' might be the reason for this. Moreover, compliance mechanisms, such as reporting or monitoring, are not required by IHL,⁸⁶ at least not explicitly. Additionally, there is no express legal obligation of the targeted nor of the attacking state to conduct a post-conflict assessment either. Furthermore, assessments conducted by international organizations or other states, if not with the permission or on invitation of the affected state, violate a state's sovereignty and might be rejected. The UN Environment Programme, established by UN General Assembly's resolution

also 'ISIS Extremists Bulldoze Ancient Assyrian Site Near Mosul' *The Guardian* (6 March 2015), at <<http://www.theguardian.com/world/2015/mar/05/islamic-state-isis-extremists-bulldoze-ancient-nimrud-site-mosul-iraq>> accessed 13 March 2015, regarding ISIS and their destructions of the artefacts in Mosul. In consequence, the actual value of marking vulnerable sites needs to be reconsidered.

⁸⁴ Without a legal analysis, but agreeing on this, Parks (n 73) 134. Others only refer to a review of the review, see McClelland (n 73) 413; Alan Backstrom and Ian Henderson, 'New Capabilities in Warfare: An Overview of Contemporary Technological Developments and the Associated Legal and Engineering Issues in Article 36 Weapons Reviews' (2012) 94 *International Review of the Red Cross* 510.

⁸⁵ William H. Boothby, 'How Will Weapons Reviews Address the Challenges Posed by New Technologies?' (2013) 52 *Military Law and the Law of War Review* 22, 43–8.

⁸⁶ Monitoring mechanisms based on arms control laws and others will not be addressed by this chapter. But the ICRC in a report from 1992 to the UN General Assembly stated: 'In addition, other international institutions and treaties bearing on environmental issues have their own monitoring and implementation mechanisms, which may be important in dealing with a wide range of cases of environmental damage.' UN General Assembly, Protection of the Environment in Times of Armed Conflict—Report of the Secretary-General, UN Doc. A/RES/47/37, 25 November 1992, 31.

2997,⁸⁷ has been conducting post-crisis environmental impact assessments over the past decades, but only on request by the affected states. I argue, however, that a monitoring is required by logic after the conduct of hostilities, resulting from Article 36 AP I together with Article 35(3) AP I.

i. Resulting from Article 36 AP I

A plain reading of Article 36 AP I suggests that the weapons review only covers the pre-conflict phase, while applying the laws that govern armed conflicts. ‘Study, development, acquisition or adoption’ are terms that relate to actions before the first deployment. The term ‘new’ weapons confirms this, since its definition relates to the time before the actual deployment, namely from its study up to its purchase. Once deployed by the state conducting the review, a weapon cannot, in any case, be regarded as new anymore. Hence, at first sight, IHL and Article 36 AP I do not require a monitoring of newly deployed weapons.

From a logical point of view, however, it appears very reasonable to have a follow-up, a re-evaluation of newly deployed weapons, and their prior purely hypothetical and theoretical anticipated effects. Since in the situation of an armed conflict there is only little time to consider the devastating effects a weapon can have, commanders rely on recommendations that have been made during the review process. A re-evaluation based on actual experience in a war theatre with such weapons appears to be appropriate. There is, however, no legal basis in Article 36 AP I.

ii. Based on Article 36 AP I together with Article 35(3) AP I

At second glance, Article 36 AP I, read in context with the entire Protocol, suggests that it has a much broader impact. The provision refers to prohibitions and restrictions of AP I that regulate the conduct of hostilities. This also relates to Article 35 AP I, which contains the basic rules governing means and methods of warfare. Article 35(3) AP I specifically addresses and protects the natural environment.⁸⁸

I argue that Article 35(3) AP I presupposes an assessment and monitoring of the effects of the conduct of hostilities during past conflicts and their environmental consequences. This includes the deployment of new weapons or means and methods of warfare. This assertion is based on Article 35(3) AP I’s wording, more specifically on the threshold ‘widespread, long-term and severe damage to the natural environment’. As stated above, the wording ‘long-term’ in the sense of AP I relates to a period of time measured in decades.⁸⁹ This means that states were aware that even after an armed conflict, the consequences of hostilities may impact the natural environment and influence a legal classification according to Article 35(3) AP I, which can

⁸⁷ UN Doc. RES/A/2997 (XXVII) of 15 December 1972, following the 1972 Rio Conference on the Human Environment (Rio Declaration).

⁸⁸ See Section 17.2.1 A and B of this chapter.

⁸⁹ ICRC, Official Records of the Diplomatic Conference on the Reaffirmation and Development of the International Humanitarian Law Applicable in Armed Conflicts (1978), 268f, para. 27. To recall, the terms ‘widespread’ and ‘severe’ are neither defined in the Protocol nor in the *travaux préparatoires*, no agreement could be reached during the negotiations as to their definitions, see Pilloud (n 28) Art. 35, para. 1452.

only be analysed in the aftermath of a conflict, sometimes even decades later if the consequences are enduring. The only way to know whether the consequences of the deployment of a weapon are 'long-term' is to monitor its consequences in the aftermath of a conflict.

Hence, Article 36 AP I together with Article 35(3) AP I requires monitoring of environmental consequences of wars to have a solid basis for comparison in the course of the weapons review.

B. *Re-evaluation and revisions*

This raises the issue to what extent states are obliged to revise their reviews based on the monitoring. Article 36 AP I only requires a review of 'new' weapons. The question to what extent the anticipated effects materialized during combat does not seem to be of relevance according to AP I. However, once a state is aware of unlawful consequences of its weapons, it is bound by *bona fide* as well as its legal obligations deriving from IHL and other laws regulating armed conflicts to guarantee a lawful deployment. A re-evaluation and revision of the first issued recommendations and decisions in the course of the weapons review seems to be an appropriate tool to verify the lawfulness. But not only new findings deriving from monitoring, but also changes in law or policy might result in a re-evaluation and revision of a review. These are, however, not based on Article 36 AP I, but on the modified laws or policies and *bona fide*. Otherwise a deployment repeating the once identified unlawful effects would be unlawful and violate the other laws or policies.

C. *Summary*

Monitoring, if taken seriously, requires a re-evaluation and revision of the weapons review to guarantee a lawful deployment of means and methods of warfare according to the laws regulating armed conflicts. The monitoring itself is not required by an explicit legal basis, but it is presupposed by Article 35(3) AP I and its wording 'long-term', referring to environmental damage that lasts for several decades. Article 36 AP I, which also relates to Article 35(3), is based *inter alia* on a comparative analysis with other weapons and their reviews. A solid basis for such a comparison only stands if all reviews are revised based on the actual consequences in a war theatre and not only on the anticipated and purely theoretical ones before their first deployment. However, a sound legal basis for monitoring, re-evaluation, and revision does not exist in AP I. It is rather a post-conflict impact based on logic and Articles 36 and 35(3) AP I. Article 36 AP I, as a preparatory measure with preventive aspects, mainly influences peacetime armament rather than post-conflict peacebuilding. Nevertheless, a post-conflict assessment of newly deployed weapons can be very useful.

17.4 Conclusion

Preventive measures under IHL do have some impact in post-conflict settings when it comes to environmental protection. They need to be included in frameworks and

principles regulating the transition from conflict to peace and contribute to re-install justice after war. The training of military forces, a continuous task, is intended to guarantee a lawful conduct of hostilities. It is essential to include references as to the protection the environment enjoys in this context and its explicit protection according to Articles 35(3) and 55(1) AP I. Additionally, the protection the natural environment enjoys *via* the principles of proportionality and military necessity as well as a civilian object (principle of distinction) need to be highlighted as well. Raising awareness of the topic and of its relevance should be the main objective. A first step is taken by including this in military curricula and military manuals. Furthermore, when talking about post-conflict settings, the updating of military manuals and military curricula is also crucial.

Protected zones, such as undefended localities in urban settings and demilitarized zones in the hinterland, can be used to protect parts of the environment and environmental hotspots. Even though the identification of potential parties to a conflict might be a challenge in the uprising or aftermath of an armed conflict, agreeing on demilitarized zones in sense of Article 60 AP I or including zones in armistice agreements regarding future conflicts and vulnerable environmental sites can improve the level of environmental protection in the long run. However, practice, especially regarding medical personnel, shows that the marking of vulnerable spots might result in the contrary, meaning intensified attacks on these vulnerable sites.

Article 36 AP I as well as logical considerations deriving from provisions regulating the conduct of hostilities and arms control laws require states to conduct a weapons review. From an economical perspective, this review should be conducted at the earliest stage possible to avoid unnecessary expenditures on unlawful weapons or means and methods of warfare. The review is based on several methods, for example, a comparative analysis with other weapons. This comparative method, together with the threshold of Article 35(3) AP I and long-term damage which is measured in decades, consequently requires states to assess the deployment of their weapons and means and methods of warfare after a conflict is over. A monitoring has to be conducted, since only environmental damage that lasts for decades fulfils the threshold of Article 35(3) AP I, which is part of the legal background against which the weapon review is conducted. Once a state possesses the outcome of the assessment and is aware of the consequences of its warfare conduct, it is bound by *bona fide* and its legal obligations regulating the conduct of hostilities to re-evaluate the legality of its weapons and means and methods of warfare and revise prior recommendations.

In sum, the IHL measures addressed connect the pre-conflict with the post-conflict phase. IHL impacts post-conflict actions and requires states to extract lessons learned from past conflicts in preparation for war and in order to prevent illegal conduct, including the prevention of unlawful damage to the environment 'after the war is before the war'.

Reframing the Remnants of War

The Role of the International Law Commission, Governments, and Civil Society

*Doug Weir**

18.1 Introduction

The physical, chemical, and explosive remnants of armed conflicts can create lasting threats to communities and ecosystems. They pose immediate and long-term risks to human health and livelihoods, and undermine the viability of natural resources upon which the human population depend. How and where wars are fought, and by whom, are important factors in determining the impact of conflicts and their associated military activities on the environment. The mechanization and intensification of warfare, increasing urbanization, and industrial development have all increased the likelihood that toxic hazards will be generated. During conflicts and in their wake, the collapse of environmental governance and management systems is commonplace, and for industrializing and industrialized countries alike, this too risks contributing to lasting environmental damage.

Since the 1990s, efforts by states, international organizations, and civil society to address the remnants of war have prioritized the immediate threat of the explosive remnants of war ('ERW'), anti-personnel land mines, booby traps, and, increasingly, improvised explosive devices. These efforts have been underpinned by effective advocacy framings based on the direct humanitarian consequences of these weapons. These framings overwrote earlier more holistic advocacy messaging on the material remnants of wars, which sought to simultaneously encompass environmental and humanitarian risks. With renewed attention being focused on the means through which environmental protection in relation to armed conflict may be enhanced, there has been a reappraisal of the remnants of war and the emergence of a new focus on the toxic remnants of war ('TRW'). In 2016, this advocacy framing was strengthened after the International Law Commission ('ILC') published a draft principle that addressed the 'toxic and hazardous remnants of war'.

This chapter explores the context of the ILC's work on conflict and the environment; it analyses the lasting impact that civil society advocacy frames have had on the perception of and response to the remnants of war; and reviews the utility of the ILC's draft principles for future efforts to address TRW.

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18.2 Context

The renewed effort to tackle the lamentable state of protection for the environment in relation to armed conflicts can be traced back to 2009, when the United Nations Environment Programme ('UNEP') published a major study documenting the current gaps in protection and identifying opportunities for progress.¹ Although many of these avenues had been identified by legal scholars and debated at length prior to 2009, in distilling these views, the study, and its recommendations, helped pave the way for what can be viewed as the third major phase of interest in the topic; the first and second having followed the war in SE Asia and the 1991 Gulf War respectively.

The 2009 UNEP report found that numerous bodies of law may provide protection at different points in the cycle of conflicts. As such, it recommended that the topic be adopted for study by the ILC, and that the Commission seek to make sense of the relationship between these different bodies of law. The ILC duly adopted the topic for study in 2011,² and in 2013, its Nordic ILC member Dr Marie Jacobsson was appointed as its Special Rapporteur, beginning what would become a stocktaking of relevant law and norms, based on their applicability before, during, and after armed conflicts.

While the ILC is tasked by the UN General Assembly with promoting the progressive development of international law and with its codification, in this case the Special Rapporteur elected only to propose non-binding draft principles. These were to be synthesized from existing law and state practice, and presented to the ILC and governments for further consideration. In light of the vast scope of what is viewed as 'conflict and the environment', and the complexity of the interactions between the different legal regimes under review, the Special Rapporteur divided her research on what she termed the *Protection of the environment in relation to armed conflicts* ('PERAC') loosely along temporal lines. This would relate to preventative measures designed to enhance protection before conflicts; the legal framework protecting the environment during conflicts; and principles designed to restore and respond to environmental damage in their wake.

While the environmental conduct of states and militaries during conflicts initially mediates the scope and intensity of environmental degradation, it is these latter principles covering the post-conflict phase that are of particular interest for scholars of *jus post bellum*. Also important is the approach underpinning the work of the ILC, which has drawn on International Humanitarian Law ('IHL'), International Environmental Law ('IEL'), and Human Rights Law ('HRL'). The PERAC work stream has also drawn heavily on state practice and the practice of international organizations, and no more so than in its work relating to the post-conflict phase. By 2016, the Special Rapporteur had published three reports on PERAC, a preliminary report in 2014,³ a second in 2015

¹ Elizabeth Maruma Mrema *et al.*, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP, 2010).

² UN Doc. A/66/10, at <<http://legal.un.org/docs/?path=../ilc/reports/2011/english/annex.pdf&lang=EFSRAC>> accessed 9 February 2017.

³ Marie G. Jacobsson, Special Rapporteur, Preliminary Report, International Law Commission, Sixty-sixth Session, UN Doc. A/CN.4/674 (2014).

that focused in part on conduct during conflicts,⁴ and a third in 2016 that considered the law and practice relevant to the post-conflict phase.⁵

The second and third reports also proposed draft principles for consideration by the ILC and governments. Six principles were proposed in the 2015 report—one on preventative measures prior to conflicts, and five on military conduct during conflicts.⁶ The third report contained nine draft principles, seven of which related to post-conflict obligations, one on preventative measures to complement the principle proposed in 2015's report, together with a principle on the rights of indigenous peoples.⁷ The reports, and the principles they contained, were a substantial body of work, work that progressed at a speed that proved uncomfortable for some members of the ILC. Governments contributed reports on their own practice and experiences to the Special Rapporteur during the process, and also debated the issues raised during annual sessions of the UN General Assembly's Sixth Committee.⁸

Five of the draft principles proposed by the ILC's Special Rapporteur in 2016 had particular relevance for one form of environmental and humanitarian harm associated with both international and non-international armed conflicts, and increasingly with hybrid conflicts: the TRW. Of these, the draft principle on *Remnants of war* was the most relevant. It was also subject to significant changes following its publication by the ILC. Notably, the revision of the draft principle by the ILC and its Drafting Committee reversed a process that, since the 1970s, had seen ERW become separated from other chemical and physical legacies of conflict.

18.3 The Historic Decoupling of the Environment from Mine Action

The two previous phases of international attention on the environmental impact of conflict, in the late 1970s and early 1990s, saw narratives anchored in the harm associated with chemicals and pollution. In the 1970s, attention focused on the widespread damage caused by chemical defoliants in SE Asia, the most notorious of which was Agent Orange. After the 1991 Gulf War, it was the national and regional consequences of pollution from oil fires that catalysed renewed debate on the weakness of legal protection for the environment in relation to armed conflicts.⁹ For SE Asia, the pernicious

⁴ Marie G. Jacobsson, Special Rapporteur, Second Report, International Law Commission, Sixty-seventh Session, UN Doc. A/CN.4/685 (2015).

⁵ Marie G. Jacobsson, Special Rapporteur, Third Report, International Law Commission, Sixty-seventh Session, UN Doc. A/CN.4/700 (2016).

⁶ ILC Study (n 4). ⁷ ILC Study (n 5).

⁸ For coverage of the three debates by the TRW Project, and links to national statements, see: 'Blog: Which States are Progressive on Conflict and the Environment?' (28 August, 2015), at <<http://www.trwn.org/blog-which-states-are-progressive-on-conflict-and-the-environment/>> accessed 9 February 2017; 'What States Said on Conflict and the Environment at the UN Last Week and Why it Matters' (16 November 2015), at <<http://www.trwn.org/what-states-said-on-conflict-and-the-environment-at-the-un-last-week-and-why-it-matters/>> accessed 9 February 2017; 'States Back Further Progress on Conflict and Environment in UN Legal Debate' (9 November 2016), at <<http://www.trwn.org/states-support-further-legal-work-on-environmental-protection-in-conflict/>> accessed 9 February 2017.

⁹ Glen Plant (ed.), *Environmental Protection and the Law of War: A Fifth Geneva Convention on the Protection of the Environment in the Time of Armed Conflict?* (John Wiley & Sons, 1992).

legacy of the dioxin TCDD, which was present in the chemical defoliants, continues to affect human health; while efforts to remediate areas affected by the 1991 oil spills and fires are expected to continue until 2020.¹⁰

Conflict pollution would again become visible during the conflicts in the Balkans, particularly during the Kosovo War when NATO aircraft targeted industrial facilities and utilized depleted uranium ammunition.¹¹ International concern over both forms of pollution during the wars helped launch UNEP's work on conflicts, and the subsequent development of their model of post-conflict environmental assessments.¹² Since then, assessments by UNEP and other international organizations have added considerably to our understanding of the environmental drivers and consequences of armed conflicts and, in this respect, it is perhaps unsurprising that the current phase of interest in conflict and the environment has coincided with this expansion of knowledge.

The situation following the conflict in SE Asia contrasted starkly to that of today, particularly where it concerned the remnants of wars, whether toxic, explosive, or physical. Throughout much of the 1970s, there was far less distinction between post-conflict environmental and explosive hazards, with all forms of remnants framed in the discourse as the *material remnants of war*. And it was UNEP that was tasked by the UN General Assembly with studying 'the problem of the material remnants of wars, particularly mines, and their effects on the environment'.

The UN General Assembly had first begun considering the remnants of wars in 1975, with UNEP publishing an initial scoping report and governmental consultation in 1977.¹³ The environmental impacts highlighted were broad, covering loss of access to fishing, mineral, or agricultural resources, damage to land through cratering or the removal of ERW, and the effects of the chemical constituents of munitions on human health and the ecosystem as a whole. For a more detailed discussion on the environmental impact of land mines and ERW, see chapter 16 in this volume.

In 1976, UNEP canvassed states on 'the feasibility and desirability of convening an intergovernmental meeting on the environmental problems of the material remnants of wars'. A lack of government interest meant that the meeting did not take place but the scoping report was submitted to the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts

¹⁰ Laurence Menhinick, 'Blog: What the Environmental Legacy of the Gulf War Should Teach Us' (18 March 2016), at <<http://www.trwn.org/blog-what-the-environmental-legacy-of-the-gulf-war-should-teach-us/>> accessed 9 February 2017.

¹¹ ICBUW, 'A Question of Responsibility—the Legacy of Depleted Uranium Use in the Balkans' (11 October 2010), at <<http://www.bandedpleteduranium.org/en/a-question-of-responsibility-the-legacy-of-deplete>> accessed 9 February 2017.

¹² For an overview of the development of UNEP's post-conflict environmental assessments, see: David Jensen, 'Evaluating the Impact of UNEP's Post-Conflict Environmental Assessments' in David Jensen and Steve Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (London: Earthscan, 2012).

¹³ UN Doc. UNEP/GC/103 1977 Implementation of General Assembly Resolution 3435 (XXX): Study of the problem of the material remnants of wars, particularly mines, and their effects on the environment.

and discussed within the context of Articles 35 and 55 of the 1977 Geneva Convention's Additional Protocols, where it was championed by Sweden.¹⁴

The Geneva conference, and the negotiations within the Conference on Disarmament on the 1977 Environmental Modification ('ENMOD') Convention, represented the other two avenues whereby concerns over the environmental impact and legacy of conflict were being explored.¹⁵ Meanwhile, the process begun at the Lucerne conference resulted in the negotiation of the 1980 Convention on Certain Conventional Weapons ('CCW'), which established humanitarian restrictions on 'excessively injurious' and 'indiscriminate' weapons, including landmines and incendiary weapons.¹⁶

With the negotiation of ENMOD and the CCW, the material remnants framing began to collapse, with the environment effectively decoupled from what would eventually become mine action.¹⁷ This process would accelerate during the latter part of the 1980s as aid workers deployed to the locations of the Cold War's proxy conflicts witnessed first-hand the effects of the use of Soviet mine warfare doctrine. These aid workers would go on to establish the influential humanitarian demining NGOs such as Handicap International, the HALO Trust, and Mines Advisory Group, which would successfully reframe land mines and ERW as primarily a humanitarian, rather than environmental problem.¹⁸

18.4 The Emergence of the Toxic Remnants of War Framing

Following UNEP's 2009 study on the state of legal protection for the environment, a report on strengthening legal protection for victims of armed conflicts, which was prepared for the International Committee of the Red Cross's ('ICRC') thirty-first Conference, drew fresh attention to the health threats from environmental pollution associated with conflicts. Conflict pollution had appeared regularly in UNEP's post-conflict environmental assessments up until this point but typically as one of a range of environmental threats. The ICRC report drew attention to the fact that, in spite of considerable progress in the development of legal mechanisms

¹⁴ Official records of the diplomatic conference on the reaffirmation and development of international humanitarian law applicable in armed conflicts, Geneva (1974–1977), at <http://www.loc.gov/rr/frd/Military_Law/pdf/RC-records_Vol-16.pdf>.

¹⁵ Convention on the Prohibition of Military or any Hostile Use of Environmental Modification Techniques, 10 December 1976 (October 2012), at <<https://ihl-databases.icrc.org/ihl/INTRO/460>> accessed 9 February 2017.

¹⁶ Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects. Geneva, 10 October 1980, (October 2010), at <<https://ihl-databases.icrc.org/ihl/INTRO/500?OpenDocument>> accessed 9 February 2017.

¹⁷ The International Mine Action Standards (IMAS) refer to mine action as 'activities which aim to reduce the social, economic and environmental impact of mines and (other) ERW including cluster munitions'. According to the UN, mine action comprises five complementary groups of activities or 'pillars': Mine/ERW risk education; Demining, i.e. mine/ERW survey, mapping, marking and clearance; Victim assistance, including rehabilitation and reintegration; Stockpile destruction; Advocacy against the use of anti-personnel mines and cluster munitions.

¹⁸ Matthew Bolton and Doug Weir (2015) 'Towards an integrated approach to the material legacies of war: landmines, explosive remnants of war and environmental contamination', at <<http://www.toxicremnantsofwar.info/towards-an-integrated-approach-to-the-material-legacies-of-war/>> accessed 9 February 2017.

to deal with land mines and ERW, conflict pollution remained under-addressed, observing that:

damage to the environment due to armed conflicts may be extensive, largely exceeding the actual combat zone. It may also have long-term consequences that continue after the hostilities end. For instance, a considerable amount of environmental damage may emanate from chemicals and other pollutants leaking into the soil and groundwater as a result of military operations. These chemicals and pollutants can come from the destruction of power plants, chemical plants and other industrial installations but also from the rubble left by attacks against other types of military objectives. In some situations, hazardous substances have been abandoned by parties to armed conflict when leaving combat zones. For example, in Astana, a small village in Afghanistan, land on which the inhabitants grazed livestock was polluted for years by hazardous chemicals used to fire missiles, exposing the local population to high risks.

As a result, the civilian population no longer has safe access to resources that are indispensable to its survival. People may also suffer serious health effects. Extensive thought must therefore be given to possible mechanisms and procedures for addressing the immediate and long-term consequences of environmental damage.¹⁹

The report concluded by proposing that a new system could be introduced for addressing wartime environmental damage, suggesting that it be based on similar rules for dealing with the legacy of landmines and other ERW. Conflict and the environment was one of four topics proposed as focus areas for the ICRC's work during the period between conferences. Of these, only two could be selected and, after consultations with states and national Red Cross societies, conflict and the environment was rejected in favour of IHL compliance and the care of detainees. Nevertheless the Nordic governments and societies pledged to continue working on the theme until the thirty-second conference.²⁰

For civil society actors working on conflict pollution, such as the International Coalition to Ban Uranium Weapons ('ICBUW'), the ICRC's 2011 report had coincided with a reappraisal of how their work was framed.²¹ The active reframing of land mines and ERW as a humanitarian issue by civil society in the 1980s had ultimately created the field of humanitarian disarmament. This approach, which views disarmament as humanitarian action, is radically different to the state-centric approaches to disarmament and arms control of the twentieth century.²²

¹⁹ ICRC, 2011, 31IC/11/5.1.1 Strengthening Legal Protection for Victims of Armed Conflicts, at <<http://www.icrc.org/eng/assets/files/red-cross-crescent-movement/31st-international-conference/31-int-conference-5-1-1-report-strength-ihl-en.pdf>>.

²⁰ Pledge P1290, at <<https://rcrcconference.icrc.org/applic/pledges/p31e.nsf/pledge.xsp?action=openDocument&documentId=16A50358B3ED1677C1257958003CC786>> accessed 9 February 2017.

²¹ Doug Weir, 'Mapping the Toxic Remnants of War' (2 February 2016), at <<https://toxicnews.org/2016/02/02/mapping-the-toxic-remnants-of-war/>> accessed 9 February 2017.

²² See, John Borrie, 'Rethinking Multilateral Negotiations: Disarmament as Humanitarian Action' in John Borrie and Vanessa Randin (eds.), *Alternative Approaches in Multilateral Decision Making: Disarmament as Humanitarian Action* (United Nations Institute for Disarmament Research (UNIDIR), 2005), at <<http://www.unidir.org/files/medias/pdfs/rethinking-multilateral-negotiations-disarmament-as-humanitarian-action-eng-0-65.pdf>> accessed 9 February 2017.

The tactics, vocabulary, advocacy, and communication strategies utilized for humanitarian disarmament seek to place those impacted by the weapons at the centre of the debate. This presents challenges for efforts to utilize these tools for advocacy on the victims of pollution, where harms may be subtle, cumulative, or take many years to present themselves. At issue was whether a framing on conflict pollution could be developed that merged both environmental and humanitarian considerations, and which encompassed the diversity of sources of conflict pollution that had hitherto been dealt with in isolation, if at all. In 2012, ICBUW and PAX launched the Toxic Remnants of War Project ('TRW Project') to document conflict pollution and to promote the framing as part of the renewed attention on conflict and the environment.²³

The TRW Project defined TRW as 'any toxic or radiological substance resulting from military activities that forms a hazard to humans or ecosystems.'²⁴ The Project later sought to catalogue them as direct or indirect. Direct TRW might include pollutants from bomb damaged industrial facilities, whereas indirect TRW were pollutants that were generated as a result of the conditions associated with conflicts, such as informal hazardous waste dumping caused by the collapse of environmental management systems.²⁵

As with post-conflict ERW responses, the Project argued that irrespective of pollutant type, there were common requirements for mitigating the health and environmental risks that TRW pose. These included monitoring and transparency measures, post-conflict environmental and health assessments, victim assistance, and environmental remediation.²⁶ In advocating for the development of these policies, the Project also utilized the same legal frameworks that would underpin the work of the ILC on PERAC—IHL, IEL, and HRL. The Project also considered peacetime environmental norms as a standard for the protection of human health and the environment following conflicts.

18.5 The ILC's Draft Principle on the Toxic and Hazardous Remnants of War

The ILC Special Rapporteur's third report on PERAC, published in July 2016, focused predominantly on the laws, norms, and practice relating to environmental protection in the post-conflict phase.²⁷ The Special Rapporteur chose to deal with remnants of war on land, and remnants of war at sea separately, arguing that they can be subject to very different legal regimes:

²³ Toxic Remnants of War Project, at <<http://www.toxicremnantsofwar.info/>> accessed 9 February 2017.

²⁴ TRW Project, 'Pollution Politics: Power, Accountability and Toxic Remnants of War' (2014), at <www.toxicremnantsofwar.info/report-pollution-politics-power-accountability-and-toxic-remnants-of-war> accessed 9 February 2017.

²⁵ TRW Network, 'TRW Sources' (29 April 2015), at <<http://www.trwn.org/trw-sources/>> accessed 9 February 2017.

²⁶ TRW Project, 'Environmental Mechanics: Reimagining Post-Conflict Environmental Assistance' (2015), at <<http://www.toxicremnantsofwar.info/new-report-environmental-mechanics-re-imagining-post-conflict-environmental-assistance/>> accessed 9 February 2017.

²⁷ ILC Study (n 5).

While the affected environment may be an area under the sovereignty or control of a State, it can also be an area outside the exclusive jurisdiction of a State, such as the high seas or the international seabed.²⁸

The Special Rapporteur also observed that, while the term ‘remnants of war’ has been widely used since the 1970s, there had been no attempt to legally define it. Indeed as discussed previously, the term had been somewhat flexible, and had been dependent to a large extent on the frames applied primarily by civil society organizations. The term ‘explosive remnants of war’ was not defined until 2003,²⁹ in a process initiated and driven by the ICRC and NGOs, who had recognized the need for a broader approach to deal with forms of unexploded and abandoned ordnance other than anti-personnel mines.³⁰

The frameworks created by the Mine Ban Treaty, the Convention on Cluster Munitions, and the protocols to the Convention on Certain Conventional Weapons represent a substantial body of law and practice, and as such, provided the ILC with sufficient justification for a draft principle. The initial draft principle proposed in July 2016 on *Remnants of war* was a conservative summary of existing norms and obligations under these regimes:

Draft principle III-3 Remnants of war

1. Without delay after the cessation of active hostilities, all minefields, mined areas, mines, booby-traps, explosive ordnance and other devices shall be cleared, removed, destroyed or maintained in accordance with obligations under international law.
2. At all times necessary, the parties shall endeavour to reach agreement, both among themselves and, where appropriate, with other States and with international organizations, on the provision of technical and material assistance, including, in appropriate circumstances, the undertaking of joint operations necessary to fulfil such responsibilities.

The exclusion of any reference to TRW from the principle was viewed by the TRW Project as problematic;³¹ but it was also a reflection of the historical decoupling of explosive remnants from the more holistic material remnants framing of the 1970s and 1980s. Clearly the Special Rapporteur was also constrained by the sources of law and practice available, which were predominantly weighted towards international agreements on land mines and ERW.

Nevertheless, the problem of TRW had been raised by several states during the UN General Assembly Sixth Committee debates on the 2015 report of the ILC. Lebanon had highlighted its efforts to address the 2006 Jiyeh oil spill, which was caused by Israel’s

²⁸ *ibid.*

²⁹ Protocol on Explosive Remnants of War (Protocol V to the 1980 CCW Convention), 28 November 2003, (February 2003), at <<https://ihl-databases.icrc.org/ihl/INTRO/610>> accessed 9 February 2017.

³⁰ For an overview of the development of CCW Protocol V, see Louis Maresca, ‘A New Protocol on Explosive Remnants of War: The History and Negotiation of Protocol V to the 1980 Convention on Certain Conventional Weapons’, at <https://www.icrc.org/eng/assets/files/other/irrc_856_maresca.pdf> accessed 9 February 2017.

³¹ Doug Weir, ‘Blog: UN Legal Experts Consider Principles Guiding Environmental Protection After Conflicts’ (8 July 2016), at <<http://www.trwn.org/un-legal-experts-consider-principles-guiding-environmental-protection-after-conflicts/>> accessed 9 February 2017.

bombing of an oil-fired power station.³² Viet Nam had highlighted the need for obligations to clear ‘land mines, toxic chemicals and other remnants of war’,³³ while Iran had highlighted the problems caused by the use of depleted uranium and the responsibility of states to rehabilitate the environment from ‘pollution caused by conventional and chemical weapons.’³⁴

The views of ILC members on the proposed principle were mixed, a few argued that the explosive hazards cited in paragraph one were predominantly a threat to humans and not the environment, and therefore irrelevant for the PERAC study. A view that perhaps demonstrates the effectiveness of the humanitarian framings developed around ERW, but which is also symptomatic of wider questions about how the environment and our place in it are defined. Several members challenged the limited scope of the principle, arguing that it was under-inclusive of other, non-explosive remnants that nevertheless posed a risk to the environment. Still others questioned the strength and urgency of the obligation on states. The fine detail of the debate wasn’t necessarily captured by the ILC’s summary records but the message on inclusivity was clear:

Another area requiring further examination concerned the types of remnants of war that the draft principles aimed to cover, the current wording seeming over-inclusive and under-inclusive at the same time. In this respect, while several members considered it important to take a broad, non-exhaustive approach, it was also observed that attempting to cover all remnants of war would require further study. It was also suggested that the type of information envisaged under paragraph 2 of draft principle III-4 be further specified, possibly in the commentaries.³⁵

In spite of some objections from ILC members, all nine principles proposed by the Special Rapporteur were forwarded to the ILC’s Drafting Committee, which revised the original draft principles based on the outcome of the plenary debate.³⁶ Draft principle III-3 on Remnants of war underwent considerable revision and, significantly, its scope was modified to include both ERW and ‘*toxic and hazardous remnants of war*’. The principles were also renumbered for technical reasons and the revised principle expanded with a third paragraph:

16. Remnants of war

1. After an armed conflict, parties to the conflict shall seek to remove or render harmless toxic and hazardous remnants of war under their jurisdiction or control that

³² Statement by Lebanon, Sixth Committee, 10 November 2015, at <<http://statements.unmeetings.org/media2/7655118/lebanon.pdf>> accessed 9 February 2017.

³³ Statement by Viet Nam, Sixth Committee, 11 November 2015, at <<http://statements.unmeetings.org/media2/7655153/vietnam.pdf>> accessed 9 February 2017.

³⁴ Statement by Iran, Sixth Committee, 10 November 2015, at <<http://statements.unmeetings.org/media2/7655145/iran.pdf>> accessed 9 February 2017.

³⁵ UN Doc. A/71/10, Chapter X, Report of the International Law Commission, Sixty-eighth Session (2 May–10 June and 4 July–12 August 2016), at <<http://legal.un.org/docs/?path=../ilc/reports/2016/english/chp10.pdf&lang=EFSRAC>> accessed 9 February 2017.

³⁶ Statement of the Chairman of the Drafting Committee, Mr. Pavel Šturma, International Law Commission, Sixty-eighth Session, at <http://legal.un.org/docs/?path=../ilc/documentation/english/statements/2016_dc_chairman_statement_peac_9august.pdf&lang=E> accessed 9 February 2017.

are causing or risk causing damage to the environment. Such measures shall be taken subject to the applicable rules of international law.

2. The parties shall also endeavour to reach agreement, among themselves and, where appropriate, with other States and with international organizations, on technical and material assistance, including, in appropriate circumstances, the undertaking of joint operations to remove or render harmless such toxic and hazardous remnants of war.
3. Paragraphs 1 and 2 are without prejudice to any rights or obligations under international law to clear, remove, destroy or maintain minefields, mined areas, mines, booby-traps, explosive ordnance and other devices.

In expanding the scope on remnants, the ILC had not only recognized that TRW and other non-explosive hazards have remained under-addressed in recent decades, but also reconnected to earlier, more holistic framings around the material remnants of war. However the definition of what constitute the ‘*toxic and hazardous remnants of war*’ will only be made clear in the Commentary, which at the time of writing has not been published. At present it is unclear whether this formulation relates to the nature of the remnant, requiring it to be both toxic and posing a hazard—without a predetermined threshold, or whether it relates to both ‘toxic remnants’ and ‘hazardous remnants’ separately, with the latter including ERW and other explosive devices. Given the debate on inclusivity that led to the revision, it feels as if this should be the latter.

Other notable changes in the revised principle are the urgency and strength of the obligation to clear remnants. The requirement to address contamination ‘without delay’—which aligns with existing obligations for ERW clearance under CCW Protocol V was weakened to ‘after an armed conflict’. An example of why this could prove problematic is the current conflict in Iraq against Islamic State. At the time of writing the conflict is ongoing and yet urgent ERW clearance efforts are already underway to secure the return of displaced people and allow safe corridors for humanitarian access. Similarly, oil fires started in the vicinity of the town of Qayyarah in northern Iraq in July 2016 are generating pollution that is impacting public health and the environment,³⁷ delaying work to minimize or assess these risks until such time as Islamic State are defeated would be unthinkable.

Of further concern is that the principle obliges states only to ‘seek to remove’ remnants. As Hulme observes:

we cannot, of course, gloss over the notion that states are mandated only to ‘seek to remove, and it is unclear exactly what this obligation might entail. Clearly, one could envisage a situation where a state was unaware of hazardous remnants despite due diligence in carrying out environmental assessments, but such remnants did in fact later

³⁷ Doug Weir, ‘Blog: The Environmental Consequences of Iraq’s Oil Fires are Going Unrecorded’ (30 November 2016), at <<http://www.trwn.org/blog-the-environmental-consequences-of-iraqs-oil-fires-are-going-unrecorded/>> accessed 9 February 2017.

cause environmental harm, or a situation where a state simply cannot afford clearance operations.³⁸

Similarly while paragraph 2's reference to the provision of international assistance is also welcome, absent a clear international framework to structure provision this will remain the preserve of bilateral agreements between states, which are inevitably more subject to the vagaries of political and donor interest than formalized arrangements. Nevertheless, the principle is a significant step forward, even if its current formulation may be more progressive for environmental protection than for the protection of human health. It is perhaps regrettable that no way was found of balancing both the humanitarian and environmental risks posed by TRW in the wording of the principle. The Commentary will perhaps clarify how the humanitarian and environmental motivations behind the principle are to be interpreted.

Because the draft principles published in 2016 relied more heavily on the practice of states and international organizations, and referenced a wider body of law than those proposed in 2015—which primarily related to IHL during conflict—it was unclear how they would be received by states during 2016's UN General Assembly debate on the work of the ILC. This was certainly the case with the draft principle on *Remnants of war*. Austria and Portugal provided general comments on scope, with the former suggesting that the principle was only partly applicable in non-international armed conflicts, as non-state actors are unable to enter into formal agreements with states.³⁹ Portugal meanwhile argued that the primary focus of the principle should be on environmental protection, rather than the protection of human health.⁴⁰

States were divided on the substance of the draft principle. Israel objected to the use of toxic and hazardous remnants, arguing that it went far beyond the definition used by Protocol V of the CCW, adding that they couldn't identify any missing forms of remnants from the existing definition—which covers only ERW.⁴¹ The Netherlands objected to the use of 'shall', questioning whether the principle reflected an existing legal obligation of universal application. They too objected to the scope of 'remnants' and suggested that Additional Protocol II and Protocol V of the CCW have yet to achieve customary status. The United States, which provided only a limited assessment of the principles as it claimed it had not had sufficient time to review them fully, argued that the principle on *Remnants of war* expanded the obligations under CCW Protocol V to mark and clear, remove, or destroy ERW to include toxic or hazardous remnants of war.⁴²

³⁸ Karen Hulme, The ILC's Work Stream on Protection of the Environment in Relation to Armed Conflict, QIL, Zoom-in 34 (2016), 27–41, at <http://www.qil-qdi.org/wp-content/uploads/2017/01/03_EnvironmentArmedConflicts_HULME.pdf> accessed 9 February 2017.

³⁹ Statement of Austria, Sixth Committee, 1 November 2016, at <<http://statements.unmeetings.org/media2/7663524/austria.pdf>> accessed 9 February 2017.

⁴⁰ Statement of Portugal, Sixth Committee, October/November 2016, at <<http://statements.unmeetings.org/media2/7663560/portugal.pdf>> accessed 9 February 2017.

⁴¹ Statement of Israel, Sixth Committee, 2 November 2016, at <<http://statements.unmeetings.org/media2/7663610/israel.pdf>> accessed 9 February 2017.

⁴² Statement of the United States, Sixth Committee, 1 November 2016, at <<http://statements.unmeetings.org/media2/7663603/us.pdf>> accessed 9 February 2017.

However the principle was supported by El Salvador, although they cautioned that mitigating or treating such remnants only after a conflict has ended may be too late to protect the environment.⁴³ It was also welcomed by Lebanon,⁴⁴ and Micronesia,⁴⁵ with the latter proposing that the eventual definition ensure as comprehensive coverage as possible, and include those remnants no longer under the jurisdiction and control of belligerents but for which they retain responsibility. Micronesia also argued for the retention of the clause ‘remove without delay’, which had been removed by the Commission’s Drafting Committee.

Slovenia too welcomed the principle, arguing that its initial formulation, which focused only on ERW, had been too narrow.⁴⁶ Ukraine proposed that the principle be amended to highlight that the toxic and hazardous remnants of war not only cause, or pose a risk of causing, damage to the environment, but also threaten human health.⁴⁷ Viet Nam thought the principle should be reconstructed so that the belligerent party that introduced the substances harmful to the environment should bear the legal consequences of its actions.⁴⁸ This included responsibility for the clearance and destruction of remnants, and responsibility to restore the environment.

It was perhaps inevitable that during the debate the views of states recently affected by environmental degradation wrought by conflicts would contrast so starkly with those of the United States, Israel, and the Netherlands. Their arguments that the proposed principle goes beyond the obligations and definitions in CCW Protocol V are valid, and this perhaps necessitates a greater reliance for the ILC on state practice than on formal obligations. Two pertinent examples in this regard are the US-funded programme to remediate dioxin contamination around Da Nang Airbase in Viet Nam—while accepting no liability for harm;⁴⁹ and the UK’s practice on the surface clearance of depleted uranium in Iraq following the 2003 conflict.⁵⁰ Depleted uranium does not fall under the scope of CCW Protocol V’s definition of ERW, yet even without a clear legal obligation, the UK recognized that it had a ‘moral obligation’ to conduct harm reduction measures. Similar surface clearance efforts were undertaken within the UK area of operations in Kosovo. Both the US and UK examples were driven by the recognition that actions were necessary to minimize the health and environmental risks for TRW, even where formal obligations were absent.

⁴³ Statement of El Salvador, Sixth Committee, 2 November 2016, at <<http://statements.unmeetings.org/media/7663530/el-salvador.pdf>> accessed 9 February 2017.

⁴⁴ Statement of Lebanon, Sixth Committee, 1 November 2016, at <<http://statements.unmeetings.org/media/7663550/lebanon.pdf>> accessed 9 February 2017.

⁴⁵ Statement of Micronesia, Sixth Committee, 1 November 2016, at <<http://statements.unmeetings.org/media/7663564/micronesia.pdf>> accessed 9 February 2017.

⁴⁶ Slovenia’s statement is not available online.

⁴⁷ Statement of Ukraine, Sixth Committee, 3 November 2016, at <<http://statements.unmeetings.org/media/7663687/ukraine.pdf>> accessed 9 February 2017.

⁴⁸ Statement of Viet Nam, Sixth Committee, November 2016, at <<http://statements.unmeetings.org/media/7663602/viet-nam.pdf>> accessed 9 February 2017.

⁴⁹ ‘Environmental Remediation of Dioxin Contamination at Danang Airport Project Frequently Asked Questions’ (16 December 2016), at <<https://www.usaid.gov/vietnam/environmental-remediation-dioxin-contamination-danang-airport-project-frequently-asked-questions>> accessed 9 February 2017.

⁵⁰ ICBUW, ‘Chilcot Report Highlights Lack of Obligations for Depleted Uranium Clean-Up’ (11 July 2016), at <<http://www.bandedpleteduranium.org/en/chilcot-highlights-lack-of-du-clearance-obligation>> accessed 9 February 2017.

The ILC's draft principle on terrestrial remnants of war could eventually prove to be a significant step forward for global efforts to mitigate the impact of TRW on human and ecosystem health. So far it is just a tentative first step towards this goal, but in recognizing and highlighting the environmental and humanitarian impact of the wide suite of remnants of conflicts that do not present an explosive risk, the ILC has clearly contributed to a long overdue rapprochement between the toxic, physical, and explosive remnants of war.

18.6 The ILC's Other Post-Conflict Draft Principles that Intersect with Toxic Remnants of War

Five of the draft principles published in 2016 were also of relevance for the generation and management of TRW. The first, on preventative measures, could conceivably help underpin more effective mainstreaming of environmental policies in military planning and practice before, during, and after conflicts. In turn these could help encourage policies and practices that help minimize the generation of TRW.

4. Measures to enhance the protection of the environment

1. States shall, pursuant to their obligations under international law, take effective legislative, administrative, judicial and other measures to enhance the protection of the environment in relation to armed conflict.
2. In addition, States should take further measures, as appropriate, to enhance the protection of the environment in relation to armed conflict.

Limited information is currently available on the implementation of IHL obligations pertaining to the environment, while state practice is dispersed across national laws, military guidelines, and the interactions with IEL frameworks, such as those on chemicals and waste. Information on the environmental conduct of non-state actors is sparser still.⁵¹ In this regard, it was unsurprising that the need for better implementation of the international law relevant to the protection of the environment in relation to armed conflicts also featured in 2016's United Nations Environment Assembly ('UNEA') resolution on the *Protection of the environment in areas affected by armed conflict*.⁵² Whether the ILC principle and the UNEA resolution will help catalyse more effective environmental mainstreaming, or indeed greater scrutiny of state practice and conduct, remains to be seen. The ICRC is expected to update its 1996 *Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict* by the end of 2017, and this could provide one benchmark against which to test the conduct of states.⁵³

⁵¹ Jonathan Somer, 'Blog: Environmental Protection and Non-State Armed Groups: Setting a Place at the Table for the Elephant in the Room' (4 December 2015), at <<http://www.trwn.org/blog-environmental-protection-and-non-state-armed-groups-setting-a-place-at-the-table-for-the-elephant-in-the-room/>> accessed 9 February 2017.

⁵² Protection of the Environment in Areas Affected by Armed Conflict, UN Doc. UNEP/EA.2/Res.15.

⁵³ 'Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict', at <<https://www.icrc.org/eng/resources/documents/article/other/57jn38.htm>> accessed 9 February 2017.

7. Agreements concerning the presence of military forces in relation to armed conflict

States and international organizations should, as appropriate, include provisions on environmental protection in agreements concerning the presence of military forces in relation to armed conflict. Such provisions may include preventive measures, impact assessments, restoration and clean-up measures.

The ILC's Drafting Committee noted that the requirements in draft principle seven on Status of Forces Agreements ('SOFAs') did not stem from any obligation under international law; however they do increasingly reflect the practice of militaries. A number of ILC members questioned the applicability of the original principle in plenary, with some suggesting that basing agreements had little to do with the conduct of hostilities. However, as the cases of contamination from NATO's International Security and Assistance Forces facilities in Afghanistan demonstrate, the environmental footprint of installations can be significant before, after, and also during conflict,⁵⁴ something that stronger environmental standards in bilateral agreements could help address. Pollution from foreign military bases and activities can generate serious and persistent pollution that can threaten the health of local communities, and affect water and agricultural resources. Affected states may be at the mercy of power imbalances in seeking redress from polluters or, where they wish to reoccupy facilities once foreign forces depart, may prioritize cordial relations with the polluter over community concerns. In cases where occupying forces reject liability for harm, this can create long-running tensions with the affected state and communities, as has been the case with Agent Orange and heavy metal contamination on US military bases on Okinawa.⁵⁵

14. Peace processes

1. Parties to an armed conflict should, as part of the peace process, including where appropriate in peace agreements, address matters relating to the restoration and protection of the environment damaged by the conflict.
2. Relevant international organizations should, where appropriate, play a facilitating role in this regard.

As with other draft principles interpreted from the practice of states and international organizations, draft principle 14 represents the growing trend for environmental factors—such as natural resources—to be included in peace agreements. There was some concern in the ILC debate and at the UN General Assembly Sixth Committee that not all conflicts are concluded with a formal agreement, with some states arguing that practice was rare.⁵⁶ Paragraph 2 of the principle reflects the role that organizations such as UNEP can play as arbiters in such processes and the fact that parties to a conflict do

⁵⁴ Aneaka Kellay, 'ISAF's Environmental Legacy in Afghanistan Requires Greater Scrutiny' (2017), at <<http://www.toxicremnantsowar.info/isafs-environmental-legacy-in-afghanistan-requires-scrutiny/>> accessed 9 February 2017.

⁵⁵ The Japan Times, 'Agent Orange and Okinawa: The Story So Far', at <<http://features.japantimes.co.jp/agent-orange-in-okinawa/>> accessed 9 February 2017.

⁵⁶ Haodan Heather Chen, 'Prized Natural Resources are Rarely Addressed in Peace Agreements' (New Security Beat, 10 February 2016), at <<https://www.newsecuritybeat.org/2016/02/natural-resources-important-prize-rarely-addressed-peace-agreements/>> accessed 9 February 2017.

not always welcome this role. However, in cases where there are threats from TRW or other forms of harm, or where natural resources have helped fuel conflicts, integrating agreements on the ownership and management of these environmental issues could play an important role in building and sustaining peace.

15. Post-armed conflict environmental assessments and remedial measures

Cooperation among relevant actors, including international organizations, is encouraged with respect to post-armed conflict environmental assessments and remedial measures.

UNEP, the World Bank, and the United Nations Development Programme ('UNDP') have been undertaking post-conflict environmental assessments since the late 1990s. These have become a vital tool for efforts to provide scientifically robust and neutral data on the environmental drivers and consequences of conflicts, considering direct forms of harm, such as TRW, analysing systems of environmental governance with a view to reconstructing governmental capacity, and minimizing the risks of a return to conflict over particular natural resources.⁵⁷ ILC members were clear that this principle should deal solely with assessments, and not cover issues of liability or reparations. However some states that spoke to the principle at the UN General Assembly felt that it should go further in terms of cooperation, with belligerents having a responsibility to conduct assessments and a greater focus on remedial measures.

17. Remnants of war at sea

States and relevant international organizations should cooperate to ensure that remnants of war at sea do not constitute a danger to the environment.

Pollution from marine military remnants is a global issue, with wrecks and sea-dumped munitions posing health and environmental risks to communities across the world. These are often most acute for small island states, with a heavy reliance on fishing and tourism. They also act as a barrier to the economic development of seabed resources. The financial costs and legal complexity associated with addressing these hazards are significant, particularly where remnants may have been emplaced decades previously. This complexity is reflected in the principle, which merely calls for cooperation, rather than imposing or suggesting a strict obligation. States broadly welcomed the principle, although several queried why its original wording on public health risks from marine remnants had been removed by the ILC's Drafting Committee.

18. Sharing and granting access to information

1. To facilitate remedial measures after an armed conflict, States and relevant international organizations shall share and grant access to relevant information in accordance with their obligations under international law.
2. Nothing in the present draft principle obliges a State or international organization to share or grant access to information vital to its national defence or security. Nevertheless, that State or international organization shall cooperate in good faith with a view to providing as much information as possible under the circumstances.

⁵⁷ David Jensen, 'Evaluating the Impact of UNEP's Post-Conflict Environmental Assessments' in Jensen and Lonergan (n 12).

This principle, which is based loosely on the duty to cooperate, was heavily debated in the ILC's plenary meeting. It received rather less attention at the UN General Assembly where it was broadly welcomed, the swift release of data on environmental hazards being recognized as fundamental for minimizing both risks to public health and the environment. The principle could have been strengthened by including non-state actors, be they armed groups or private military contractors—who may retain information vital for environmental remediation efforts—but the main concern related to the strength of the national security exemption in paragraph 2.

One notable example in this regard relates to the refusal of the US to share targeting data on its use of depleted uranium weapons in Iraq in 2003.⁵⁸ The data, which is crucial for clearance and harm reduction measures, was not shared with UNEP, the Iraqi government, or civil society. As no transparency obligations are in place for depleted uranium weapons—unlike for ERW under CCW Protocol V—the United States was free to withhold the information, although it had made such data available to UN agencies for other conflicts in the past. Very few forms of TRW are covered by existing international obligations and, as such, the principle perhaps risks placing too much store in 'good faith'.

18.7 Conclusion

The protection of the environment, human health, and livelihoods is a critical element of any consideration of *jus post bellum*. However the existing legal frameworks that could provide enhanced protection are underdeveloped. Nevertheless there is a broad consensus that there is significant potential for progress in synthesizing the disparate elements of IHL, IEL, HRL, state practice, and peacetime environmental norms and standards.

In publishing a draft principle on TRW, the ILC has helped draw attention to environmental and human health hazards that have been largely ignored by the international community due to an understandable focus on the immediate humanitarian threat posed by ERW. Remnants of war at sea are another environmental issue that has received insufficient attention. Both cases are a reminder of the potential and power of advocacy framings and of the role that civil society can play in promoting particular topics, even where it may be at the expense of others.

The ILC's work stream on PERAC has made considerable and swift progress but, as this analysis suggests, balancing the objective of enhanced protection for both people and their environment, with the needs and interests of state and non-state actors, and international organizations, is complex. The pace and ambition of the Special Rapporteur's programme of work has proved uncomfortable for some governments and ILC members, as has her need to interpret and utilize norms and practices from beyond both IHL and existing international mechanisms, and it is evident from the debates in the UN General Assembly that this pushback may intensify. Furthermore, at

⁵⁸ Doug Weir, 'Blog: Do the ILC's Draft Principles on Remnants and Data Sharing Reflect State Practice?' (6 October 2016), at <<http://www.trwn.org/blog-do-the-ilcs-draft-principles-on-remnants-and-data-sharing-reflect-state-practice/>> accessed 9 February 2017.

this stage it is still unclear what the eventual outcome of the ILC's work on PERAC will be, draft principles, or the more meaningful draft articles.

As with other areas of *jus post bellum*, it is insufficient to have the legal tools at your disposal if you are unable to operationalize them. For conflict and the environment, the existing international system has proved itself largely inadequate to constrain environmentally harmful military behaviours, to properly address environmental damage and civilian harm in the wake of conflicts, or to ensure effective environmental assistance and restoration. The environment suffers from low prioritization across the UN system, and particularly in post-conflict response, where urgent humanitarian needs and responses take priority; and beyond UNEP, international organizations tend to have few staff dedicated to the environmental impact and legacy of conflicts. Recent conflicts have also shown that piecemeal interventions do little to address the systemic problems caused by the collapse in environmental governance that often accompanies armed conflicts and instability.

The TRW Project considered these problems in mapping a possible structure for a post-conflict environmental mechanism.⁵⁹ In doing so, we explored how a more formalized system of post-conflict assistance could increase the protection of civilians and their environment, and help to create and strengthen norms against environmentally destructive military behaviours. Such a framework could help to operationalize the ILC's draft principles and catalyse the merging of the disparate bodies of law relevant to the field, but achieving such a system would require a far greater level of state and civil society engagement on the environmental dimensions of armed conflict than currently exists.

Vitaly, a more formalized system of post-conflict environmental assistance would help facilitate the mainstreaming of the environment throughout the cycle of conflicts. The international agreements on ERW tended to be driven from the bottom up, with NGOs working with international organizations and progressive states to develop response frameworks. NGOs brought field data and the voices of victims and survivors to the attention of states and the wider public, catalysing political efforts. This poses a problem for TRW and conflict and the environment more generally as current engagement on these topics by civil society is patchy, particularly with regard to the transnational environmental NGOs. This indicates that those wishing to see more effective mainstreaming of the environment will need to consider how an international framework could be developed, something that was done with the other cross-cutting issue of peace and security—gender. Any consideration of greater environmental mainstreaming in both the discourse on conflicts, and in how the international community responds to them, should prioritize more effective structural monitoring of environmental risks and incidents, and more robust integration of the environment in peacebuilding and humanitarian response.⁶⁰

⁵⁹ TRW Project (n 26).

⁶⁰ UNEP/OCHA Joint Unit, 'Environment and Humanitarian Action—Increasing Effectiveness, Sustainability and Accountability' (2014), at <<https://docs.unocha.org/sites/dms/Documents/EHA%20Study%20webfinal.pdf>> accessed 9 February 2017.

Governments broadly welcomed the continuation of the ILC's work on PERAC, suggesting that occupation, the practice of non-state actors, indigenous peoples, the questions of responsibility and liability, and the applicability of the precautionary principle all be considered in future. It will be a lengthy process, and lessons should be learned from the previous phases of political interest in conflict and the environment which ultimately faltered due to a lack of engagement or allowing ownership to be handed to military lawyers.⁶¹ Nevertheless there are grounds for optimism. The international community has a far better understanding of the environmental dimensions of conflicts than it did in the 1970s and 1990s, and the passage by consensus of a wide-ranging resolution on the *Protection of the environment in areas affected by armed conflict* at 2016's meeting of UNEA was undoubtedly a sign of growing interest in the topic among governments;⁶² but building on this interest, and ensuring that the environment is more effectively mainstreamed in all matters of peace and security, is likely to remain challenging.

⁶¹ Doug Weir, 'Blog: Whatever Happened to the 5th Geneva Convention?' (29 July 2015), at <<http://www.trwn.org/blog-whatever-happened-to-the-5th-geneva-convention/>> accessed 9 February 2017.

⁶² UNEA-2 resolution (n 52).

Index

- Aarhus Convention** 344
- Accountability**
alternative avenues, for 167–8
corporate accountability before the ICC 159
environmental harm as a facet of *jus post bellum* 248–52
- Additional Protocols I and II to the Geneva Conventions** 239–40
demilitarized zones, Art 69 AP1 429–30
post-conflict impact Art 36 AP1 433–6
undefended localities, Art 59 AP1 428–9
weapons review, Art 36 AP1 430–1
- Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons (1996)** 259, 377, 378, 426
- African Commission on Human and Peoples Rights** 135, 377
- African Convention on the Conservation of Nature and Natural Resources** 241
- Alliance des Forces Démocratiques pour la Libération du Congo-Zaire (AFDL)** 173
- Alien Tort Claims Act, US (ATCA)** 280
- Animal Detection Systems (ADS)** 407
- Anti-personnel Mine Ban Convention (APMBC)** 401
- Armed Conflicts**
due regard for the environment in 207–11
national sovereignty and its limits 213
problems in environmental protection work 74–6
see also *Non-International Armed Conflict*
- Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991)** 197
- Banjul Charter (1981) (African Charter on Human and Peoples Rights)** 376, 377
- Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution (1976)** 200
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)** 197, 265
- Basel Protocol on Liability and Compensation (1999)** 198, 265
- Bosnia and Herzegovina**
agreement on application of IHL between parties to the conflict in 243
- Brundtland Report (1987)** 105
- Case Concerning Armed Activities on the Territory of the Congo (DRC v Uganda) (2005)** 231
- Case Concerning the Factory at Chorzów (Germany v Poland) (1928)** 352
- Central African Republic (CAR)** 91
- Committee on Economic, Social and Cultural Rights (CESCR)** 124, 128, 129, 130, 139, 141, 310
- Committee on the Rights of the Child (CRC)** 132
- Congolese Army** 91
- Convention on Certain Conventional Weapons (1980)** 240–1
- Convention on Chemical Weapons (1993) (CWC)** 192, 193, 194, 195, 196, 199, 200, 201, 374
see *Disarmament*
- Convention on Cluster Munitions (2010) (CCM)** 137
- Convention on Long-range Transboundary Air Pollution (1979)** 378
- Convention on the Prohibition of Military and Any Other Hostile Use of Environmental Modifications Techniques (ENMOD)** 244–5, 424
- Corporate Social Responsibility**
challenges and gaps in existing frameworks
addressing degradation from external involvement in post conflict settings 293–7
environmental degradation, and 277–9
governing adverse impacts of extraterritorial corporate behavior 280–5
governing corporate behaviour in recently post conflict settings 286–90
non-judicial enforcement of these frameworks 285–6
normative frameworks 277, 280–5
respect for human and environmental rights in post conflict countries, and 279–80
- Criminal Responsibility**
individual criminal responsibility 213–14
- Darfur Peace Agreement (2006)** 250
- Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration) (1972)** 18, 50, 124, 196, 376
- Democratic Republic of Congo (DRC)**
contribution of peacekeeping operations towards the implementation of standards in 188
resolutions in relation to 181–4
UN Organization (Stabilization) Mission in 186–8
see also *Natural Resources*
- Destruction of property** 47, 165, 233
- Disarmament**
CWC obligation to disarm 190–4
environmental implications of chemical disarmament 194–5
fragmentation to integration 195–9
lessons learned 201–2
the Syrian case 199–201
- Diversion of Water from Meuse (Netherlands v Belgium) (1937)** 97
- Draft Code of Crimes against the Peace and Security of Mankind (1996)** 242
- Draft of a Possible Convention on Private Military and Security Companies (2010)** 311, 312

- Economic, Social and Cultural (ESC) Rights** 120, 124, 128, 130–1, 138, 139, 142, 163
see also *Human Rights Law*
- Environment**
definition
 classic approach 44–62
 scope 48–57
 magnitude 57–61
 lessons for *jus post bellum* 68–70
- Environmental Damage**
human rights issue, as a 123–6
post-conflict human rights issue, as a 126–41
- Environmental Harm**
exacerbating conflict and jeopardizing
 Economic and social recovery 236
perpetrated during an NIAC 238–9
symbolic value of prohibiting during
 NIACs 234
transboundary harm 235–6
see also *Environmental Damage and International Criminal Law*
- Environmental Integrity**
change in baseline Conditions 64–5
goals 67–8
pristine myth 65–7
what *jus post bellum* adds to 364–5
- Environmental Peacebuilding**
see *Environmental Obligations*
- Environmental Obligations**
environmental projects and
 peacebuilding 215–16
post conflict 215–17
see also *Non-International Armed Conflict and Reparations*
- Environmental Protection**
extending protection to NIACs 234–48
gravity 235
impact on future generations 234–5
jus post bellum and 274–7
see also *Environmental Damage, Environmental Harm, Mine Action and Sustainable Development*
- Environmental Restoration**
agriculture/food sources and land 131–2
water sources 132–4
see also *Reparations and Toxic Remnants of War*
- Equator Principles** 288
- European Agreement Concerning the International Carriage of Dangerous Goods by Road (1957)** 198–9
- European Court of Human Rights (ECtHR)** 124, 125, 136, 376, 416
- Explosive Remnants of War (ERW)** 240, 396, 401, 438, 442, 443, 444, 445, 446, 449, 454
- Federal Tort Claim Act** 317
- Food and Agriculture Organizations of the United Nations (FAO)** 35, 189, 282, 405
- General Principles of International Law**
derived from the international legal system 97–8
derived from national laws 96–7
intrinsic to the idea of law 97
- role in international law
 development function 102
 gap filling function 100
 interpretative function 100–1
 unification function 98–100
- Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention) (1949)** 46, 49, 148, 336, 373, 375
- Governance Economic and Management Assistant Plan (GEMAP)** 172
- Gravity** 235
see *Environmental Protection*
- Habitat Equivalency Analysis (HEA)** 358
- Hague Regulations** 46, 49, 148, 149, 154, 155, 156, 157, 158, 319, 336, 373
- Harvard Manual on the Law of Air and Missile Warfare** 209, 424
- Human Rights Mechanisms**
ESC rights and progressive realization 130–1
natural resource depletion 138–40
poverty 140–1
- Human Rights Committee** 128
- Human Rights Council (HRC)** 129
- Human Rights Law**
addressing post conflict environmental harm through;
 ESC rights and progressive realisation 130–1
 human rights mechanisms 127–31
- Inter-American Court of Human Rights (IACtHR)** 124, 376–7, 416
- International Ammunition Technical Guidelines (IATG)** 403
- International Code of Conduct for Private Security Service Providers (2013) (ICoC)** 308
- International Commission Against Impunity (CICIG)** 166
- International Committee of the Red Cross (ICRC)**
Study on Customary International Humanitarian Law 19
survey of national legislation 246
working paper for the preparatory committee for the establishment of an international criminal court 244
- International Conference for the Great Lakes Region (ICGLR)** 184, 189
- International Covenant on Economic, Social and Cultural Rights (1966) (ICESCR)** 120, 124, 128, 130, 236, 310
- International Covenant on Civil and Political Rights (1966)** 128, 236, 309
- International Criminal Court (ICC)**
see *Pillage*
- International Criminal Law (ICL)**
application to environmental harm in non international armed conflicts 224–33
destruction of property 233
environmental harm in
 NIACs 234–53
pillage 231–3

- practicalities of amending the Rome Statute to address 236–7
- provisions capable of application to environmental harm 226–31
- starvation of civilian population 232–3
- Internally Displaced Persons (IDPs)** 6, 23, 31, 32, 137, 370, 397
- International Environmental Law**
- principles in *jus post bellum* 102, 103, 104, 115–17, 118
- see also *International Equity and The Precautionary Principle*
- Intergenerational Equity**
- current legal status 106
- history and evolution 105
- International Finance Corporation Social and Environmental Performance Standards** 289–90
- International Financial Organizations** 290–3
- International Humanitarian Law**
- Martens Clause 213
- observance of 243–4
- preventative measures under;
- marking protected sites and zones 428–30
- post conflict impact 431–6
- training of forces 422–8
- United Nations Secretary General's bulletin concerning
- see also *Additional Protocols I and II to the Geneva Conventions*
- International Law Commission (ILC)**
- Articles on Allocation of Loss in the Case of Transboundary Harm Arising Out of Hazardous Activities 16
- Articles on the Effects of Armed Conflicts on Treaties (AEACT) 259, 378, 431
- Articles on Prevention of Transboundary Harm for Hazardous Activities 209, 217
- Articles on the Responsibility of States for Internationally Wrongful Acts (ARSIWA) 214, 262, 265, 266, 267
- Draft Articles on Allocation of Loss in the Case of Transboundary Harm Arising Out of Hazardous Activities 16
- Draft Principle on the Toxic and Hazardous Remnants of War 444
- Report on Protection of the Environment in Relation to Armed Conflicts (PERAC) 45, 46, 54, 444–50
- International Whaling Convention (1946)** 105
- Iraq**
- technical assistance for 343–4
- Islamic State of Iraq and Syria (ISIS)** 233
- Kellog Brown and Root (KBR)** 300
- Kimberley Process** 18, 172, 178, 179, 180, 181, 186, 189, 190
- Lex Specialis** 93, 97, 101, 218, 378, 382
- Legal Frameworks**
- post conflict 120–3
- Liberia**
- contribution of peacekeeping operations 188
- Independent National Patriotic Front of Liberia (INPFL) 171
- Liberian Forest Initiative (LFI) 172, 180–1
- Liberians United for Reconciliation and Democracy (LURD) 172
- Movement for Democracy in Liberia (MODEL) 172
- National Patriotic Front of Liberia (NPFL) 171
- resolutions adopted in relation to 177–81
- United Nations mission in 185–6
- see also *Natural Resources*
- Logistics Civilian Augmentation Program (LOGCAP)** 301
- Military Manuals** 245–6
- Mine Action**
- challenges
- during and after removal of remnants of conflict 416–18
- enforcing state liability for incidents due to contamination 414–16
- 'do no harm' approach and 402–4
- historic decoupling of environment from 440
- impact of mine clearance on land 406–8
- international mine action standards (IMAS) 403, 442
- liability for post conflict contamination 409–12
- measures to ensure no harm to the environment 408–9
- national mine action authority (NMAA) 417
- nexus between peacebuilding, mine action, and the environment 396–8
- Multilateral environmental agreements (MEAs)** 4, 16, 17, 20, 34, 77, 78, 83, 203, 211, 216, 259
- Montreux Document (On Pertinent International Legal Obligations and Good Practices for States Related to Operations of Private Military and Security Companies During Armed Conflict)** 306, 308, 309, 311, 312, 313, 314, 322, 323
- National Park Service, Report (2012)** 65, 67
- Natural Resources**
- implementation of standard in the mandates of peace keeping operations 185–8
- implementation of standards in management reform programmes 188–90
- lessons for *jus post bellum* 190–1
- role in fuelling conflict in West Africa and DRC in DRC 173–5
- in Liberia and the wider region 170–2
- standards developed in UNSC resolutions 175–85
- traditional reluctance to impose international obligations concerning 236–7
- see also *Democratic Republic of Congo (DRC)* and *Liberia*
- Non-International Armed Conflict (NIAC)**
- customary obligations in 211–13
- environmental obligations in 205–15
- responsibility of non state actors in 61, 413
- see also *Pillage*
- North Sea Continental Shelf case (1969)** 96, 238

- Oil Pollution Act** 56, 352
- Opinio Juris** 15, 24, 96, 204, 206, 212, 213, 218, 219, 238, 243
- Organisation for Economic Cooperation and Development (OECD) guidelines (for Multinational Enterprises)** 284–5
- Organization for the Prohibition of Chemical Weapons (OPCW)** 194
- Peacekeeping Operations**
- United Nations Mission in Sierra Leone (UNAMSIL) 185
 - United Nations Observer Mission in Angola, (MONUA) 185
 - United Nations Operation in Côte d'Ivoire, (UNOCI) 185
 - United Nations Organization (Stabilization) mission in the Democratic Republic of the Congo (MONUC/MONUSCO) 185
 - United Nations Transitional Authority in Cambodia (UNTAC) 185
- see also *Liberia*
- Permanent Court of International Justice (PCIJ)** 8, 42, 96, 113, 352
- Pillage**
- alternative avenues for accountability and prevention 167–8
 - corporate liability
 - before the ICC 159
 - of officers and managers before the ICC 159–60
 - command responsibility 160–1
 - accomplice liability 161
 - for war crimes 162
 - evolution of norms against 147–9
 - key terms 146–7
 - law of pillage and economic crimes 162–7
 - law of pillage and *jus post bellum* 151–67
 - natural resource exploitation and law of occupation 154–9
 - temporal considerations 152–4
 - towards a standard definition 149–51
- The Precautionary Principle**
- burden of proof 110–11
 - definition 107–8
 - emergence and development in international law 107
 - health 111–13
 - legal status of 112–13
 - precautionary principle versus international humanitarian law 113–15
 - threat of harm 109
 - uncertainty and risk 109–10
- Principles for Responsible Agricultural Investment in the Context of Food Security and Nutrition** 283–4
- Pristine Myth** 65–7
- Private Security Companies and Security Service Providers (PSCs)**
- international efforts on binding legislation and soft law 311–15
 - international legal obligations of states and non-state actors in relation to 320–3
 - law, policy and relevance to environmental protection 305–15
 - liability for PSC wrongdoing
 - contract litigation 315–18
 - corporate liability 318–20
 - PSC's and environmental harm 302–5
 - PSC's and IHL 306–8
 - PSC's and IHRL 308–11
 - rise, of 300–1
- Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (1984) (EMEP)** 198
- Prosecutor v Furundzija (1998)** 101, 102
- Prosecutor v Kupreskic et al. (2000)** 95, 160
- Protocol on Long-term Financing of the Cooperative**
- Ramsar Convention on Wetlands of International Importance (1972) (Ramsar Convention)** 68, 79, 83, 89, 90, 378
- Remnants of Conflict**
- access denial 405
 - chemical contamination 406
 - soil degradation and loss of productivity 405–6
- see also *Toxic Remnants of War* and *Unexploded Remnants of War*
- Regional Environmental Rehabilitation Advisory Group (RERAG)** 363, 364, 365
- Reparations**
- environmental damage, for 214–15, 257–9
 - parameters 379–87
 - primary rules, and 259–63
 - shared responsibility, and
 - fundamentals 265–6
 - apportionment of 266–7
 - approach in practice 267–70
 - some further challenges for *jus post bellum* 271–2
 - special reparation principles post-conflict
 - relevance of 216
- see also *United Nations Compensation Commission* and *Victims*
- Rio Declaration, on Environment and Development (1992)** 103, 106, 107, 108, 222, 260, 275, 378, 394, 435
- Ruggie Framework**
- see *United Nations Guiding Principles on Business and Human Rights*
- San Remo Manual on International Law Applicable to Armed Conflicts at Sea (1994)** 202, 444
- Shared Responsibility**
- see *Reparations*
- Sierra Leone**
- Revolutionary United Front (RUF) 171
- South Sudan**
- United Nations mission in 403
- South West Africa Cases, (Ethiopia v South Africa; Liberia v South Africa)** 96
- Status of Forces Agreement (SOFA)** 47, 451
- Starvation (of civilian populations)** 232–3
- Sustainable Development**
- environmental protection and *jus post bellum* 274–7

- Tenure Guidelines** see *Voluntary Guidelines on the Responsible Governance of Tenure*
- Toxic Remnants of War (TRW)**
 emergence of the toxic remnants of war
 framing 442–4
 ILC draft principles 444–50
 ILC post-conflict draft principles that intersect with 450–3
- Transitional Justice**
 mechanisms 393
 see also *Legal Frameworks*
- Truth and Reconciliation Commissions (TRCs)** 94, 117, 165, 166, 171, 251, 384
- Unexploded Remnants of War (UXO)** 302, 398, 415
 see also *Toxic Remnants of War*
- United Nations Compensation Committee (UNCC)**
 constitution of, and choice of civil or criminal law 333–7
 environmental reparations and *jus post bellum* 360–4
 structure, procedures, and substantive law
 applicable law 340
 compensable losses and damage 354–7
 direct losses and damage 347–52
 due process 340–3
 evidentiary threshold 345–6
 fact finding 346
 jurisdiction 337–9
 nature of loss and damage 358–9
 remedy 352–4
 tracking and follow up programmes 359–60
 transparency and confidentiality 344–5
 valuation of damage 357–8
- United Nations Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti Personnel Mines and on Their Destruction (1997)** 2, 137, 212, 401
- United Nations Development Programme (UNDP)** 34, 35, 452
- United Nations Draft of a Possible Convention on Private Military and Security Companies (UN Draft)** 311, 312, 322
- United Nations Educational, Scientific and Cultural Organisation (UNESCO)** 15, 50, 79, 85, 86, 87, 88, 204, 222
- United Nations Environment Programme (UNEP)** 1, 2, 13, 14, 24, 35, 36, 41, 59, 80, 88, 89, 103, 127, 204, 211, 215, 222, 260, 275, 277, 294, 304, 329, 351, 364, 370, 392, 397, 399, 439, 441, 442, 451, 452, 453
- United Nations Guiding Principles on Business and Human Rights (Ruggie Framework)** 2, 21, 280, 281, 282, 283, 284, 286, 287, 296, 297, 298
- United Nations Law of the Sea Convention (1982) (UNCLOS)** 208, 209, 387
- United Nations Register of Damage (UNRoD)** 55
- United Nations Security Council**
 appraisal of standard-setting practice 184–5
 standards developed in UN security council
 resolutions 175–85
 working methods 175–7
- United Nations Working Group on the Use of Mercenaries as a Means of Violating Human Rights and Impeding the Exercise of the Right of Peoples to Self-determination** 311
- United Nations Recommendations on the Transport of Dangerous Goods-Model Regulations** 199
- United States Central Command (CENTOM)** 304
- Universal Declaration of Human Rights (1948)** 243, 289, 309, 412
- US Hazardous Waste Cleanup Law (CERCLA)** 56
- US National Park Service** 64
- Victims**
 administrative reparations schemes 390–2
 civil suits 390
 criminal liability 389–90
 facilitating participation 393–4
 protection of
 under International Environmental Law 377–9
 under International Criminal Law 375
 under International Human Rights Law 376–7
 under the International Humanitarian Law 372–5
 reparations for
 in International Criminal Law 384–6
 in International Environmental Law 386–7
 in International Humanitarian Law/
 International Human Rights Law 382–5
 see also *Transitional Justice*
- Vienna Convention for the Protection of the Ozone Layer (1985)** 107
- Vienna Convention on the Law of Treaties (1969) (VCLT)** 101
- Voluntary Guidelines on the Responsible Governance of Tenure ('Tenure Guidelines')** 282–3
- Voluntary Principles on Security and Human Rights** 288–9
- Water Sources** 132–4
- World Commission on Environment and Development, (WCED)** 105
- World Health Organization, (WHO)** 124
- World Heritage Convention,**
 four elements
 broad mandate of treaty institutions 80–1
 institutional co-operation 87–90
 non-confrontational compliance
 mechanisms 83–7
 open ended provisions 81–3

