Prosecuting environmental harm before the International Criminal Court

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II. ENVIRONMENTAL HARM AND THE ICC'S SUBSTANTIVE FRAMEWORK

A. Introduction

In this chapter, the substantive provisions of the Rome Statute of the ICC that could potentially be used to address serious environmental harm are assessed. Part B sets out the definitions of the core crimes (genocide, crimes against humanity, war crimes, and aggression),[282] and reviews how these crimes have been used in ICC proceedings, as well as other relevant settings, to address environmental harm. Part C then turns to three paradigmatic forms of environmental harm (military attacks resulting in harm to the environment, toxic dumping, and wildlife exploitation) and examines them from the inverse perspective, assessing whether these three specific forms of environmental harm could be prosecuted under any of the current crimes within the ICC's jurisdiction.

While the analysis is focused on the provisions of the Rome Statute, other instruments and principles of international law are referenced where relevant for the interpretation and potential application of these crimes. In this respect, the approach reflects the hierarchy of sources of law set out in article 21 of the Rome Statute, which provides that the Court shall apply in the first place the Rome Statute, Elements of Crimes and its Rules of Procedure and Evidence, in the second place, applicable treaties and the principles and rules of international law, including international humanitarian law, and third, "general principles of law derived by

[282] There are other crimes under international law that may potentially have some relevance to environmental harm, but are not included in the ICC's jurisdiction. Terrorism is not a crime *per se* under the Rome Statute. If terrorism were to be included, it may provide a vehicle to prosecute environmental harm. For example, the definition of terrorism in the Arab Convention for the Suppression of Terrorism explicitly refers to damaging the environment as an underlying act of terrorism. Article 1(2) of the Arab Convention for the Suppression of Terrorism, of 22 April 1998, defines terrorism as 'Any act or threat of violence, whatever its motives or purposes, that occurs in the advancement of an individual or collective criminal agenda and seeking to sow panic among people, causing fear by harming them, or placing their lives, liberty or security in danger, or seeking to cause damage to the environment or to public or private installations or property, or to [sic] occupying to seizing them, or seeking to jeopardize a natural resources'; Antonio Cassese and Paola Gaeta, International Criminal Law, (Oxford: Oxford University Press, 2nd edn, 2008), p.164. See also Article 1(2) of the Convention of the Organization of the Islamic Conference on Combating International Terrorism, of 1 July 1999 (referring to "exposing the environment or any facility or public or private property to hazards or occupying or seizing them, or endangering a national resource, or international facilities, or threatening the stability, territorial integrity, political unity or sovereignty of independent States"). See further, Article 1(3) of the Organization of the African Union Convention on the Prevention and Combating of Terrorism, of 14 July 1999 ("(a) any act which is a violation of the criminal laws of a State Party and which may endanger the life, physical integrity or freedom of, or cause serious injury or death to, any person, any number or group of persons or causes or may cause damage to public or private property, natural resources, environmental or cultural heritage …").

the Court from national laws of legal systems of the world including, as appropriate, the national laws of States that would normally exercise jurisdiction over the crime".[283] The one prohibition in the Rome Statute that explicitly mentions the environment, the war crime set out in article 8(2)(b)(iv), is analysed in detail. However, the study also looks to other war crimes, crimes against humanity, and forms of genocide, which could be used to prosecute environmental harm.

The focus in this Chapter is on substantive law, and not on procedural questions, which are dealt with in Chapter Three, nor on questions of victim status and participation, which are dealt with in Chapter Four. Applying the substantive provisions of the Rome Statute to environmental harm, including the three paradigmatic forms listed above, provides a guide to the feasibility of prosecuting environmental harm at the ICC and also permits an insight into whether the Court's framework is conceived anthropocentrically, as opposed to eco-centrically.

B. The Preamble of the Rome Statute and environmental harm

Before addressing the specific prohibitions set out in the Rome Statute, it is instructive to look to its Preamble to discern the tenor of the Court's object and purpose, and the underlying motivations for the creation of its jurisdiction. The Preamble not only provides a guide to the aims underlying the Court's foundation but also may be used to interpret the text of the Rome Statute.[284] Jurisprudence emerging from the ICC shows that the Preamble is frequently relied on for the interpretation of the provisions of the Rome Statute.[285]

Although there is no direct reference to environmental harm in the Preamble of the Rome Statute, it does refer to ending impunity for atrocity crimes, "for the sake of present and future generations".[286] This reference, albeit oblique, may accommodate the Court's processes being applied to serious environmental harm. In the World Charter for Nature, the United Nations General Assembly reaffirmed the need to protect species and ecosystems "for the benefit of

[283] Rome Statute, article 21(1)(c) clarifies that general principles of law from national systems may only be relied on "provided that those principles are not inconsistent with this Statute and with international law and internationally recognized norms and standards." See also infra Chapter I(C)(1) (discussion of sources of law).
[284] See Vienna Convention on the Law of Treaties of 1969, article 31(1) ("A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose."). See also Max Hulme, "Preambles in Treaty Interpretation", *University of Pennsylvania Law Review*, 164 (2016), pp.1281-1343, p.1282.
[285] See, e.g., *Katanga* article 74 Decision, paras.55, 1122.
[286] Rome Statute, Preamble.

present and future generations",[287] and the World Heritage Convention recalls the duty of states to ensure "the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage…".[288] The International Court of Justice has also acknowledged the direct link between the environment and the health of human beings, including future generations, stating "(…) 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."[289] The indirect reference in the Rome Statute Preamble to the principle of intergenerational equity forms a bridge to international environmental law, as this principle lies at the heart of the notion of sustainable development.[290]

However, the lack of any direct reference to the environment in the Preamble indicates that the accommodation for environmental harm only extends as far as human interests are impacted. Accordingly, from the outset of the ICC's founding document, the environment is accorded at most incidental coverage, conditional on the demonstration of harm to human interests. That anthropocentric orientation must be taken into account when interpreting the specific provisions of the Rome Statute, including the substantive prohibitions within the Court's jurisdiction, which are examined forthwith.

C. Prohibitions in the Rome statute relevant to environmental harm

1. Genocide

Genocide is a crime that consists of one or more of several prohibited underlying acts targeting members of a group,[291] committed with the intent to destroy, in whole or in part, a

[287] United Nations General Assembly, Resolution 37/7, A/RES/37/7, 28 October 1982, Annex: World Charter for Nature, Preamble ("Reaffirming that man must acquire the knowledge to maintain and enhance his ability to use natural resources in a manner which ensures the preservation of the species and ecosystems for the benefit of present and future generations…"). See also UNGA Resolution 69/314 ("*Reaffirming* the intrinsic value of biological diversity and its various contributions to sustainable development and human well-being, and recognizing that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the Earth which must be protected for this and the generations to come…").

[288] World Heritage Convention 1972, article 4.

[289] *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, 8 July 1996, *I.C.J. Reports* 1996, p. 226 ("ICJ Nuclear Weapons Advisory Opinion (1996)").

[290] See Brundtland Commission, World Commission on Environment and Development 1990, Our Common Future, Australian edn, Oxford University Press, Melbourne, p.85 ("development that meets the needs of the present without compromising the ability of future generations to meet their own needs.").

[291] The underlying acts listed in the Genocide Convention, article 3 are: (a) Killing members of the group; (b) Causing serious bodily or mental harm to members of the group; (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; (d) Imposing measures intended to prevent births within the group; (e) Forcibly transferring children of the group to another group.

national, ethnical, racial or religious group, as such.[292] ICTR judgements have called genocide "the crime of crimes",[293] and at the ICTY it has been noted that genocide is "singled out for special condemnation and opprobrium" as it harms all of humanity.[294] While genocide is clearly anthropocentric in a broad sense, as it concerns the suffering of groups of human beings, it could more precisely be labeled as genus-centric, because the core value that it seeks to protect is the existence of groups of people, rather than specific individuals.[295]

Direct evidence of genocidal intent is rare. Instead, this specific intent (*dolus specialis*) is usually shown by the accretion of circumstantial and indirect evidence. Because of the difficulty of proving specific intent, genocide is typically only charged at the international courts where there is evidence of large-scale killings or other serious violence targeting a racial, religious, national or ethnic group *en masse*.[296]

Convictions for genocide under international criminal law can be difficult to obtain. At the ICC there have been no convictions for this charge to date.[297] At the ICTY, only 3 of 161 indictees have received confirmed convictions for the commission of genocide; all pertaining to the mass killings and related crimes in Srebrenica in July 1995.[298] Conversely, at the ICTR,

[292] Rome Statute, article 6.
[293] *Prosecutor v. Jean Kambanda*, Case No. ICTR 97-23-S, Trial Judgment and Sentence, para.16 (4 September 1998); *Prosecutor v. George Rutaganda*, Case No. ICTR-96-3-T, Trial Judgment and Sentence, para.451 (6 December 1999); *Prosecutor v. Omar Serushago*, Case No. ICTR-98-39-S, Trial Sentence, para.15 (2 February 1999).
[294] In *Krstić,* the appeals chamber noted that "[a]mong the grievous crimes this Tribunal has the duty to punish, the crime of genocide is singled out for special condemnation and opprobrium … This is a crime against all humankind, its harm being felt not only by the group being targeted for destruction, but by all of humanity." *Prosecutor v. Radislav Krstić*, Case No. IT-98-33- A, Appeal Judgment, paras.266 and 275 (19 April 2004), para.36.
[295] The term genus-centric is original to this thesis.
[296] Genocide was charged in many cases before the ICTR, where the occurrence of genocide was considered a fact of common knowledge, that did not need to be proved anew for each case. At the ICTY, genocide was charged in relation to the mass killings and related violence of the Bosnian Muslims of Srebrenica in July 1995, and in relation to the broader ethnic cleansing campaign throughout several municipalities in Bosnia, particularly Prijedor. At the ECCC, genocide was charged in relation to the Cham people in Cambodia. To date, genocide has only been charged before the ICC in relation to the large-scale attacks on Fur, Masalit, and Zaghawa people in Darfur.
[297] The only person charged with genocide before the ICC to date is the Sudanese President, Omar Al-Bashir: *Prosecutor v. Omar Hassan Ahmad Al Bashir,* Case No.ICC-02/05-01-09, Second Warrant of Arrest for Omar Hassan Ahmad Al Bashir, 12 July 2010 ("Second Bashir Arrest Warrant").
[298] Ljubiša Beara, Vujadin Popović, and Ždravko Tolimir. Two other persons – Radislav Krstić and Drago Nikolić were convicted for aiding and abetting genocide. Radovan Karadžić and Ratko Mladić have been convicted of committing genocide and are currently appealing their convictions.

where the occurrence of genocide was a fact of judicial notice, many of the indictees were convicted for genocide.[299]

Environmental harm could potentially meet the elements of one of the underlying acts of genocide. For example, intentionally destroying a people's habitat or taking their land or resources could be classified as wilful killing if death ensued (article 6(a)), deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part (article 6 (c)); or as causing serious bodily or mental harm to members of the group (article 6(b)).

The critical element would be proving that the environmental harm was perpetrated with the specific intent (*dolus specialis*) to destroy, in whole or in part, the targeted group.[300] In the case of pure environmental harm, with no accompanying direct violent attacks on human victims, past practice suggests it would be difficult to convince the judges of the genocidal intent.[301] An additional difficulty would be causation, as many intervening factors, including the weather and economic fluctuations, would affect the impact on a human population of environmental degradation and break the causal chain between the perpetrators' conduct and the resulting harm or death to members of the victim group.

Conversely, where environmental harm featured as one of a range of measures taken as part of a campaign against a targeted group, this may assist to build a basis from which genocidal intent could be inferred. At the ICC, Sudanese President Omar Al-Bashir is charged with crimes that relate to, but do not centrally focus on, environmental harm, and also include many alleged killings. These include the systematic pillaging and destruction of villages and civilian property across a large area,[302] "contaminat[ing] the wells and water pumps of the towns and villages primarily inhabited by members of the Fur, Masalit and Zaghawa groups that they attacked", and "deliberately inflicting on the Fur, Masalit and Zaghawa ethnic groups conditions of life calculated to bring about their physical destruction".[303] However,

[299] Of the 62 indictees convicted by the ICTR, the large majority were convicted for some form of genocide; see United Nations Mechanism for the International Criminal Tribunals, key figures (available at http://unictr.unmict.org/en/cases/key-figures-cases).
[300] Rome Statute, article 6.
[301] In this respect, it is notable that the OTP of the ICTY has encountered considerable difficulty seeking to prove genocide charges in relation to areas of Bosnia other than Srebrenica.
[302] *Prosecutor v. Omar Hassan Ahmad Al Bashir,* Case No.ICC-02/05-01-09, Warrant of Arrest for Omar Hassan Ahmad Al Bashir, 4 March 2009, pp.5-7; ("Bashir Arrest Warrant"); Second Bashir Arrest Warrant.
[303] Second Bashir Arrest Warrant, pp.5-8; Bashir Arrest Warrant, pp.5-7. *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7.

there is an insufficient basis in the materials and filings in the *Bashir* case submitted so far to tell whether harm to the natural environment will feature significantly during the trial.

Another means is to destroy the land that sustains the targeted people through so-called scorched earth tactics.[304] While such tactics have not specifically been charged as genocide, this tactic of war could potentially meet the definition of the crime if it involved large-scale death or serious harm among the targeted population and were accompanied by the requisite specific intent or *dolus specialis*.[305] However, if the scorched earth tactics were merely seen as a defensive manoeuvre then it would be unlikely to result in any conviction, no matter how ill-judged, as demonstrated by the Rendulić case from the United States Military Tribunal at Nuremberg following World War Two.[306]

Because of the exacting requirements to prove genocide, environmental harm would be most likely to feature in a genocide case as one of several means used to harm members of the group by inflicting conditions on them that jeopardize their ongoing existence. This would assist to demonstrate the necessary specific intent needed to establish genocide. Environmental harm in and of itself, without any accompanying direct attacks on humans, would be unlikely to provide a sufficient basis to charge genocide.

2. Crimes Against Humanity

(a) Contextual Elements

Crimes against humanity consist of underlying acts listed in article 7 of the Rome Statute committed as part of a widespread or systematic attack against a civilian population pursuant to or in furtherance of a state or organizational policy.[307] No link to armed conflict is required to prove a crime against humanity, meaning that this category of offence could potentially be

[304] See Cohan (2002), p.500.
[305] See Rome Statute, article 6.
[306] See *The Hostages Trial (Wilhelm List and Others)*, 8 Law Reports of Trials of War Criminals 66, 66-69 (1948) ("*Hostages* Trial"). Note that in the context of article 8(2)(b)(iv), these circumstances would potentially preclude responsibility prior to getting to the issue of duress, as the required foresight of excessiveness would not be met.
[307] Rome Statute, article 7. The underlying acts are: (a) Murder; (b) Extermination; (c) Enslavement; (d) Deportation or forcible transfer of population; (e) Imprisonment or other severe deprivation of physical liberty in violation of fundamental rules of international law; (f) Torture; (g) Rape, sexual slavery, enforced prostitution, forced pregnancy, enforced sterilization, or any other form of sexual violence of comparable gravity; (h) Persecution against any identifiable group or collectivity on political, racial, national, ethnic, cultural, religious, gender as defined in paragraph 3, or other grounds that are universally recognized as impermissible under international law, in connection with any act referred to in this paragraph or any crime within the jurisdiction of the Court; (i) Enforced disappearance of persons; (j) The crime of apartheid; (k) Other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health.

used to repress serious environmental harm committed during war or peace.[308] Prosecuting environmental harm under this framework would first and foremost require the demonstration of an attack on a civilian population. The environmental harm could either constitute the attack in and of itself,[309] or occur as part of an attack committed through other means, such as the typical anthropocentric violence seen in previous crimes against humanity cases under international law.[310]

The anthropocentric focus of crimes against humanity is evident from the reference to humanity in the name itself. For present purposes, it is important that the reference to environmental harm in order to show an attack on a civilian population would immediately subordinate the environmental aspect of the case to the anthropocentric harm in so far as the legal elements of the case are concerned. Similarly, the contextual requirement of a state or organisational policy is anthropocentrically framed as it refers to an attack on a civilian population, rather than an attack on the natural environment. Accordingly, environmental harm will inevitably be de-prioritized and subordinated to the primary focus on anthropocentric harm if crimes against humanity are utilized in this manner.[311]

(b) Other inhumane acts

The most directly applicable specific crime against humanity is article 7(1)(k), "other inhumane acts".[312] In addition to the general elements discussed above, the elements of other inhumane acts require that the perpetrator caused the victims great suffering or physical or mental harm.[313]

Environmental harm could potentially constitute inhumane acts if it caused the requisite great suffering or harm.[314] For example, if an aspect of the natural environment were of special significance to a people and the perpetrator were aware of the harm that would likely result

[308] At the ICTY a link to armed conflict was required to establish crimes against humanity, although this was a jurisdictional matter, and not part of the inherent definition of crimes against humanity under customary international law; ICTY Statute, article 5.
[309] See Prospieri and Terrosi (2017), pp.509–525, p.510.
[310] See, e.g., *Katanga* article 74 Decision, para.1137 (referring to multiple violent acts such as wounding and killing villagers escaping from Bogoro).
[311] See Lambert (2017), p.726; M.A. Orellana, 'Criminal Punishment for Environmental Damage: Individual and State Responsibility at a Crossroad', (2005) 17 Georgetown International Environmental Law Review 673, at 693; Cusato Scorched Earth.
[312] Rome Statute, article 7(1)(k); Statute of the ICTY, article 5(i); Statute of the ICTR, article 3(i).
[313] Elements of Crimes, article 7(1)(k). See also Wattad 2009, p.282.
[314] See Lambert (2017), pp.727-728.

from its destruction, this could conceivably lead to a conviction.[315] Accordingly, it has been argued that "employing such [modern] technologies and industrial methods to exploit or destroy the environment in which such [indigenous and rural] people live, or to dispossess them of their land (either directly or indirectly), might cause serious mental suffering."[316]

Nonetheless, this is self-evidently an anthropocentric provision, with human suffering being the core element. Even in the case of the most severe environmental harm, the suffering or harm to human beings would remain at the core of the crime, with the environmental harm merely constituting a means of causing the harm. To date, there have been no convictions under international criminal law for other inhumane acts based on environmental harm.

(c) Persecution

Another underlying crime against humanity potentially applicable to environmental harm is persecution under article 7(1)(h) and 7(2)(g) of the Rome Statute.[317] Persecution is defined as the intentional and severe deprivation of fundamental rights contrary to international law by reason of the identity of the group or collectivity committed "on political, racial, national, ethnic, cultural, religious, gender as defined in paragraph 3, or other grounds that are universally recognized as impermissible under international law".[318] The persecution must be committed "in connection with any act referred to in this paragraph [article 7] or any crime within the jurisdiction of the Court."[319]

Although it is debatable whether the right to a healthy environment is a fundamental right established under international law,[320] the commission of serious environmental harm can

[315] For example, the African Court on Human and Peoples' Rights found that the Mau Ogiek people were ordered to be evicted from the east Mau forest by the Kenyan Government, and argued that this constituted a violation of their human rights. An expert witness testifying for the Mau Ogiek people, Dr. Liz Alden Wily, asserted that the livelihoods of hunter-gatherer communities are dependent on a social ecology whereby their spiritual life and whole existence depends on the forest; African Court on Human and Peoples' Rights, *African Commission on Human and Peoples' Rights v. Republic of Kenya, Application Number 006/2012*, Judgment, 26 May 2017 ("Mau Ogiek Judgment (2017)"), para.160.
[316] See Prospieri and Terrosi (2017), p.524.
[317] See Lambert (2017), p.727.
[318] Rome Statute, article 7(1)(h), 7(2)(g).
[319] Rome Statute, article 7(1)(h).
[320] The right to a healthy environment is recognised in varying formulations in some international human rights instruments, such as the African Charter on Human and Peoples' Rights, article 24 (**"**All peoples shall have the right to a general satisfactory environment favourable to their development."). Article 12(2) of the International Covenant on Economic and Social Rights also refers the need to ensure a healthy environment, without necessarily enshrining it as a right: "The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for . . . (b) The improvement of all aspects of environmental and industrial hygiene."). Article 1 of the Rio Declaration of 1992 ("Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony

gravely impact on well-established fundamental rights, including the right to life, security, health,[321] and private and family life and home.[322] There are decisions of institutions including the African Commission on Human and Peoples' Rights, the European Court of Human Rights, and the Inter-American Commission and Court of Human Rights that have determined that environmental harm could amount to violations[323] including of the rights to life,[324] health,[325] property[326] and privacy,[327] in addition to the right to a satisfactory environment.[328] The gravity of serious environmental harm such as the spoliation of lands and ecosystems is

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with nature.") and article 1 of the Stockholm Declaration of 1972 ("Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.") point towards the development of a right to a healthy environment but were not intended to create binding legal obligations. The Office of the High Commissioner for Human Rights has emphasized that the right to health under *inter alia* the Universal Declaration of Human Rights, article 25(1), and the Convention on the Rights of the Child, article 24, implicitly includes the right to a safe, clean, healthy and sustainable environment: Chart of Human Rights corresponding to Sustainable Development Goals: http://www.ohchr.org/Documents/Issues/MDGs/Post2015/SDG_HR_Table.pdf
(Sustainable Development Goals 12, 13, 14, 15). Also, at least 45 states have the right to a healthy environment as part of their constitution: http://hrlibrary.umn.edu/edumat/IHRIP/circle/modules/module15.htm; John 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, UNGA Document A/HRC/25/53, 30 December 2013, para.18 (https://documents-dds-ny.un.org/doc/UNDOC/GEN/G13/192/11/PDF/G1319211.pdf?OpenElement). See further Council of Europe, *Manual on Human Rights and the Environment*, second edition (2012). However, the European Court of Human Rights has noted that "no right to nature preservation is as such included" in the provisions of the ECHR; e.g. *Fadeyeva v. Russia* [2005] ECHR 376 [68] cited in Stephens (2009), p.317.

[321] John 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, United Nations General Assembly Document, A/HRC/22/43, 24 December 2012 ("Knox (2012)"), para.34.

[322] Stephens (2009), p.318 noting *Lopez-Ostra v. Spain* (1995) 20 EHRR 277 ("severe environmental pollution may affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely, without, however, seriously endangering their health").

[323] See generally Knox (2012), para.24 (also for following citations).

[324] See, *e.g.*, Ogoniland Decision, para. 67 ("The security forces were given the green light to decisively deal with the Ogonis, which was illustrated by the wide spread terrorisations [sic] and killings. The pollution and environmental degradation to a level humanly unacceptable has made it living in the Ogoni land 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 brutalities not only persecuted individuals in Ogoniland but also the whole of the Ogoni community as a whole. They affected the life of the Ogoni society as a whole."); Öneryıldız v. Turkey [GC], para. 118; Inter-American Commission on Human Rights, Report on the situation of human rights in Ecuador, document OEA/Ser.L/V/II.96 doc. 10 rev. 1.

[325] See, *e.g.*, European Committee of Social Rights, complaint No. 30/2005, *Marangopoulos Foundation for Human Rights* v. *Greece*, para. 221.

[326] See, *e.g.*, Inter-American Court of Human Rights, *Saramaka People* v. *Suriname*, Series C No. 172, judgement of 28 November 2007, paras. 95, 158.

[327] See, *e.g.*, European Court of Human Rights, *Fadeyeva v. Russia* (application No. 55723/00), judgement of 9 June 2005, para. 134; *Taşkin and others* v. *Turkey* (application No. 46117/99), judgement of 10 November 2004, para. 126; *López Ostra* v. *Spain* (application No. 16798/90), judgement of 9 December 1994, para. 58.

[328] Ogoniland Decision, para.52 ("The right to a general satisfactory environment, as guaranteed under Article 24 of the African Charter or the right to a healthy environment, as it is widely known, therefore imposes clear obligations upon a government. It requires the state to take reasonable and other measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources.").

particularly acute for indigenous people who frequently have collective ownership and responsibility concerning natural resources and lands.[329]

The deprivation of a fundamental right would have to be committed with the intent to target the victim because of their membership of a collectivity or group.[330] In circumstances where the environmental harm solely impacted one group this element would be more readily proved. However, if the environmental harm impacted all people of all groups in a certain area, it would be more difficult to establish that it was conducted with the intent to target members of one particular group.

Whereas the ICTY[331] and ICTR[332] do not require persecution to be committed in connection with a separate crime within their jurisdiction, at the ICC this is a requirement.[333] Consequently, not only would the breach of a fundamental right be required but also the commission of another crime against humanity, war crime, or genocide. Because of this, the independent utility of persecution as a means to address environmental harm before the ICC must be characterized as limited.[334]

(d) Deportation and forcible transfer

The crimes against humanity of deportation and forcible transfer could also be perpetrated by or through serious environmental damage.[335] Deportation and forcible transfer are sometimes referred to under the term forcible displacement.[336] 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 attacks impacting on the victims' group's means of survival, including water wells, are charged as a means of

[329] Prospieri and Terrosi (2017), p.522 citing Judgment, Moiwana Community v. Suriname, (Series C, No. 124), Inter-American Court of Human Rights, 15 June 2005 ('Moiwana Community Judgment'), § 131.
[330] Rome Statute, article 7(2)(g) ("'Persecution' means the intentional and severe deprivation of fundamental rights contrary to international law by reason of the identity of the group or collectivity").
[331] ICTY Statute, article 5(h); *Prosecutor v. Tihomir Blaškić*, Case No.IT-95-14, Appeal Judgement, 29 July 2004, paras.131, 139; *Prosecutor v. Radoslav Brđanin*, Case No.99-36, Appeal Judgement, 3 April 2007, para.296; *Prosecutor v. Vujadin Popović et al*., Case No.05-88, Appeal Judgement, 30 January 2015, para.738.
[332] ICTR Statute, article 3(h); *Ferdinand Nahimana et. al. v. Prosecutor*, Case No.ICTR-99-52, Appeal Judgement ("*Nahimana* AJ"), para.985.
[333] See Rome Statute, article 7(1)(h).
[334] See Lambert (2017), p.727.
[335] See Lambert (2017), pp.726-727.
[336] See, e.g., Rome Statute, article 7(2)(d). Technically, the term forcible displacement encompasses deportation or forcible transfer or both when charged as underlying forms of persecution; *Prosecutor v. Mladen Naletelić and Vinko Martinović*, Case No.IT-98-34-A, Appeals Chamber, Judgment, 3 May 2006, para. 154. However, at the ICC it is unclear if the same terminology will be followed.

displacing the population.[337] Additionally, a communication sent to the court asking the Prosecutor to open a situation in Cambodia *proprio motu* under article 15 referred to mass evictions of civilians from their lands and "associated deforestation" and alleged that these acts would constitute forcible transfer.[338]

On an analogous track, a case litigated before the African Court on Human and Peoples' Rights, saw a 2017 decision issued in which the court found that the Kenyan Government had violated the rights of the Mau Ogiek people by evicting them from their ancestral lands in the Mau forest complex.[339] The Ogiek community, which numbers around 20,000 people, and other settlers received an eviction notice in 2009, giving them 30 days to leave the East Mau forest. The Court noted that there was evidence the Government had granted logging concessions over areas of the Mau forest.[340] Their eviction was found to constitute several human rights breaches, including discrimination.[341] Although it was not charged criminally, the involuntary nature of the evictions could potentially meet the elements of forced displacement (in the form of forcible transfer) under the Rome Statute.[342]

In assessing the occurrence of displacement crimes through environmentally harmful activities such as illegal logging, a potential tension may arise with the development and economic interests of a state permitting or participating in these activities. The Court would face the difficult task of applying the provisions of the Rome Statute in such a manner as to take account of the potential legality of these acts as a matter of domestic law or non-criminal public international law.[343] In this respect, the genuineness of the Government's efforts would be a key factor, as would the existence of any indications of an *animus malus* on the part of the authorities in supporting the environmental harm.

(e) Murder and extermination

Other crimes against humanity could also encompass aspects of environmental harm. One example is murder, which could be committed through, or in connection with, environmental crimes. For example, there are allegations that, in January 2009, members of Joseph Kony's

[337] See above Chapter II(C)(1) (discussion of environmental harm charged as genocide).
[338] Global Diligence LLP, "Communication under Article 15 of the Rome Statute of the International Criminal Court. The Commission of Crimes Against Humanity in Cambodia", executive summary of the original communication, available online at https://www.fidh.org/IMG/pdf/executive_summary-2.pdf, para.8.
[339] Mau Ogiek Judgment (2017).
[340] Mau Ogiek Judgment (2017), para.130.
[341] Mau Ogiek Judgment (2017), para.146.
[342] See Rome Statute, article 7(1)(d).
[343] Prospieri and Terrosi (2017), p.520.

Lord's Resistance Army attacked the Garamba National Park headquarters in the Democratic Republic of Congo, killing 15 African Parks staff members who assist the elephants and other wildlife species that live in the park, and taking other people hostage. The LRA members were reportedly seen taking Ivory from the location.[344] More recently, in August 2017, Mai Mai rebels were reported to have killed two park rangers in the Virunga National Park in the Democratic Republic of Congo – the latest in a series of attacks targeting the protectors of the endangered Virunga mountain gorillas.[345]

Extermination, which essentially concerns large-scale killing of people,[346] can be committed through the infliction of conditions of life calculated to bring about the destruction of part of a population. This could be perpetrated through environmental destruction.[347] 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.[348] Murder and extermination are both charged against Sudanese President Omar Al-Bashir, with the charged underlying conduct including attacks and pillaging of towns and villages and poisoning of wells,[349] which constitutes a form of environmental harm.

(f) Other crimes against humanity

Although the remaining crimes against humanity are more attenuated from the notion of environmental harm, mankind's ability to concoct new forms of cruelty should not be underestimated and it is possible they could be committed through or in connection with damage to the natural environment. The crime of apartheid, for example, could be perpetrated in part through the destruction of the natural habitat in which the subjugated race lives in order to maintain a regime of systematic oppression against that race.[350] The crime against

[344] African Conservation Foundation, "Lord's Resistance Army Attack Threatens Headquarters At Garamba National Park, North-Eastern DRC, 7 June 2012 (https://www.africanconservation.org/wildlife-news/lords-resistance-army-attack-threatens-headquarters-at-garamba-national-park-north-eastern-drc-2). See also National Geographic (2014), "Poachers Slaughter Dozens of Elephants in Key African Park", 13 May 2014, http://news.nationalgeographic.com/news/2014/05/140513-democratic-republic-congo-garamba-elephants-poaching-world/.

[345] Guardian, "Three wildlife rangers killed in attack by violent militia in DRC", 16 August 2017, https://www.theguardian.com/environment/2017/aug/16/three-wildlife-rangers-killed-in-attack-by-violent-militia-in-drc. See also Rose (2014), p.17 (noting reports that rebels in DRC are involved in the illegal ivory trade).

[346] Athanase Seromba v. Prosecutor, Case No.ICTR-2001-66-A, Appeal Judgement, 12 March 2008, para.189.

[347] See Lambert (2017), p.726.

[348] Rome Statute, Elements of Crimes, footnote 9.

[349] Bashir Arrest Warrant, pp.5-7; Second Bashir Arrest Warrant, pp.5-8; *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7.

[350] See Rome Statute, article 7(1)(j) and 7(2)(h).

humanity of enslavement could be conducted on a similar basis.[351] Likewise, it is possible that a perpetrator group could target a victim group by destroying its natural environment while also committing crimes like imprisonment, torture, and sexual violence.[352] Cases that are brought before the international courts often feature a broad array of interconnected crimes unleashed against the victim population(s), particularly in leadership cases.[353] Attacking the victims' natural environment may constitute a form of repression akin to attacking their towns and villages in order to make life unbearable and jeopardize their peaceful existence.

The preceding survey shows that several underlying crimes against humanity could be used to prosecute environmental harm, with environmental harm potentially constituting the *actus reus* of some of these crimes, such as the case of other inhumane acts and deportation/forcible transfer. However, the use of any crimes against humanity remains an indirect manner of addressing environmental harm *per se*. In keeping with the name, crimes against humanity are necessarily anthropocentric, and require showing harm to humans and their property. Using these provisions to substitute for the direct prosecution of environmental harm may result in convictions but would not signal the full weight of the international community's condemnation of environmental harm itself. While laudable in practical effect, this manner of proceeding would lessen the declaratory impact and potential deterrent effect of any resulting conviction for environmental harm, which are important functions of international criminal law.

3. War Crimes

(a) Contextual elements

In keeping with the name, war crimes are offences committed during times of armed conflict. These offences generally focus on acts targeting or harming persons and acts against property, and largely reflect the prohibitions set out in the Geneva Conventions of 1949, the Additional Protocols of 1977, and The Hague Regulations of 1899 and 1907. Under the Rome Statute of

[351] See Rome Statute, article 7(1)(c) and 7(2)(c).
[352] See Rome Statute, article 7(1)(e), 7(1)(f), and 7(1)(g).
[353] See, e.g., Bashir Arrest Warrant and Second Bashir Arrest Warrant; Prosecutor v. Omar Hassan Ahmad Al Bashir, Case No.ICC-02/05-01-09, Case Information Sheet, 6 April 2017, ICC-PIDS-CIS-SUD-02-005/17_Eng (noting that Al-Bashir is charged with Five counts of crimes against humanity: murder (article 7(1)(a)); extermination (article 7(1)(b)); forcible transfer (article 7(1)(d)); torture (article 7(1)(f)); and rape (article 7(1)(g)); Two counts of war crimes: intentionally directing attacks against a civilian population as such or against individual civilians not taking part in hostilities (article 8(2)(e)(i)); and pillaging (article 8(2)(e)(v)); and Three counts of genocide: genocide by killing (article 6-a), genocide by causing serious bodily or mental harm (article 6-b) and genocide by deliberately inflicting on each target group conditions of life calculated to bring about the group's physical destruction (article 6-c)).

the ICC, war crimes are divided into those committed during international armed conflicts and those committed during non-international armed conflicts.[354]

(b) Underlying crimes

The provisions on war crimes in the Rome Statute place little emphasis on protecting the environment. There is one war crime, set out in article 8(2)(b)(iv), which explicitly addresses harm to the environment, but that provision only applies in international armed conflicts, and is subject to highly restrictive requirements, as discussed in detail in a later section of this chapter.[355] In the context of non-international armed conflicts, the coverage is even sparser. There is no provision corresponding to article 8(2)(b)(iv) and no other mention of the environment in the war crimes provisions (or in the Statute for that matter).

In otherwise omitting to address the environment, article 8 of the Rome Statute reflects the broader orientation of international humanitarian law towards anthropocentric, rather than eco-centric, interests. For example, the United Nations Secretary-General observed that article 3 common to the Geneva Conventions of 1949 (which is reflected in article 8(2)(c) of the Rome Statute applicable to non-international armed conflicts) "does not say anything about protecting the environment during civil wars; it addresses only humanitarian issues in the strictest sense".[356] Similarly, Additional Protocol II (which is the source of many of the prohibitions set out in article 8(2)(e) of the Rome Statute) "contains no provisions relating explicitly to the environment".[357]

Nonetheless, there are several war crimes prohibitions in the Rome Statute that are indirectly relevant to environmental harm. Several prohibitions, like wilful killing[358] and murder,[359] inhuman treatment,[360] wilfully causing great suffering, or serious injury to body or health,[361] cruel treatment,[362] and unlawful deportation or transfer,[363] largely overlap with underlying

[354] Rome Statute, article 8.
[355] See below, discussion of article 8(2)(b)(iv) at Chapter II(D)(1).
[356] Secretary-General Report 1993, p.8.
[357] Secretary-General Report 1993, p.8. The Secretary-General added that articles 14 and 15 of Additional Protocol II are indirectly relevant to the environment, as they deal with objects indispensable to the survival of the civilian population, and works and installations containing dangerous forces, respectively.
[358] Rome Statute, article 8(2)(a)(i) (applicable in international armed conflict).
[359] Rome Statute, article 8(2)(c)(i) (applicable in non-international armed conflict).
[360] Rome Statute, article 8(2)(a)(ii) (applicable in international armed conflict).
[361] Rome Statute, article 8(2)(a)(iii) (applicable in international armed conflict).
[362] Rome Statute, article 8(2)(c)(i) (applicable in non-international armed conflict).
[363] Rome Statute, article 8(2)(a)(vii) (applicable in international armed conflict); article 8(2)(b)(viii) (concerning situations of occupied territory; applicable in international armed conflict). Article 8(2)(e)(viii), which applies to

crimes against humanity, which have been discussed above. Aside from the contextual requirements for crimes against humanity (demonstrating a widespread or systematic attack on a civilian population pursuant to a State or organizational policy),[364] these war crimes would raise similar issues to the related underlying crimes against humanity (murder;[365] deportation and forcible transfer;[366] and other inhumane acts[367]). The major difference for war crimes as opposed to other crimes is the requirement of showing a sufficient connection to the applicable form of armed conflict.[368]

Several other war crimes under article 8 are particularly relevant as possible means to repress environmental harm. These are:

- article 8(2)(a)(iv) (Extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly);[369]

- article 8(2)(b)(i) / 8(2)(e)(i)[370] (Intentionally directing attacks against the civilian population as such or against individual civilians not taking direct part in hostilities);

- article 8(2)(b)(ii) (Intentionally directing attacks against civilian objects, that is, objects which are not military objectives);

- article 8(2)(b)(iv) (Intentionally 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);

- articles 8(2)(b)(xiii) / 8(2)(e)(xii)[371] (Destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war);[372]

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non-international armed conflict, prohibits "ordering the displacement of the civilian population for reasons related to the conflict, unless the security of the civilians involved or imperative military reasons so demand."

[364] Rome Statute, article 7(1) and 7(2)(a).

[365] Rome Statute, article 7(1)(a).

[366] Rome Statute, article 7(1)(d).

[367] Rome Statute, article 7(1)(k).

[368] Cryer et. al. (2010), p.267 ("For war crimes law, it is the situation of armed conflict that justifies international concern").

[369] See also Geneva Convention IV, articles 53 ("any destruction by the Occupying Power of real or personal 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.") (this is the concept of usufruct) and 147 (which lists "extensive destruction and appropriation of property not justified by military necessity and carried out unlawfully and wantonly" among the acts constituting "grave breaches" of the Convention); Hague Convention IV, articles 23(g) and 55.

[370] This provision mirrors article 8(2)(b)(i) but applies in non-international armed conflict.

- article 8(2)(b)(xvi) / 8(2)(e)(v)[373] (Pillaging a town or place, even when taken by assault);

- article 8(2)(b)(xvii) / 8(2)(e)(xiii)[374] (Employing poison or poisonous weapons);

- article 8(2)(b)(xviii) / 8(2)(e)(xiv)[375] (Employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices).[376]

- article 8(2)(b)(xxv) (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).[377]

(i) Pillage

The crime of pillage deserves particular mention in relation to environmental harm.[378] Though pillage was originally applied to acts of theft, and was designed to deter the practice of permitting soldiers to reward themselves by looting villages and towns,[379] pillage has been used as a basis to prosecute illegal exploitation of natural resources during armed conflict.[380]

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[371] This provision mirrors article 8(2)(b)(xiii) but applies in non-international armed conflict. Given that the basis for this prohibition, article 23(g) of the Hague Regulations of 1907 only applied to international armed conflicts, the Rome Statute's extension of the prohibition to non-international armed conflicts is a step forward from the pre-existing conventional regime. See Dam-de Jong (2015), p.215.

[372] It is required that the property was protected from that destruction or seizure under the international law of armed conflict; ICC Elements of Crimes, pp.26, 44. Article 8(2)(e)(xii) uses the term "adversary", as opposed to "enemy" in article 8(2)(b)(xiii). "Adversary" has been interpreted as "any person, who is considered to belong to another party to the conflict, such as the government, insurgents or, as article 8 para. 2(f) of the Statute demonstrates, belongs to an opposing organized armed group"; Andreas Zimmerman, 'article 8 - para. 2 (e)', in O. Triffterer (ed.), *Commentary on the Rome Statute of the International Criminal Court: Observers' Notes, Article by Article* (1999), margin no.326-327, p.284.

[373] This provision mirrors article 8(2)(b)(xvi) but applies in non-international armed conflict.

[374] This provision mirrors article 8(2)(b)(xvii) but applies in non-international armed conflict.

[375] This provision mirrors article 8(2)(b)(xviii) but applies in non-international armed conflict.

[376] 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).

[377] See also Additional Protocol I, Article 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); Additional Protocol II, Article 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", 28 *Denv. J. Int'l L. & Pol'y* 265 (1999-2000), (copy at end of article), ("Schmitt (1999-2000)"), pp.301-302; Schwabach 2004, p.25.

[378] See, e.g., Van den Herik and Dam-de Jong (2011), pp.237-273.

[379] Van den Herik and Dam-de Jong (2011), pp.237-273; Dam-de Jong (2015), pp.218-219.

[380] Dam-de Jong and Stewart (2017), p.3 citing See *e.g.* Trials of War Criminals before the Nuremberg Tribunals under Control Council Law No. 10, Vol. IX, the *Krupp* case (Washington: Government Printing Office 1950), at 1344-1345; Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No.

While the term pillage bears connotations of widespread destruction and spoliation in everyday parlance, it has a highly circumscribed definition under article 8(2)(b)(xvi) and (e)(v) of the Rome Statute, which word the prohibition vaguely as "pillaging a town or place, even when taken by assault".[381] The accompanying Elements of Crimes provide more guidance, defining pillage as the intentional appropriation of property for private or personal use, in connection with an armed conflict.[382]

Environmental harm fits awkwardly under this definition in three ways. First, the focus on appropriation, as opposed to destruction or spoliation,[383] would exclude a significant portion of the harm done to the environment during armed conflict, which is not always conducted with a view to exercising ownership rights over environmental features. Appropriation conducted by the Government will typically be internally legalised through legislative act or executive decree, or else justified as military requisitions, which are apparently exempted from the coverage of pillage under the ICC Elements of Crimes, which clarifies that pillage only applies to appropriations for private ends.[384] Consequently, the prohibition may result in the asymmetric repression of the environmentally harmful appropriations, where rebel groups are subject to restrictions which do not apply to government forces and agents.[385] Given that "illicit exploitation is also a key component in kleptocratic governance" and "endemic corruption",[386] the unequal application of the prohibition of pillage may foster resentment among the populations whose property is taken by government representatives and further exacerbate such governmental misfeasance.

Second, the idea of the environment constituting property is a contested notion.[387] For example, if an attack involved the contamination of an area through radiation, it would be

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10, Vol. XIV, *France v. Roechling* (Washington: Government Printing Office 1949), at 1113 and 1124 as well as modern instances of attempted prosecutions of exploitation of natural resources under the label of pillage.

[381] The prohibition against pillage and plunder is found in several instruments of international humanitarian law, including articles 28 and 47 of the 1907 Hague Regulations, article 33 (2) of the Fourth Geneva Convention of 1949 and article 4(2) (g) of 1977 Additional Protocol II.

[382] Elements of Crimes, article 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.

[383] Appropriation is used to mean depriving the owner of his or her property in the sense of stealing that property, rather than destroying that property; see *Katanga* article 74 Decision, paras.942, 950.

[384] See ICC Elements of Crimes, fn.62.

[385] Contra Dam-de Jong (2015), p.221 (arguing that the misappropriation of natural resources by state representatives could be prosecuted as pillage because the resources belong to the state and not its representatives).

[386] Dam-de Jong and Stewart (2017), p.3.

[387] There are indisputably elements of the environment that can constitute "property"; see for example Van den Herik and Dam-de Jong (2011), pp.237-273; Dam-de Jong (2015), pp.217 (noting that the term "property" is sufficiently broad to capture all types of natural resources as well as rights relating to the exploitation of natural resources and citing article 55 of the 1907 Hague Regulations, which defines forests as properties).

difficult to analyse the area *per se* as property. Similarly, it is unclear whether nature reserves could be considered property, yet there is widespread support for the use of international law to protect these important environmental spaces.[388] Classifying the environment as property also risks devaluing its status. A generally held view is that human life and limb are more important values to protect than property.[389] While views differ as to exactly where the environment should be placed in this regard, equating it to just one form of property is likely to propagate the message that the environment only merits value to the extent it serves human interests.

Third, the limitation to appropriation for private or personal use is a major restriction that would exclude many forms of misappropriation that occur during armed conflict, including any appropriation undertaken for the use of the military force or group rather than private use. This restriction narrows the coverage of the crime of pillage beyond that which applied under the jurisprudence of the *ad hoc* tribunals. The experience of the ICTY has demonstrated that much looting and pillage of property was carried out at least ostensibly in the name of group entities, such as regional boards, based on ethnicity, rather than for purely personal ends.[390] Conversely, likely because of the restrictive definition of pillage under the Rome Statute, which refers specifically to appropriation, the cases in which it has been charged thus far at the ICC have tended to place emphasis on the stealing of goods such as livestock, DVD players and fridges, rather than the illegal exploitation of parts of the environment, such as minerals and timber.[391]

Despite the limitations on pillage under the Rome Statute, there have been many calls to use this crime to address the unlawful extraction of natural resources during armed conflict.[392]

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[388] Secretary-General Report 1993, p.14.

[389] See Kai Ambos, "Defences in International Criminal Law", in Bertram S. Brown, ed., Research Handbook on International Criminal Law (Edward Elgar, 2011), p.308 ("the difference in value attached to life and physical injury, on the one hand, and property, on the other, justifies a clear distinction in the protection afforded to these legal interests.").

[390] See, e.g., *Prosecutor v. Mićo Stanisić and Stojan Župljanin*, Case No.IT-08-91-T, Judgment, 27 Mach 2003, paras.650-651 ("On 20 July, thousands of Muslims and Croats from Hambarine and Ljubija were removed from the municipality. Property of Muslims and Croats who had left the area was confiscated and assigned to Serbs…. Mevludin Sejmenović, a Muslim mining engineer and a former member for SDA of the Prijedor Municipal Assembly, confirmed that events on the ground corresponded to a proposed decision of the Prijedor Municipal Assembly to declare abandoned property and property belonging to those who participated in the "armed uprising" in Prijedor to be owned by the state.").

[391] *The Prosecutor v. Bosco Ntaganda*, Case No. ICC-01/04-02/06, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Bosco Ntaganda, paras.59-63. See also Dam-de Jong (2015), p.220.

[392] See Michael Lundberg, "The Plunder of Natural Resources During War", in Stewart, ed., *Corporate War Crimes*, pp.495-526; Van den Herik and Dam-de Jong, "Re-Vitalizing the Antique War Crime of Pillage, in Stewart, ed., *Corporate War Crimes*, pp.237-273.

Nonetheless, there have been no cases in the modern international tribunals that have confirmed that pillage under article 8 of the Rome Statute would apply to the exploitation of natural resources.[393]

(ii) Destruction of property

Whereas the specific crime of pillage under the Rome Statute provides an unpromising basis to prosecute environmental harm, the crime of extensive destruction or appropriation of protected property under article 8(2)(a)(iv), and the related prohibition against destroying or seizing the enemy's property under article 8(2)(b)(xiii) (for international armed conflicts) and 8(2)(e)(xii) (for non-international armed conflicts), provide potentially more scope to address this type of harm.[394]

The crime of destruction or appropriation of protected property under article 8(2)(a)(iv) is based on the grave breach of the Geneva Conventions.[395] Accordingly, the property in question must be protected under one or more of the conventions, meaning that it is property of an adverse party to the conflict who is subject to reciprocal obligations under the Geneva Conventions or else is property that is generally protected, such as hospitals.[396]

For the crimes under article 8(2)(b)(xiii) and 8(2)(e)(xii), the property must have belonged to a hostile party (or adversary) and have been "protected from that destruction or seizure under the international law of armed conflict".[397] This may create difficulties applying these prohibitions to environmental harm. For international armed conflicts, the enemy's property includes all property situated in the enemy state's territory, whilst in non-international armed conflicts the concept of property is regulated by national law.[398] The property in question "whether moveable or immoveable, private or public – must belong to individuals or entities aligned with or with allegiance to a party to the conflict adverse or hostile to the perpetrator, which can be established in the light of the ethnicity or place of residence of such individuals or entities."[399] To the extent environmental features can be considered property, they are

[393] Dam-de Jong (2015), p.220.
[394] Dam-de Jong (2015), pp.221-222.
[395] This crime is based on the grave breach set out in article 147 of Geneva Convention IV ("extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.").
[396] See, e.g., Rome Statute, article 8(2)(b)(ix) (prohibiting the direction of attacks against *inter alia* hospitals).
[397] Rome Statute, Elements of Crimes, pp.25, 41.
[398] Dam-de Jong (2015), p.223.
[399] *Katanga* article 74 Decision, para.892.

typically vested in the state.[400] This may result in an asymmetric application of the prohibition in relation to destruction or seizure of environmental resources, whereby forces opposing the state are prohibited from destroying or seizing the environmental feature, while the state's armed forces may benefit from it.

The requirement that the property belong to an adverse party to the conflict, excludes self-inflicted environmental harm, such as scorched earth tactics to forestall advancing armed forces.[401] The prohibition on destroying or seizing the enemy's property also has a significant limitation under the Rome Statute, as it exempts "such destruction or seizure [as is] imperatively demanded by the necessities of war". Military necessity was defined by the Nuremberg Tribunal in the following terms

> "[m]ilitary necessity permits a belligerent, subject to the laws of war, to apply any amount and kind of force to compel the complete submission of the enemy with the least possible expenditure of time, life and money. In general, it sanctions measures by an occupant necessary to protect the safety of his forces and to facilitate the success of his operations".[402]

Destruction and seizure that is militarily necessary, and thus excluded from the prohibition's coverage, extends to military and civilian property. In this sense, it acts as an exception to the general prohibition against targeting and attacking civilian objects, covering the situation of enemy property which is imperatively demanded by the necessities of war.[403]

The elements of crimes also require that the crime under article 8(2)(a)(iv) is conducted wantonly and on an extensive basis.[404] These requirements would typically be fulfilled in relation to the environmental harm addressed in this analysis. For example, the burning of the Kuwaiti oil wells by Saddam Hussein's Iraqi forces in 1990-1991 was militarily unjustified and malicious. However, to the extent the term wanton could imply a measure of disorderly or uncontrolled conduct, this would not necessarily be present, as environmental harm can be carried out in a planned and purposeful manner. The crime of destroying or seizing the

[400] Dam-de Jong (2015), p.223.
[401] See Secretary-General Report 1993, p.15.
[402] *Hostages* Trial, pp. 1253-1254.
[403] Dam-de Jong (2015), pp.223-224.
[404] Rome Statute, Elements of Crimes, article 8(2)(a)(iv), p.15.

enemy's property has been adjudicated before international courts, including the ICTY and the SCSL.[405]

(iii) Intentionally directing attacks against civilians and civilian objects

Intentionally directing attacks against civilians and civilian objects violates the core humanitarian law principle of distinction. These prohibitions could be relevant to the prosecution of environmental harm in two ways. First, if harm to non-combatants, their property, their dwellings or other materials or buildings were achieved by means of harming the environment. And, second, if the environment *per se* were considered a civilian object *per se*.

Looking first to attacks on civilians, this prohibition has been prosecuted in several cases under international criminal law, including at the ICC, where Germaine Katanga was convicted for attacking civilians in the context of a non-international armed conflict in the Democratic Republic of Congo.[406] While these cases generally focused on anthropocentric harm, the jurisprudence provides insight into the key principles that would govern a case involving environmental harm.

Relying on article 13 of Additional Protocol 1, the *Katanga* Trial Chamber recalled that this is an absolute prohibition, which cannot be exonerated by military necessity.[407] It clarified that "attack" means "acts of violence against the adversary, whether in offence or defence",[408] and added that as long as an attack is launched targeting civilians not taking direct part in hostilities; no result need ensue from the attack.[409] Importantly, it noted that the crime may be established even if the military operation also targeted a legitimate military objective, as long as civilians were the primary target of the attack, and recalled that indiscriminate attacks or attacks with indiscriminate weapons provide a basis from which an inference may be drawn that the attack was directed at civilians.[410]

While the attack in the *Katanga* case was not environmental in nature, the prohibition could apply to serious environmental harm if that were used as a method to target a civilian

[405] See *Prosecutor v. Kordić and Čerkez*, Case No. IT-95-14/2, Trial Judgment, 26 February 2001, para. 205; *The Prosecutor vs. Moinina Fofana and Allieu Kondewa*, Case No.SCSL-14-44-A, Appeals Chamber Judgment, 28 May 2008, para. 390.
[406] *Katanga* article 74 Decision, p.558, Disposition.
[407] *Katanga* article 74 Decision, para.800.
[408] *Katanga* article 74 Decision, para.798.
[409] *Katanga* article 74 Decision, para.799.
[410] *Katanga* article 74 Decision, para.802.

population during an armed conflict. For example, the burning of a forest in order to target a civilian population could qualify as a violation of this prohibition. In the Al-*Bashir* case, one of the alleged means used to conduct the crime of intentionally directing attacks against civilians is the poisoning of wells and water sources, which potentially implicates environmental harm.[411]

Looking to the possibility of the environment constituting a civilian object *per se*, it should be noted that, under the Rome Statute, this prohibition only applies during international armed conflicts.[412] The exclusion of coverage of non-international armed conflicts, considerably limits the utility of the prohibition given the uncertainty surrounding the classification of conflicts as international and non-international.[413]

To date, the ICC has adhered to the traditional definitional approach whereby the term civilian is defined negatively in contradistinction to the term military.[414] Military objects are defined as those "which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage".[415] The ICRC has expressly stated that the natural environment qualifies *prima facie* as a civilian object,[416] meaning that the intentional targeting or destruction of environmental features would constitute a breach of the prohibition on targeting civilian objects.

(iv) Intentionally using starvation of civilians as a method of warfare

The crime of intentionally using starvation of civilians as a method of warfare by depriving them of objects indispensable to their survival could potentially be relevant to environmental harm. It is designed to protect the civilian population during armed conflict by ensuring that

[411] *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7.
[412] Rome Statute, article 8(2)(b)(ii).
[413] In the Court's first trial, *Lubanga*, the Pre-Trial Judge classified the conflict as international, only for the Trial Chamber, to classify it as non-international, as was upheld on appeal.
[414] See, e.g., *Bemba* article 74 Decision, para.152.
[415] Additional Protocol 1, article 52(1); *Katanga* article 74 Decision, para.893; *Prosecutor v. Dario Kordić & Mario Čerkez*, Case No. IT-95-14/2-A, Appeal Judgement, 17 December 2004 ("*Kordić* AJ"), para.52.
[416] International Committee of the Red Cross ("ICRC") study on customary international humanitarian law. Jean-Marie Henckaerts and Louise Doswald-Beck (eds.), *Customary International Humanitarian Law*, (ICRC: Geneva, 2005) ("ICRC Study"), Rule 9: Definition of Civilian Objects, Commentary and State Practice (referring to numerous examples where the natural environment is cited under the heading of civilian objects). See also 1994 Guidelines on the Protection of the Environment in Times of Armed Conflict, Principle 9 ("The general prohibition on destroying civilian objects, unless such destruction is justified by military necessity, also protects the environment.")

their access to basic items needed for survival is maintained.[417] Strangely, the prohibition is limited to international armed conflicts in the Rome Statute, despite the fact that article 14 of Additional Protocol II extends this prohibition to non-international armed conflicts as a matter of international humanitarian law.

The terms "intentionally" and "method of warfare" indicate that direct intent is required, and that reckless disregard, or negligence as to the likely starvation of civilians due to certain deleterious conduct would not be sufficient.[418] A key question concerning this crime is whether the objects in question need to be directly indispensable to the survival of the civilian population, such as water and food sources, or whether commodities, the sale of which generates income for the purchase of basic sustenance, would also be covered.[419] The most obvious example of environmental harm amounting to such destruction is the removal of forests, which may constitute both a direct and indirect means of survival for civilians during times of armed conflict. Article 54 of Additional Protocol 1 clarifies that food production or storage sites used by military forces for their sustenance will be excluded from the ambit of this prohibition unless the deprivation would "leave the civilian population with such inadequate food or water as to cause its starvation or force its movement".[420] Operation Ranch Hand in Vietnam provides a historical example of conduct potentially violating these prohibitions, although no prosecutions resulted with respect to this environmental harm.

(v) Using poisonous weapons, or asphyxiating, poisonous or other gases, liquids, materials or devices

The war crimes of using poisonous weapons, or asphyxiating, poisonous or other gases, liquids, materials or devices, could be used to prosecute environmental harm where the poisons caused serious damage to the environment as well as harming human beings. The United Nations Environmental Program has signaled concern that new technologies, such as depleted uranium munitions, are not explicitly included in the prohibitions of means and methods of warfare contained in the Rome Statute.[421]

[417] Dam-de Jong (2015), p.234.
[418] Cf. Dam-de Jong (2015), p.235-236 (arguing that reckless disregard should be a sufficient state of mind for the corresponding provisions of international humanitarian law prohibiting this conduct).
[419] See Dam-de Jong (2015), p.236-237.
[420] Additional Protocol 1 of 1977, article 54(3)(b).
[421] UNEP Study (2009), Executive Summary, p.16.

Under the Elements of Crimes, these prohibitions are framed in terms of harm to humans, as they require that the substance must be one that causes death or serious damage to health due to its toxic properties in the ordinary course of events.[422] Nonetheless, if the environmental were harmed in connection with the use of such substances during armed conflict, these prohibitions would apply. A potential example is provided in the *Bashir* case, wherein the Prosecution alleges that the perpetrators *inter alia* polluted or poisoned water wells.[423] However, it is unclear whether this conduct also caused serious environmental harm.

It also bears noting that the law governing armed conflict at sea differs from that on land, as foreshadowed in the general introduction to the war crimes section of the Elements of Crimes, which reads "The elements for war crimes under article 8, paragraph 2, of the Statute shall be interpreted within the established framework of the international law of armed conflict including, as appropriate, the international law of armed conflict applicable to armed conflict at sea."[424] In relation to environmental harm, Rule 44 of the San Remo Manual on International Law Applicable to Armed Conflicts at Sea provides that "Methods and means of warfare should be employed with due regard for the natural environment taking into account the relevant rules of international law. Damage to or destruction of the natural environment not justified by military necessity and carried out wantonly is prohibited."[425]

4. Aggression

In addition to war crimes, crimes against humanity and genocide, the ICC has jurisdiction over the crime of aggression. Article 8*bis* of the Rome Statute has been agreed upon by the State Parties to the ICC and has been activated. Whilst the aggression amendments were adopted by consensus, they will not enter into force until July 2018 in line with the Assembly of States Parties decision to activate the amendments.[426]

Substantively, aggression generally refers 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'.[427] Article 8*bis* provides several

[422] Rome Statute, Elements of Crimes, pp.26, 41.
[423] *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7.
[424] ICC Elements of Crimes, p.12.
[425] San Remo Manual on International Law Applicable to Armed Conflicts at Sea, 12 June 1994, Rule 44.
[426] Assembly of States Parties, Draft resolution proposed by the Vice-Presidents of the Assembly Activation of the jurisdiction of the Court over the crime of aggression, 14 December 2017, ICC-ASP/16/L.10.
[427] Rome Statute, article 8*bis*.

examples of specific acts of aggression, ranging from direct invasions of other states to allowing territory to be used by other states to launch attacks on victim states.[428]

Environmental harm could arguably qualify under this definition. For example, a state sending special forces to poison the water supplies of another state could potentially have conducted an act of aggression under article 8*bis*. Equally, a nuclear attack on another state would likely qualify as an armed attack,[429] and, depending on the circumstances, aggression. A nuclear attack would almost certainly cause large numbers of deaths and injuries as well as massive destruction of the environment.[430] Nonetheless, the ICJ did not conclude that the use or threat of use of nuclear weapons would in all circumstances be prohibited under international law, and thus would not necessarily constitute an unlawful armed attack amounting to a manifest violation of the United Nations Charter as required by the definition of aggression in the Rome Statute.[431]

However, environmental harm does not typically involve the use of armed force against another state or its forces. Because of this, it would not meet all the elements of aggression. Polluting overflow or other downstream impacts of environmentally harmful practices would be difficult to 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.

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[428] Rome Statute, article 8*bis*(2).

[429] The term "armed attack" is usually used in international law to signify the first use of force between states, which justifies the attacked state acting in self-defence; see United Nations Charter, article 51: "Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council." It is hard to imagine a nuclear attack not fulfilling the gravity requirement to qualify as an armed attack; see *Case Concerning Military and Paramilitary Activities In and Against Nicaragua (Nicaragua v. United States of America)*; Merits, International Court of Justice (ICJ), 27 June 1986, (available at http://www.refworld.org/cases,ICJ,4023a44d2.html) (last accessed 27 December 2017), paras.193-195.

[430] See ICJ Nuclear Weapons Advisory Opinion (1996), para.35 ("The destructive power of nuclear weapons cannot be contained in either space or time. They have the potential to destroy al1 civilization and the entire ecosystem of the planet. The radiation released by a nuclear explosion would affect health, agriculture, natural resources and demography over a very wide area. Further, the use of nuclear weapons would be a serious danger to future generations. Ionizing radiation has the potential to damage the future environment, food and marine ecosystem, and to cause genetic defects and illness in future generations.").

[431] Note that the ICJ could not definitively conclude that the use or threat of use of nuclear weapons is *per se* prohibited under international law, ICJ Nuclear Weapons Advisory Opinion (1996), para.95 ("In view of the unique characteristics of nuclear weapons, to which the Court has referred above, the use of such weapons in fact seems scarcely reconcilable with respect for such requirements. Nevertheless, the Court considers that it does not have sufficient elements to enable it to conclude with certainty that the use of nuclear weapons would necessarily be at variance with the principles and rules of law applicable in armed conflict in any circumstance.").

The value protected by the crime of aggression is state sovereignty. Environmental harm would be an additional harm but not the core of the criminality targeted by this prohibition. The notion of the state overlaps in several important respects with the notion of the environment, particularly in a legal sense as each state is typically sovereign over its territory and responsible for the environment therein. But the environment as an entity needs protection going beyond state territorial boundaries. There are areas outside of state boundaries, transitory cross-border environmental elements such as migrating birds, and aspects that are of common interest for future generations. This provides a justification for overriding state boundary jurisdictional limits where serious environmental harm threatens international peace and security. However, the crime of aggression is not the vehicle to address such extra-territorial environmental harm.

D. Applying the regulatory framework to three paradigmatic cases of environmental harm

Having addressed the categories of crimes potentially prosecutable under the Rome Statute, this analysis now applies the substantive legal framework to three paradigmatic types of environmental harm. These are attacks causing excessive harm to the environment during armed conflict, toxic dumping, and wildlife exploitation. The analysis is illustrative of crimes that could be sensibly applied to these forms of environmental harm, rather than exhaustive of every possible crime that could conceivably apply in the circumstances.

1. Attacks causing excessive harm to the environment during armed conflict

It is clear that severe harm has been caused to the environment in numerous wars throughout history.[432] From scorched earth tactics during World War Two,[433] to large-scale deforestation through chemical defoliants in Vietnam,[434] to the incineration of approximately 600 oil wells in Kuwait (and similar oil well fires reportedly conducted by ISIS in 2016),[435] and the damage

[432] Dieter Fleck, Chapter 9, "Legal Protection of the Environment: The Double Challenge of Non-International Armed Conflict and Post-Conflict Peacebuilding", in Stahn et. al., *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles and Practices*, Oxford University Press 2017 ("Stahn et. al. (2017)"). See also Chapter I(A).
[433] *Hostages* Trial, pp.66-69; Ensign Florencio J. Yuzon, Deliberate Environmental Modification Through the Use of Chemical and Biological Weapons : "Greening" the International Laws of Armed Conflict to Establish an Environmentally Protective Regime, 11 *Am. U. J. Int'l L. & Pol'y* 793, p.815 (1996) ("Yuzon (1996)"), *cited in* Drumbl (1998-1999), p.134.
[434] Peterson (2009), p.331-332; Aaron Schwabach, "Environmental Damage Resulting from the NATO Military Action Against Yugoslavia," (2000) 25 *Colum. J. Envtl. L*. 117, p.126.
[435] UNSC Resolution 687, adopted on 3 April 1991, para. 16; UNEP (2009), p.8.

to oil installations along with resulting pollution in Lebanon in 2006,[436] as well as the destruction of industrial sites in Serbia in 1999,[437] warfare typically sees the risk of serious environmental harm rise.

Despite the varied forms of environmental harm caused during armed conflicts throughout history, only one crime directly addressing environmental destruction is included in the Rome Statute (article 8(2)(b)(iv)). The analysis starts with that article, and then subsequently addresses other possible prohibitions that could apply to military attacks causing excessive environmental harm.

(a) Genesis and background of article 8(2)(b)(iv)

An early version of this provision on "widespread, long-term and severe damage" to the environment was first included in draft versions of the Rome Statute at the suggestion of New Zealand and Switzerland.[438] It was based on article 35(3) and 55(1) of Additional Protocol 1.[439] The formulation ultimately included in the Rome Statute, article 8(2)(b)(iv), 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]

Article 8(2)(b)(iv) has not yet been applied in a criminal case.[440] Accordingly, there is considerable scope for the interpretation of the contours of the elements of this crime. Because the majority of the Rome Statute's war crimes provisions are closely based on provisions of the Geneva Conventions and Additional Protocols, "Protocol I [is] a natural exegetical source for article 8(2)(b)(iv)."[441]

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[436] See Jacobsson (2016), para.79 citing General Assembly resolution 69/212, paras. 4 and 5.
[437] See Press Release on Final Report on NATO (2000); Final Report on NATO (2000), para.14-16.
[438] Working Paper submitted by the Delegations of New Zealand and Switzerland, Preparatory Committee on the Establishment of an International Criminal Court, A/AC.249/1997/WG.1/DP.2, 14 February 1997, p.3.
[439] There had also briefly been a similar prohibition included as article 26 of the International Law Commission's Draft Code on Crimes Against Peace and Security of Mankind, which stated 'Wilful and severe damage to the environment' ('[a]n individual who wilfully causes or orders the causing of widespread, long-term and severe damage to the natural environment shall, on conviction thereof, be sentenced to …'). However, article 26 was deleted from the final version of the Draft Code; Report of the International Law Commission on the Work of its Forty-Third Session, UN Doc. A/CN.4/SER.A/1991/Add.1 (Part 2) (1991).
[440] Weinstein (2005), p.698; UNEP Study (2009), p.24.
[441] Kevin Jon Heller and Jessica C. Lawrence, *The Limits of article 8(2)(b)(iv) of the Rome Statute, the First Eco-centric Environmental War Crime.* Georgetown International Environmental Law Review (GIELR), Vol. 20, 2007. ENMOD is also relevant as its terms closely mirror those in article 8(2)(b)(iv). However, the parties

Another source of international law which constitutes a precursor to article 8(2)(b)(iv), and which provides interpretive guidance, is the Convention on the Prohibition of Environmental Modification Techniques, known as ENMOD, which is designed to address the use of environmental modification techniques as a means of war.[442] It prohibits State Parties from using hostile environmental modification techniques that have "widespread, long-lasting or severe effects as the means of destruction, damage or injury to another State Party".[443] The terms of the ENMOD prohibition are not conjunctive. Consequently, ENMOD provides broad coverage against damage that is either widespread or long-term or severe (or any combination thereof). Furthermore, it prospectively prohibits activities that currently are not feasible due to technological constraints.[444]

This convention was largely a reaction to the use of large quantities of chemical defoliants, most notably Agent Orange, by the United States Army during the Vietnam War, which resulted in significant destruction of forests and wildlife as well as extreme human sickness and death.[445] It is designed to prohibit large-scale environmental modification techniques which have the ability to turn the environment into a weapon, such as unnaturally induced earthquakes, tsunamis, or changes in weather patterns.[446]

ENMOD does not directly impose individual criminal responsibility for breaches of its terms.[447] Instead, its enforcement is *post hoc* and political in nature.[448] Nonetheless, because it shares many of the terms of its core prohibition with article 8(2)(b)(iv) of the Rome Statute, it is an instructive source of interpretive guidance for this Rome Statute provision.

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negotiating ENMOD confirmed that its definitions are "intended exclusively for [the ENMOD Convention] and… not intended to prejudice the interpretation of the same or similar terms…"; Understanding I of the Conference of the Committee of Disarmament ("ENMOD Memorandum of Understanding"), 31 United Nations General Assembly Official Records Supp. No. 27 (A/31/27), Annex I), reprinted in Adam Roberts & Richard Guelff eds., *Documents on the Law of War*, (Clarendon Press: Oxford, 2nd Ed., 1989).

[442] Weinstein (2005), p.700.

[443] *Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques*, 18 May 1977, 31 U.S.T 333, T.I.A.S. No.9614 ("ENMOD"), Article 1.

[444] Jensen (2005), p.154.

[445] UNEP Study (2009), p.12; Vietnam Association for Victims of Agent Orange v. Dow Chemical Co., United States Court for the Second Circuit, Case Opinion, 22 February 2008 ("Vietnam Victims' Case").

[446] UNEP 2009, p.12.

[447] Cohan (2002), p.524.

[448] Weinstein (2005), p.701.

Additional guidance is provided by ICRC customary international rule number Rule 45, which largely reflects the article 8(2)(b)(iv) prohibition albeit with some more permissive formulations of its terms.[449]

(b) Elements of article 8(2)(b)(iv)

(i) International armed conflict

Article 8(2)(b)(iv) only applies to international armed conflict, and there is no comparative provision applicable to non-international armed conflicts included in the Rome Statute.[450] Some commentators find the limitation of article 8(2)(b)(iv) to international armed conflict illogical and troubling,[451] particularly as many serious conflicts throughout the twentieth and twenty-first centuries have been non-international armed conflicts.[452] However, the primary precursor to article 8(2)(b)(iv) is found in Additional Protocol I, which applies to international armed conflicts (as well as certain self-determination struggles).[453]

Decades before the introduction of the Rome Statute, States had already been alerted to the implications of limiting the coverage of the prohibition of environmental harm to international armed conflicts. During the negotiations on Additional Protocol II to the Geneva Conventions, Australia proposed the addition of a provision (article 28 *bis*) concerning the protection of the natural environment. Australia stressed that "destruction of the environment should be prohibited not only in international but also in non-international conflicts".[454] However, this was not successful and the position under international criminal law and international humanitarian law remains inadequate in relation to protections of environmental harm committed during non-international armed conflicts.[455]

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[449] Rule 45 of the ICRC study finds the following prohibited under customary international law: "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 Study, p.151.
[450] See Rome Statute, articles 8(2)(c) and (e).
[451] See, e.g., Wattad (2009), p.268; Drumbl, 1998-1999, p.136.
[452] UNEP 2009, p.4 referring to Uppsala Conflict Data Program Database: http://www.pcr.uu.se/gpdatabase/search.php. See also *Prosecutor v. Duško Tadić*, Case No.IT-94-1-A, App.Ch., Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995 ("*Tadić* Jurisdiction Decision"), para.97.
[453] Additional Protocol I, article 1(3) and (4).
[454] See Official Records, Vol. XV, CDDH/215/Rev.1, Report of Committee III, Geneva, 3 February-18 April 1975, p.324.
[455] See UNEP Study (2009), p.5.

Some subsidiary support exists in international law for the application of the prohibition of military attacks resulting excessive environmental harm to non-international armed conflicts.[456] The ICRC study of the status of customary international found that Rule 45, which in essence reflects the article 8(2)(b)(iv) prohibition,[457] "arguably" applies to non-international armed conflict.[458]

There is some basis for regulating environmental harm during non-international armed conflicts. For example, the United Nations Convention on Certain Conventional Weapons (1980)[459] states in its Preamble that "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",[460] and since 2001, the provisions of the Conventional Weapons Convention apply to non-international and international armed conflicts.[461] However, the obligation to exercise criminal jurisdiction over its breaches is limited to cases of anthropocentric harm (wilful killing or serious injury to civilians), and so it provides mixed support for the notion of prosecuting environmentally harmful acts committed during non-international armed conflicts.

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[456] See Matthew Gillett, Chapter 10 "Eco- Struggles Using International Criminal Law to Protect the Environment During and After Non- International Armed Conflict", in Stahn et. al. (2017).

[457] Rule 45 of the ICRC study finds the following prohibited under customary international law: "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 Study, p.151.

[458] ICRC Study, pp.156-157.

[459] ICRC Study, 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 arguably eco-centric in the subject it is protecting; Protocol III (Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons), Article 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 (1997), p.89.

[460] Conventional Weapons Convention as amended on 21 December 2001, preamble, para. 4.

[461] Amended Article 1 (to date 82 States Parties have accepted this amendment, including the United States of America, the United Kingdom, the Russian Federation, France and China). 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.

(ii) Attack

Article 8(2)(b)(iv) requires that an "attack" be launched. The term "attack" in this context should not be confused with the broader notion of an "attack" on a civilian population as required to demonstrate a crime against humanity under article 7 of the Rome Statute.[462] For the purposes of the war crime in article 8(2)(b)(iv), the attack envisaged would typically be a kinetic, military attack.[463] A military operation would amount to an armed attack for the purposes of article 8(2)(b)(iv) to the extent it involved the use of armed force against an opposing party. Conversely, the conduct of members of an armed force incidental to an attack, such as exploiting natural resources to finance military activities, would not constitute an attack *per se*.[464] At the same time, the attack need not be directed exclusively or even primarily at the environment. It would be sufficient if the attack were launched with knowledge that it would cause damage to the environment of sufficient gravity, scale, and duration.

The bombing and destruction of a large-scale dam, leading to severe flooding of an extended area would constitute the typical type of kinetic attack covered by this term. During the armed conflict in Croatia in the 1990s, the Serb forces were reported to have placed charged explosives in the Peruca Dam, which was located in disputed territory, creating the potential for devastating consequences for downstream riparian areas.[465] Had the explosives been activated, this operation would have qualified as an attack and, depending on the consequences, could have fulfilled the elements that are now enshrined in article 8(2)(b)(iv).

Tactics used during an armed conflict, and operations to implement the tactics could be considered "attacks" for the purposes of article 8(2)(b)(iv). An example of an operation

[462] As the Trial Chamber in *Kunarac et. al.* explained "the term "attack" in the context of a crime against humanity carries a slightly different meaning than in the laws of war. In the context of a crime against humanity, "attack" is not limited to the conduct of hostilities. It may also encompass situations of mistreatment of persons taking no active part in hostilities, such as someone in detention."; *Prosecutor v. Kunarac et. al.*, Case No.IT-96-23 and 23/1, Trial Judgment, 8 July 2003, para.416.

[463] The wording of article 8(2)(b)(iv) could also potentially encompass other forms of attacks, such as cyber-attacks, if those attacks were capable of causing loss of life or injury to civilians or civilian objects. An example would be a cyber-attack designed to make a hydro dam malfunction and unleash damaging amounts of water on downstream civilians and civilian objects, also causing large-scale environmental damage. See generally Michael Schmitt et. al., *Tallinn Manual on the International Law Applicable to Cyber Warfare*, Cambridge University Press 2013 ("Tallinn Manual").

[464] Peterson (2009), p.337.

[465] The motivation for laying mines on the site remains unclear. Criminal proceedings concerning the attacks on Peruca Dam were commenced in Croatia. Former JNA military commander Borislav Djukić was charged by Croatian authorities in connection with the mining of the Peruca Dam: Balkan Insight, "Montenegro Extradites Serbian Wartime General to Croatia", 9 March 2016, http://www.balkaninsight.com/en/article/montenegro-extradited-serbian-wartime-general-to-croatia-03-08-2016.

conducted during armed conflict that is frequently cited as the type of conduct that could constitute an "attack" in this sense is the American defoliation campaign during the Vietnam War – "Operation Ranch Hand".[466] During Operation Ranch Hand, the United States ("US") Army sprayed many millions of gallons of herbicides, including the infamous Agent Orange, on Vietnam and Laos and cleared lands with large "Roman plows" in an effort to remove the forest cover being used effectively by the Viet Cong and North Vietnamese army.[467] Encompassing many individual strikes, this overarching campaign would also qualify as an "attack" for the purposes of article 8(2)(b)(iv).[468] However, in civil proceedings under the Alien Tort Statute in the USA, the district court, as upheld on appeal, held no violation of international law had been shown concerning the US deployment of Agent Orange in Vietnam, because in the judge's view the Agent Orange was only used to defend US forces.[469]

Another type of military attack that could result in excessive harm to the environment, is nuclear attacks. Generally large-scale in impact, nuclear attacks would almost inevitably result in serious environmental harm, and could potentially meet the circumstances in which the elements of article 8(2)(b)(iv) may be satisfied. However, there has been ongoing dispute as to whether the impact on the environment could render the use of nuclear weapons a criminal act. The ICRC has stated that the customary international law comparator of article 8(2)(b)(iv) of the Rome Statute, Rule 45, does not apply to nuclear weapons.[470] The United States, France, and the United Kingdom are all persistent objectors to Article 35(3) of Additional Protocol 1, which also largely reflects the terms of article 8(2)(b)(iv), particularly in relation to nuclear weapons.[471]

(iii) Natural environment

[466] See Aaron Schwabach, "Ecocide and Genocide in Iraq: International Law, the Marsh Arabs, and Environmental Damage in Non-International Conflict", 15 *Colo. J. Int'l Envtl. L. & Pol'y* 1 (2004), p.7; see Timothy Schofield, "The Environment as an Ideological Weapon: A Proposal to Criminalise Environmental Terrorism", 26 *B. C. Envtl. Aff. L. Rev.* (1998-1999), pp.635-636; Schmitt, 1997, pp.9-10. Commentators are divided as to whether the defoliation operations conducted in Vietnam would qualify as an attack for the purposes of this prohibition.

[467] See Schwabach 2000, p.126

[468] *Contra* Peterson (2009), pp.336, 338, 342.

[469] Vietnam Victims' Case.

[470] Jean-Marie Henckaerts, "Customary International Humanitarian Law: A Response to US Comments", 89 Int'l Rev. Red Cross 473, (2007), p.482. Note that many treaties contain prohibitions against the use of nuclear weapons on specific vulnerable areas of the world; *for example* The 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* Popović (1995-1996), pp.82-83.

[471] Major Jeremy Marsh, "*Lex Lata* or *Lex Ferenda*? Rule 45 of the ICRC Study on Customary International Humanitarian Law", 198 Mil. L. Rev. 116 (2008), p.118.

Article 8(2)(b)(iv) applies to harm to the natural environment. As stated above, the most authoritative interpretation of the term "natural environment" is that of the International Law Commission, which refers to the entirety of the natural environment of a given area as well as the usability of the environment. In the context of attacks during an armed conflict, the "natural environment' is not limited to that part of the environment belonging to or under the control an opposing party to a conflict, but also covers damage to a party's own territory.[472]

The eco-centric aspect of article 8(2)(b)(iv) is constituted by its capacity to result in a conviction for environmental harm irrespective of any harm to human beings or their interests. This aspect of article 8(2)(b)(iv) is partly reflected in regulation 6(1)(b)(iv) of the provisions governing the work of the East Timor tribunals,[473] and article 35(3) of API. These provisions prohibit causing widespread, long-term and severe damage to the natural environment, irrespective of whether human beings are harmed by the destruction of the environment. Similarly, prohibitions established in the Convention on the Prohibition of Environmental Modification Techniques (ENMOD) and under customary international law,[474] have eco-centric orientations, although these cannot form the sole basis of criminal prosecutions under international law.

Significantly, for the purposes of article 8(2)(b)(iv), the harmed environmental feature does not need to be the property of an adversary or otherwise protected under IHL. In this respect, the provision differs from several of the other most applicable war crimes provisions, and from the majority of the prohibitions relevant to environmental harm under international humanitarian law, which concern damage to another state's territory and not self-destruction by a state of its own territory.[475] Moreover, the damage does not need to affect any other party to the conflict. Consequently, the prohibition does have a partly eco-centric orientation, in that it protects against environmental harm even if no humans or their property is harmed.

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[472] Peterson (2009), p.328. See also ICRC Commentary to Article 35(3) (the ENMOD "Convention does not prohibit environmental modifications which cause widespread, long-lasting or severe damage as such, but only to the extent that they are used to cause damage to another State, while the Protocol prohibits any means of a nature to cause widespread, long-term and severe damage to the natural environment.")

[473] United Nations Transitional Authority for East Timor Regulation No. 2000/15 establishes panels with exclusive jurisdiction over serious criminal offences, including war crimes. According to Section 6(1)(b)(iv), "[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" constitutes a war crime in international armed conflicts.

[474] See specifically Rules 43-45 of the ICRC Study.

[475] Secretary-General Report 1993, p.15 (noting that the basic rule in the case of damage inflicted by a state on its own territory is that internal law governs the matter in accordance with the principle of state sovereignty, but that this position is "undergoing gradual erosion").

(iv) Widespread, long-term, and severe damage

The core of article 8(2)(b)(iv) consists of the three terms - widespread, long-term and severe. These three terms are conjunctive in article 8(2)(b)(iv), and so must all be met in order for criminal responsibility to arise.[476] The terms of article 8(2)(b)(iv) and of the Elements of Crimes require anticipated harm meeting these three criteria of widespread, long-term and severe, but do not explicitly require that the harm actually result. This presents the unlikely but possible scenario of a conviction arising for an attack that was launched and which would normally have caused widespread, long-term and severe environmental harm but for unforeseeable reasons did not result in the anticipated harm. While such conduct would still be reprehensible, it is questionable whether the gravity requirements for admissibility would be satisfied if the attack did not actually result in any harm.[477] Nonetheless, the strange wording of article 8(2)(b)(iv) leaves open the possibility that it is a partially inchoate offence,[478] in that the long-term, widespread, and severe harm to the environment is not explicitly required to manifest so long as it is present in the perpetrator's thinking.

The threshold for widespread, long-term and severe damage is high. Typical battlefield damage is not likely to reach the threshold.[479] Some commentators consider that Saddam Hussein's intentional burning of over 600 Kuwaiti oil wells during the Gulf War would not reach the threshold, despite the serious and lasting damage that was caused by this malicious act.[480] While a strong argument could be made that the article 8(2)(b)(iv) criteria were satisfied, the fact that this point is debated demonstrates the difficulty of satisfying the terms of widespread, long-term and severe. This has caused at least one commentator to lament that article 8(2)(b)(iv) "merely pays lip-service to environmental concerns, without creating that risk that anyone will be prosecuted for this particular offence."[481]

a. Widespread

[476] Weinstein (2005), p.706. *Contra* Popović (1995-1996), p.77 ("environmental damage that meets any one of the three elements is more than the international community should tolerate, even in times of war.")
[477] See infra Chapter III(B)(4) (discussion of gravity and environmental harm).
[478] See *Nahimana* AJ, para.720 ("An inchoate offence ("crime formel" in civil law) is consummated simply by the use of a means or process calculated to produce a harmful effect, irrespective of whether that effect is produced.").
[479] See *travaux préparatoires* to Article 35(3) of Additional Protocol 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, at pp.268-269 (Federal Political Department, Bern, 1978), *cited in* Cohan (2002), p.503. See also Peterson (2009), p.336.
[480] See Peterson (2009), p.342; Schmitt (1997), pp.19, 75.
[481] Peterson (2009), p.343.

The term "widespread" refers to the required geographical scope of the environmental damage. The specific threshold in terms of square kilometres remains undefined. In accordance with article 21 of the Rome Statute, the Court could have resort to applicable treaties and principles and rules of international law to interpret this provision.[482] The ENMOD convention defines "widespread" as several hundred square kilometres.[483] Other minimum requirements suggested by commentators rise to thousands of square kilometres.[484] However, imposing a high minimum threshold for "widespread" kilometres would result in an asymmetrical situation whereby some states would be precluded from applying the provision even if the damage extended across their whole geographic territory. For example, the State Parties to the Rome Statute include the world's second largest country in terms of size – Canada (nearly 10,000,000 square kilometres), alongside minute countries such as Liechtenstein (160 square kilometres) and the Cook Islands (240 square kilometres).[485] These small countries are unlikely to have intended a definition of "widespread" that would exclude the destruction of their entire natural habitat from consideration.[486] Accordingly, for the purposes of article 8(2)(b)(iv) the determination of a single absolute standard of "widespread" may not be possible.

One possible manner of interpreting the term is a relative standard, defining "widespread" according to the size of the territory within which the harm occurs, and leaving it to the ICC judiciary to apply this standard in particular cases.[487] Following this approach, 100 square kilometres of environmental destruction in Liechtenstein may be considered sufficiently widespread, even if 100 square kilometres of environmental harm in Nunavut were not considered to reach the widespread threshold.

b. Long-term

The notion "long-term" refers to the temporal duration of the environmental harm.[488] Like the term "widespread", the specific minimum duration of "long-term" remains undefined. The parties to ENMOD agreed that the corresponding term used in that convention ("long-lasting" in Article 1) refers to a period of several months or a season.[489] However, the "long-term"

[482] Rome Statute, article 21(1)(b).
[483] Understanding I, ENMOD Memorandum of Understanding.
[484] Peterson (2009), pp.331-332.
[485] See UNEP Study (2009), p.5.
[486] *Contra* Peterson (2009), p.331.
[487] *Contra* Peterson (2009), p.331.
[488] Weinstein (2005), p.708.
[489] See ENMOD Memorandum of Understanding.

duration required in Articles 35(3) and 55 of Additional Protocol I has been interpreted to mean a period of years, or even decades,[490] including by the US Department of Defence in reviewing the First Gulf War.[491] The assessment carried out by a Committee from the Office of the Prosecutor of the ICTY into the applicability of Article 35(3) to the NATO actions during its bombing campaign against the Federal Republic of Yugoslavia ("FRY") in 1999 stated that "it is thought that the notion of 'long-term' damage in Additional Protocol I would need to be measured in years rather than months".[492]

Because the most serious aspects of the harm caused by Saddam Hussein's lighting of the Kuwaiti oil wells lasted a shorter time than expected, some commentators considered this to fall short of the long-term requirement of Additional Protocol I.[493] The United States Department of Defense also took this position in its final report to Congress on the conduct of hostilities in the Gulf War.[494] However, interpreting long-term to require damage lasting decades would virtually render these provisions nugatory and would beg the question of why they were enacted in the first place. As noted by the Secretary-General of the United Nations "it is not easy to know in advance exactly what the scope and duration of some environmentally damaging acts will be."[495]

Requiring environmental harm to perdure for decades before criminal procedures could be initiated would undermine the prospect of efficient criminal proceedings. If an essential element of the crime could not be established by definition until tens of years after the crimes, then no trial could occur until after that point in time. This is not in keeping with the aim of expeditious proceedings and potentially would result in adjudicative incoherence.

c. Severe

The term "severe" refers to the intensity of the harm caused to the environment, independent of its geographic ambit or temporal duration. Severe environmental harm denotes damage

[490] Secretary-General Report 1993, pp.7; Schmitt (1997), pp.71, 107. See also, e.g. Australia, The Manual of the Law of Armed Conflict, Australian Defence Doctrine Publication, 06.4, Australian Defence Headquarters, 11 May 2006, para. 7.14 (noting that long-term had been interpreted to mean a period of decades).
[491] Dinstein (2001), p.536.
[492] Final Report on NATO (2000), para.15.
[493] See *for example* Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (Cambridge University Press: Cambridge, 2004), p.194, *cited in* Peterson (2009), p.342.
[494] United States, Department of Defense, "Final Report to Congress on the Conduct of the Persian Gulf War, Appendix O, The Role of the Law in War", 10 April 1992, ILM, Vol. 31, pp.636-637.
[495] Secretary-General Report 1993, p.7.

going beyond typical battlefield damage.[496] Examples of environmental harm that has been described as sufficiently severe include the "dam-buster" raids in World War II. The raids destroyed the Mohne and Eder dams in order to cut off water from the Ruhr industrial complex. They resulted in the death of more than 1300 civilians and cut off drinking water and energy to 4 million Germans.[497] UNEP suggests that this element should be interpreted as "serious or significant disruption or harm to human life, natural economic resources or other assets."[498] There are distinct examples in recent times of commanders launching attacks that resulted in serious environmental harm. For example, UNEP noted that thousands of tons of fuel oil were released into the Mediterranean Sea after the bombing of the Jiyeh power station during the conflict between Israel and Lebanon in 2006.[499] Similarly, the current armed conflict in Syria is having a deleterious environmental impact in Syria and Lebanon, including through increased pollution and degradation of surface, ground and marine water.[500]

In assessing the severity of the harm, the analysis should encompass the direct environmental harm caused by the attack as well as secondary effects. For example, when detailing the harm caused by Saddam Hussein's forces setting fire to the Kuwaiti oil wells, the United Nations Compensation Commission for Iraq took into account a range of factors going beyond the immediate incineration of the oil. Additional environmental harm included the release of airborne pollutants and the formation of oil rivers and lakes from unignited oil.[501]

(v) Mens rea

Article 8(2)(b)(iv) appears to contain a triple *mens rea* test. It requires that the attack be launched "intentionally", that the perpetrator know that the anticipated environmental harm will be widespread, long-term and severe, and that this damage be clearly excessive in relation to the concrete and direct overall military advantage anticipated from the information known to the Accused at the time.

[496] See *travaux préparatoires* to Article 35(3) of Additional Protocol I CDDH/215/Rev.1, para.27.
[497] See Schmitt, 1997, p.8.
[498] See UNEP Study (2009), p.5.
[499] UNEP Study (2009), p.8.
[500] Economic and Social Impact Assessment of the Syrian Conflict, World Bank Report, September 2013, Para.261 (available http://www.undp.org/content/dam/rbas/doc/SyriaResponse/Lebanon%20Economic%20and%20Social%20Impact%20Assessment%20of%20the%20Syrian%20Conflict.pdf last checked April 2014).
[501] UNCC Recommendations First Instalment (2001), para.13. See also para.31(b).

The first aspect of intentionality appears to simply indicate that the attack must be a volitional act. It would not be sufficient if military force was accidentally unleashed, or accidentally directed at the wrong target.

The second aspect—knowledge—provides a difficult test to meet. As discussed above, the widespread, long-term and severe elements are potentially highly exacting and are conjunctive. Despite the work of international organizations to educate military commanders on potential environmental harm,[502] these standards remain opaque and largely untested under international criminal law.[503] In the Gulf War, Saddam Hussein warned that he would destroy the Kuwaiti oil wells if the coalition forced the Iraqi army out of Kuwait.[504] Despite this malice aforethought, prosecuting Hussein under article 8(2)(b)(iv) would have been complicated (in the hypothetical scenario whereby article 8(2)(b)(iv) was in operation in 1991). For example, it may have been difficult to prove that he was aware of the extent of possible environmental harm.[505] This demonstrates the implications of interpreting the terms of article 8(2)(b)(iv) restrictively. For each increase in the thresholds of the harm elements (widespread, long-term, severe), the difficulty of proving that an accused had the requisite knowledge increases exponentially.[506]

Moreover, article 8(2)(b)(iv) requires a demonstration that the commander launched the attack knowing that it "will cause" the long-term, widespread and severe environmental harm. The term "will" implies a level of certainty that is extremely difficult to prove in an anticipatory setting, particularly where the environmental harm is likely not the intended purpose of the attack. Indeed, it is unclear whether even Hussein knew that the oil wells fires in Kuwait in 1990-1991 would lead to widespread, long-term, and severe environmental harm.[507] Nonetheless, the wording of article 8(2)(b)(iv) in this respect appears to exclude *mens rea* standards of negligence, wilful blindness or recklessness being sufficient.[508]

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[502] In connection with this element, and in order to educate military decision-makers about the environmental consequences of military actions and related prohibitions of international law, the ICRC has started the publication and distribution of the Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict; Schmitt (1999-2000). Also available at http://www.icrc.org/web/eng/siteeng0.nsf/html/57JN38 (last accessed 16 October 2009).
[503] Weinstein (2005), p.708.
[504] See Schmitt (1997), pp.15, 54.
[505] Weinstein (2005), p.705.
[506] See *generally* Jessica Lawrence and Kevin Heller, "The First Eco-centric Environmental War Crime: The Limits of article 8(2)(b)(iv) of the Rome Statute", 20 *Geo. Int'l Envtl. L. Rev*. 61 (2007), pp.79-85.
[507] Weinstein, pp.707-708.
[508] Drumbl (1999-2000), p.322; Cusato (2017), text accompanying footnote 24.

In this respect, causation (linking the perpetrator's acts to the harm caused) also presents challenges. For example, if high winds fanned flames arising from an attack leading to far greater harm than caused by the initial impact of the attack, a question arises as to whether this would be attributable to an accused if they knew of the risk of such weather in the targeted area. Even more complex questions of causation would likely arise in relation to harm such as that resulting from the release of chemicals into the environment.[509]

(vi) Proportionality

The third *mens rea* aspect of article 8(2)(b)(iv) and perhaps the most challenging, is its final clause - "would be clearly excessive in relation to the concrete and direct overall military advantage anticipated". This introduces a proportionality-type balancing test into the evaluation of environmental harm caused by armed conflict. The balancing test distinguishes article 8(2)(b)(iv) from genocide and crimes against humanity, which are forbidden irrespective of any anticipated military advantage.[510] The ICC Elements of Crimes for article 8(2)(b)(iv) state that the "military advantage anticipated" is assessed from the perspective of the perpetrator on the basis of the information available to him or her at the time of launching the attack.[511] Because of this clause, article 8(2)(b)(iv) cannot be seen as purely eco-centric. Even if the harm it seeks to prevent (harm to the environment) is eco-centric, the prohibition may be overridden where military interests, namely anthropocentric interests, require it. Because of this, some commentators argue that there is no environmental crime under international law.[512]

By including the proportionality test, the drafters of the Rome Statute have reduced the coverage of the prohibition against serious environmental harm in comparison with the position applicable under IHL.[513] The test provides belligerents 'a very great latitude' which, in the view of some commentators, makes 'judicial scrutiny almost impossible'.[514] In this respect, it is notable that Rule 45 of the ICRC study on customary international law does not

[509] See, e.g., Peterson (2009), p.335 (questioning whether article 8(2)(b)(iv) would apply if the damage were reversible).
[510] See Drumbl (1998-1999), p.135.
[511] Elements of Crimes of the Rome Statute of the International Criminal Court, fn.36. See also Weinstein 2005, p.708, fn.95.
[512] See, e.g., Rose (2014), p.7.
[513] Under article 55 of Additional Protocol I, widespread, long-term, and severe environmental harm would be a violation of the law, even if it was "clearly proportional", Dinstein (2001), p.536 citing M.N. Schmitt, 'The Environmental Law of War: An Invitation to Critical Re-examination', *Rev. Dr. Mil. Dr. Guerre* 36 (1997), 11 et seq., (35).
[514] Cassese and Gaeta (2008), p.96.

explicitly include this proportionality balancing test.[515] Nonetheless, Rule 45 is anthropocentrically framed as it only bars such damage where it is likely to "prejudice the health or survival of the population".[516]

A necessary step in the proportionality analysis under article 8(2)(b)(iv) is whether the object being targeted in the attack or operation was military in nature. If the intended target were not military, and were not being used for military purposes, then there would be no anticipated concrete and direct military advantage to weigh against the anticipated environmental harm and the crime would be established (as long as the other elements were present). Military objects are defined as those "which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage".[517]

Given that article 8(2)(b)(iv) does not clarify how the term "military" applies to "the environment",[518] other sources of international law may be utilized for this purpose.[519] In relation to the natural environment, the ICRC study on customary international law provides that participants in an armed conflict distinguish military targets from attacks on the environment *per se*.[520] Facets of the environment may constitute military objects.[521] A cave being used by members of an armed group for shelter and weapons storage, for example, would constitute a legitimate military target even though it is also an environmental feature.

On the other hand, it is questionable whether the environmental or aspects thereof can become a military target merely by virtue of its use to finance military efforts. Arguments have been made that natural resources, in the sense of commodities that can be extracted and traded such as minerals and rare metals, may constitute military objects if they are used to finance an armed struggle. By analogy, "an 1870 international arbitral tribunal recognized that the destruction of cotton was justified during the American Civil War since the sale of cotton

[515] "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 Study, p.151.
[516] See*, e.g.*, New Zealand, Interim Law of Armed Conflict Manual, DM112, New Zealand Defence Force Headquarters, Directorate of Legal Services, Wellington, November 1992, sections 505(1) and 614(1).
[517] Additional Protocol 1, article 52(1); *Kordić* AJ, para.52.
[518] See in this respect, Secretary-General Report 1993, p.7 (noting that article 52 has an "important bearing on the protection of the environment in armed conflict" but not explaining how).
[519] Rome Statute, article 21.
[520] ICRC Study, Marsh 2008, p.133; UNEP Study (2009), p.13.
[521] Dam-de Jong (2015), p.232.

provided funds for almost all Confederate arms and ammunition."[522] However, the ICRC list of objects that may meet this definition focuses on industries with a clear military link, such as those producing armaments, transport and communication equipment of a military character, factories producing items of an essentially military character such as metallurgical, chemical and engineering industries, and installations providing energy mainly for military consumption.[523] Expanding the list of potential military objects to include any facet of the environment that could potentially assist the financing of the war effort would virtually remove the line between civilian and military objects in this respect.

Additionally, the military advantage provided by destroying the object in question must be "must be definite and cannot in any way be indeterminate or potential."[524] The further removed the objects are from the direct, kinetic fighting, the less determine the advantage of destroying them. Nonetheless, it is clear that the destruction of the environment during hostilities in the absence of a military rationale would potentially violate international law, and potentially could be classified as criminal.[525]

Environmental damage in armed conflict is typically an effect rather than a purpose of military attacks.[526] In applying the proportionality test in article 8(2)(b)(iv) the next step would be to determine whether the attack was militarily necessary. If the attack were not necessary then it could not justify the environmental harm, even if the target was military in nature. For example, if the military command post of an opposing force had been definitively abandoned, then destroying it would not typically be necessary and would not provide a potential justification for widespread, long-term and severe environmental harm. Military necessity has been defined by the Trial Chamber in *Katanga* in accordance with the Lieber Code of 1863, and the Appeals Chamber of the ICTY,[527] as covering "those measures which

[522] New Zealand's Military Manual (1992) (Interim Law of Armed Conflict Manual, DM 112, New Zealand Defence Force, Headquarters, Directorate of Legal Services, Wellington, November 1992, para.516(5) cited in ICRC Study, Practice concerning Rule 8.
[523] ICRC Commentary to article 52 of Additional Protocol I, p.632, fn.3 (referring to a "the list drawn up by the ICRC with the help of military experts").
[524] *Katanga* article 74 Decision, para.893 citing International Committee of the Red Cross (Yves Sandoz *et al.* (Eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, 1986, paras. 2024 and 2028.
[525] ICRC Study, Rule 43.
[526] Mégret (2011), p.223.
[527] *Kordić* AJ, para.686. It should be noted that the Appeals Chamber's statement was made in the context of a discussion of the commission of violent acts against people as reprisals for previous conduct.

are indispensable for securing the ends of the war, and which are lawful according to the modern law and usages of war".[528]

The International Military Tribunal at Nuremberg found that breaching the principle of necessity constitutes a violation of international law

> The destruction of property to be lawful must be imperatively demanded by the necessities of war. Destruction as an end in itself is a violation of international law. There must be some reasonable connection between the destruction of property and the overcoming of the enemy forces.[529]

The Appeals Chamber of the ICTY has re-affirmed this prohibition.[530] However, if the Accused thought, albeit incorrectly, that the attack was militarily necessary, then the value of the target sought would have to be weighed against the environmental harm. At the same time, simply constituting a violation of international law does not necessarily mean that the proportionality test would be satisfied, as it would be necessary to assess the situation based on the information known to the perpetrator at the time they launched the attack.[531] An indication of the difficulty of proving responsibility for military tactics incorporating widespread environmental harm is the use of Agent Orange by US forces in Vietnam in a defoliation campaign from 1962-1971. The district court hearing the claim dismissed it on the basis that the chemicals were simply used to defend US forces from ambushes, and therefore no violation of international law had been shown.[532]

Other instruments of international law could also inform the analyses of whether the attack caused disproportionate environmental harm and whether the perpetrator had sufficient knowledge of the excessive nature of the harm. For example, the Third Protocol to the 1980 Convention on Certain Conventional Weapons addresses incendiary weapons and prohibits "forests or other kinds of plant cover the object of attack by incendiary weapons".[533] However, this prohibition's coverage does not apply "when such natural elements are used to

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[528] *Katanga* article 74 Decision, para.894 citing 8 Instructions for the Government of Armies of the United States in the Field (1863), ("Lieber Code"), article 14.
[529] *Hostages* Trial, 759, 1253-1254 (*cited in* Schmitt (1997), p.52).
[530] *Kordić* AJ, para.686. It should be noted that the Appeals Chamber's statement was made in the context of a discussion of the commission of violent acts against people as reprisals for previous conduct.
[531] Rome Statute Elements of Crimes, fn.37.
[532] Vietnam Victims' Case.
[533] Protocol III to the 1980 Convention on Certain Conventional Weapons, article 2(4). The vast majority of States Parties to the 1980 Convention have accepted Protocol III: https://treaties.un.org/Pages/ShowMTDSGDetails.aspx?src=UNTSONLINE&tabid=3&mtdsg_no=XXVI-2&chapter=26&lang=en.

cover, conceal or camouflage combatants or other military objectives, or are themselves military objectives."[534]

The application of the principles of necessity and proportionality in the context of environmental harm were considered by the ICTY Committee examining NATO's actions in the FRY.[535] The Committee noted that where an attack constituted a grave threat to the environment it would have to confer a very substantial military advantage in order to be considered legitimate.[536] The Committee further observed that "If there is a choice of weapons or methods of attack available, a commander should select those which are most likely to avoid, or at least minimize, incidental damage".[537]

While the "military advantage anticipated" must be assessed from the perspective of the perpetrator on the basis of the information available to him or her at the time of launching the attack,[538] it is unclear whether the "clearly excessive" element is assessed from the perpetrator's subjective viewpoint or from an objective viewpoint based on the information available to the accused. The Elements of Crimes state that the perpetrator must make the "value judgement" inherent in the provision, which supports the subjective approach. However, the following sentence of the Elements of Crimes requires that "[a]n evaluation of that value judgement must be based on the requisite information available to the perpetrator at the time."[539] This qualification implies that an assessment of the perpetrator's judgement is required, albeit on the basis of the information available to the perpetrators, which supports the objective approach of assessing the proportionality according to a standard of reasonableness.

These apparently conflicting sentences can be reconciled. This approach would work as follows: in accordance with the first sentence of this proportionality test, the Court should satisfy itself as to whether the perpetrator carried out the value-judgement. If the perpetrator concluded that the environmental harm was not justified by the military objective then liability would arise. Conversely, if the perpetrator considered that the environmental harm

[534] Protocol III to the 1980 Convention on Certain Conventional Weapons, article 2(4).
[535] Final Report on NATO (2000), para.15.
[536] Final Report on NATO (2000), para.20.
[537] Final Report on NATO (2000), paras.21, 24. The Committee added that "[i]n doing so, however, he is entitled to take account of factors such as stocks of different weapons and likely future demands, the timeliness of attack and risks to his own forces".
[538] Elements of Crimes of the Rome Statute of the International Criminal Court, fn.36. See also Weinstein 2005, p.708, fn.95.
[539] ICC Elements of Crimes, fn.37.

was justified in order to obtain the military advantage, then the Court would carry out the "evaluation" of the perpetrator's assessment, as referred to in the Elements of Crimes. A finding that the perpetrator's evaluation was a reasonable one would result in an acquittal. However, according to this approach, a patently unreasonable assessment by the perpetrator would not be grounds to escape liability if it could be shown that the commander, aware of the risk of environmental harm, nonetheless acted recklessly[540] by disregarding alternative available means which would have reduced the harm to the environment.[541]

The alternative approach is to accept the purely subjective approach, whereby the military commander's decision is accepted unless it can be shown that he thought that the environmental harm would be excessive but decided to go ahead with the attack anyway. The problem with taking a purely subjective approach is that every military commander or political leader accused under article 8(2)(b)(iv) will claim that they considered the environmental harm justified, as occurred in the World War II prosecution of the German General Rendulić for excessive harm caused by his scorched earth tactics in Norway.[542] Rendulić held a series of command positions in the German armed forces in 1943 and 1944. In accordance with his orders, German troops burnt and destroyed villages and surrounding facilities in the Norwegian province of Finmark when retreating from the advancing Russian army. His troops' slash and burn strategy destroyed thousands of buildings and resulted in serious harm to the environment. Rendulić was ultimately acquitted of the charge of wanton destruction of property. Although the Tribunal did not accept that his decision to use scorched-earth tactics was reasonable, it accepted that he genuinely perceived it to be militarily justified at the time.[543] Given the regularity of scorched earth tactics during armed conflicts, which stretches back to the Peloponnesian Wars in written histories and has continued to feature in reports of conflicts such as the Boer war, the First World War, and in World War Two, it is inevitable that the issue of scorched earth tactics will arise in future

[540] International criminal law has not incorporated a negligence standard for its *mens rea* for the substantive offences that it addresses; *Prosecutor v. Mučić et. al.,* Case No.96-21, Appeal Judgement, 20 February 2001, para.241.

[541] In this respect, the test would diverge from the approach to the assessment of the liability of Lothar Rendulić for his scorched earth tactics in Finland during World War Two, as described below; *Hostages Trial*.

[542] *Hostages* Trial, pp.66-69; Yuzon (1996), p.134. Rendulić was also charged with issuing vicious "reprisal" orders including to kill 50 hostages for any German killed and sentenced to 20 years' imprisonment.

[543] *Hostages* Trial, pp.66-69 ("It is our considered opinion that the conditions as they appeared to the defendant at the time were sufficient, upon which he could honestly conclude that urgent military necessity warranted the decision made. This being true, the defendant may have erred in the exercise of his judgment but he was guilty of no criminal act. We find the defendant not guilty on this portion of the charge."); Yuzon (1996), p.134. Another German military officer, Alfred Jodl was also prosecuted in part for scorched-earth practices in the north of Norway; Trials of War Criminals Before the Nuremberg Military Tribunals under Control Council Law No.10, Part XXII, November 1945-October 1946, 568-71 (1948).

conflicts.[544] Indeed, in 2016, reports emerged of ISIS burning oil installations in Iraq in the course of the ongoing conflict with the Iraqi Army and international forces.[545]

Given the complications and vagaries of measuring environmental harm, as well as the commitment of military commanders and political leaders to their military objectives[546] – it would be very difficult to prove that they did not believe the environmental harm was justified, no matter how absurd their assessment. It cannot be presumed that the States Parties decided to include a provision in the Rome Statute that would essentially never have any application.[547] In this respect, the Rendulić case, discussed above, marks a low point for the development of international environmental law. It indicated that commanders would not be criminally responsible for extremely serious and extensive environmental harm, as long as there was a claimed military justification for the acts that led to the harm.

Independent of which viewpoint is taken, determining the proportionality of environmental harm as compared to the counter-veiling military objectives will be difficult to carry out.[548] For example, the dropping of atomic bombs on Nagasaki and Hiroshima during World War II caused massive and predictable environmental damage.[549] There is no doubt that these attacks would satisfy the widespread, long-term and severe requirements of article 8(2)(b)(iv). However, there is also no doubt that the attacks entailed a huge military advantage, arguably hastening the end of the war in the East. Debates have raged ever since as to whether the harm was excessive in relation to the military advantage gained.[550] Thus, even the clearest cases of environmental harm will be difficult to assess under the balancing test.

The need to minimize collateral damage is reflected in a number of provisions of international humanitarian law, including Article 57(2) and (3) of Additional Protocol I.[551] The Secretary-General has noted that this has an "important bearing on the protection of the environment in

[544] See Cohan (2002), p.500.
[545] Cusato Scorched Earth.
[546] See *for example* Garrett (1996), p.45-46 ("environmental considerations should not obstruct the application of the principles of war during armed conflict").
[547] In this respect, the principle of effectiveness requires interpreting the provision to serve the purposes for which it was created as far as possible; "[w]hen a treaty is open to two interpretations one of which does and the other does not enable the treaty to have appropriate effects, good faith and the object and purpose of the treaty demand that the former interpretation should be adopted"; Report of the International Law Commission to the General Assembly, N6309/Rev.l, reprinted in [1966] 2 Y 8 Int'l L Comm'n 169, at 219.
[548] Cohan (2002), p.494.
[549] See Schmitt (1997), p.8.
[550] See, e.g., Bernard Brown "The Proportionality Principle in the Humanitarian Law of Warfare: Recent Efforts at Codification," Cornell International Law Journal: Vol. 10, 1976: Iss. 1, Article 5, p.141.
[551] Article 57 (2) Additional Protocol I.

armed conflict", without providing further specifics.[552] Nonetheless, it can be surmised that, if other such means were available but not taken, this will weigh in favour of the attacks being disproportionate.[553] This approach equates to the application of the precautionary principle as established under international environmental law, which, according to the ICRC, has been established as customary international law in relation to military attacks resulting in environmental harm.[554]

Some incidental protection for the environment is provided by article 56 of Additional Protocol I.[555] In weighing up the military necessity of attacking a certain location, for the purpose of article 8(2)(b)(iv) (or any other war crime for which proportionality or military necessity was a consideration), it would be important to note if the location fell within Article 56 of Additional Protocol I, which 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.[556] 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.[557] Article 15 of Additional Protocol II extends the protections contained in Article 56 of Protocol I to non-international armed conflicts.[558]

It has been proposed before the International Law Commission that military planners should undertake environmental impact assessments before launching operations.[559] The ICJ has confirmed that states have an obligation under general public international law to perform

[552] Secretary-General Report 1993, p.7.
[553] Schmitt, 1997, p.6; Schmitt (1999-2000), p.276, 313.
[554] ICRC study, Rule 43.
[555] Secretary-General Report 1993, p.7.
[556] Additional Protocol I, Article 56(1).
[557] In the case of dams, they must also be used other than in their normal manner; Additional Protocol I, Article 56(2).
[558] A similar prohibition is contained in Article 52 of the Berlin Rules on Water Resources, which states that "the Combatants shall not, for military purposes or as reprisals, destroy or divert waters, or destroy water installations, when such acts would cause widespread, long-term, and severe ecological damage prejudicial to the health or survival of the population or if such acts would fundamentally impair the ecological integrity of waters." Berlin Rules on Water Resources, 2004. This provision contains two prohibited consequences: an anthropocentrically-oriented reference to the health and survival of the population and an eco-centrically oriented reference to the ecological integrity of waters. The latter consequence is notable for its sole focus on environmental considerations. In this respect, it stands as the high water mark of environmental protections under international humanitarian law. However, the commentary to this rule indicates some doubt as to its status as customary international law. Because of this, only limited weight could be placed on Rule 52 as a prohibition of customary international law. Moreover, it is unclear which international tribunal, if any, could prosecute individuals for violating Rule 52.
[559] ILC Report on 66th Session, para.209.

environmental impact assessments when undertaking industrial activities with potential transboundary effects.[560] State representatives have expressed support this obligation also applying during armed conflict.[561] Such a requirement is reflected in the ICRC's customary rules of international humanitarian law. Rule 44 provides that "methods 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 minimise, incidental damage to the environment.[562] 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."[563] This language dovetails with the precautionary principle, under international environmental law, which seeks to prevent and limit environmental damage by holding that where there is a serious risk of environmental harm, the lack of full scientific certainty should not be used as a reason to postpone any measures to prevent or redress such damage.[564]

In the context of international criminal law, a precautionary obligation would be relevant to the assessment of a commander's decision to launch an attack which potentially entailed significant environmental harm. The failure of a commander to undertake an environmental impact assessment without good reason could arguably be used to support a finding of wilful blindness regarding the environmental harm and potentially assist to establish the *mens rea* required under article 8(2)(b)(iv).

In the context of non-international armed conflicts, the position is more complex. It is unclear whether the environmental impact assessment obligation confirmed by the ICJ in the Pulp Mills and other cases would apply to States and also to non-State entities, such as organized armed groups. It is also disputable whether non-State actors could even be expected to have the capacity to carry out environmental impact assessments. On the other hand, the ICRC has

[560] See *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010*, p. 14, at p. 83, para. 204.
[561] Jordan, Note verbale dated 5 July 1991 to the UN Secretary-General, UN Doc. A/46/141, 8 July 1991 Jordan, Explanatory memorandum, annexed to Note verbale dated 5 July 1991 to the UN Secretary-General, UN Doc. A/46/141, 8 July 1991, p. 2, § 1 ("The environment must be taken into consideration from the initial stages of conflict decision-making by both politicians and military decision makers.")
[562] Additional Protocol I of 1977, article 57.
[563] ICRC Study, Rule 44.
[564] See Secretary-General Report 1993, p.17.

set out the argument for the obligation to take measures to minimize environmental damage during military operations applies also in non-international armed conflicts.[565]

(c) Additional limitations on the ambit of article 8(2)(b)(iv)

The reach of article 8(2)(b)(iv) may also be limited by the so-called "non-threshold threshold"[566] "chapeau" clause of Article 8. This clause notes that the Court has "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". However, the Court has noted that this provision provides guidance only and is not an essential requirement for liability under the Statute.[567]

To the extent that the clause is addressed by chambers applying the Statute, in relation to the second clause, while it is clear that "such crimes" must be war crimes, it is unclear whether they must be the same specific type of war crimes as the charged ones. If it were necessary to show the large-scale commission of a specific type of war-crime, in this case attacks on the environment, then the circumstances in which the Court could act would be severely circumscribed. Given the highly restrictive nature of the elements of article 8(2)(b)(iv), it would be difficult to establish multiple breaches of this provision. Proving that the act was part of a plan or policy would depend on the nature of the acts. Centrally-ordered attacks on the environment, such as the lighting of the Kuwaiti oil fields, would fit squarely within the definition, but one-off strikes inflicting serious harm on the environment, such as a strike ordered by a rogue general, would not necessarily qualify as being part of a plan or policy. Consequently, the chapeau elements of Article 8 have the potential to exclude many human-caused environmental disasters from the ambit of article 8(2)(b)(iv).

(d) Additional provisions violated by excessive environmental harm during armed conflict

Alongside article 8(2)(b)(iv), there are several other war crimes in the Rome Statute that would potentially apply to the type of severe environmental harm committed as attacks during armed conflict. For example, the prohibitions against destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war under articles 8(2)(b)(xiii) (international armed conflict) and 8(2)(e)(xii) (non-

[565] ICRC Study, pp.148-149.
[566] Hermann von Hebel and Daryl Robinson, 'Crimes within the jurisdiction of the court', in Roy S. Lee, ed., *The International Criminal Court: the Making of the Rome Statute: Issues, Negotiations, and Results,* The Hague, Kluwer Law International, 1999, pp.79-126, 124.
[567] *Bemba* article 74 Decision, para.126.

international armed conflict) could apply if the destruction or appropriation was not imperatively necessary.[568] Depending on the manner in which the environmental destruction was conducted and whether any humans or property were harmed, the prohibitions against using poisonous weapons, and against murder, inhumane acts, and forcible displacement as war crimes could be engaged.[569]

In addition to war crimes, military attacks causing excessive environmental harm could also constitute crimes against humanity or genocide. For crimes against humanity, this would require demonstrating the contextual elements of a widespread or systematic attack against a civilian population pursuant to a state or organizational policy, as well as the elements of the specific underlying crime.[570]

For genocide, this would require demonstrating the specific intent to destroy a racial, religious, ethnic or national group in whole or in part, as well as the elements of the underlying form of genocide.[571] Additionally, a question remains as to whether there is a minimal threshold of genocidal acts required before the crime can be prosecuted. The *ad hoc* tribunals' jurisprudence evinces some support for the strict approach whereby a single underlying act listed in the genocide convention, such as killing or causing serious bodily or mental harm, as long as the specific genocidal intent were present.[572] However, the ICC Elements of Crimes indicate that it is necessary to show that "the conduct took place in the context of a manifest pattern of similar conduct directed against that group or was conduct that could itself effect such destruction."[573] While the Elements of Crimes are not strictly binding,[574] they are generally followed by the Judges when applying the crimes set out in the

[568] Dinstein (2001), p.544.

[569] For more detailed discussions of these crimes see above discussion of using war crimes to prosecute environmental harm; Chapter II(C).
[570] Rome Statute, article 7(1) and 7(2)(a). For more detailed discussions of these crimes see above discussion of using crimes against humanity to prosecute environmental harm, Chapter II(C).
[571] Rome Statute, article 6. For more detailed discussions of these crimes see above discussion of using genocide to prosecute environmental harm, Chapter II(C).
[572] *Prosecutor v. Jean-Paul Akayesu*, Case No.ICTR-96-4, Trial Judgement, 2 September 1998, para.497 ("contrary to popular belief, the crime of genocide does not imply the actual extermination of the group in its entirety, but it is understood as such once any one of the acts mentioned in Article 2(2)(a) through 2(2)(e) is committed with the specific intent to destroy "in whole or in part" a national, ethnical, racial or religious group").
[573] ICC Elements of Crimes, p.2.
[574] Rome Statute, article 9.

Rome Statute. Accordingly, genocide will likely only be charged where there is a substantial amount of genocidal activity occurring.[575]

For military attacks causing excessive harm to the environment, a key consideration will be the intent behind the attack. If the military aspect is secondary, and the primary aim is actually to strike civilians, or to strike indiscriminately, and people were harmed then crimes against humanity such as other inhumane acts would likely be established. Conversely, if military targets appeared to be the primary goal and the harm to the civilians were essentially collateral, it would be difficult to satisfy the requirement of showing an attack primarily directed against civilians. Similarly, for genocide the question of whether the harm to civilians was an intended consequence or merely a possible but unwanted consequence of the military attack would be at the core of the analysis. In this respect, two counter-veiling trends would impact that application of these prohibitions to environmental harm. On the one hand, harmful conduct in warfare is regulated and the jurisdiction of the international courts over war crimes offences are well-established. On the other hand, the use of the label "collateral damage" is increasing and typically allows the perpetrators to avoid criminal sanction.

2. Unlawful transboundary movement and storage of hazardous substances (toxic dumping)

Unlawful transboundary movement and (mis)storage of hazardous substances is a growing threat to the environment.[576] In an increasingly crowded world, where national regulatory frameworks often outright prohibit any storage or dumping of hazardous materials, there is a strong economic incentive to find cheap locations to deposit the harmful payload.[577]

This practice is often referred to as toxic dumping and encompasses conduct such as trafficking of hazardous substances and failing to ensure that toxic substances are properly disposed. Toxic dumping can occur both within and outside of armed conflict. The primary instrument regulating this conduct at the international level is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, which was adopted on 22 March 1989 and entered into force on 5 May 1992. There are over 175 parties

[575] See Chapter II(C) (noting that genocide is usually charged where there has been a large-scale killing).
[576] Since 1995 a Special Rapporteur on Toxic Dumping has been appointed to galvanise efforts to combat this scourge; Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes - http://www.ohchr.org/EN/Issues/Environment/ToxicWastes/Pages/SRToxicWastesIndex.aspx. In 2011, the United Nations Human Rights Council strengthened the mandate of the Special Rapporteur to cover the whole life-cycle of hazardous waste; Human Rights Council Resolution 18/11 2011.
[577] For more detailed discussions of these crimes see above discussion of using crimes against humanity to prosecute environmental harm, Chapter II(C).

to the Convention. However, the examples listed herein do not all necessarily feature in the annexes to that conviction. Nonetheless, the Basel Convention provides a useful reference to identify potentially harmful substances, which could potentially be incorporated into the analysis of international crimes concerning toxic dumping, as discussed below.

(a) Assessing the unlawfulness of toxic dumping

In order to be prosecuted before the ICC, the toxic dumping would have to be considered sufficiently grave unlawful conduct to merit ICC intervention.[578] In this respect, international law, particularly conventional law, provides a useful reference point to identify unlawful conduct.

(i) The Basel Convention

In order to demonstrate the gravity of the toxic dumping, it would be important to assess whether or not it was legal under the relevant domestic and international law.[579] The Basel Convention of 1989 provides a useful guide concerning the types of movement and storage of substances that States have considered harmful to the environment and unlawful.[580]

The hazardous wastes covered by the Basel Convention are set out in annexes, which provide a list of categories of waste that are included (Annex 1), unless they do not have problematic characteristics (Annex 3). The Convention also covers wastes that are defined as, or are considered to be, hazardous wastes by the domestic legislation of the party of export, import or transit.[581]

Under the Basel Convention, the following conduct is prohibited: transboundary movement (a) without notification pursuant to the provisions of the Basel Convention to all States concerned; or (b) without the consent pursuant to the provisions of the Basel Convention of a State concerned; or (c) with consent obtained from States concerned through falsification, misrepresentation or fraud; or (d) that does not conform in a material way with the documents; or (e) that results in deliberate disposal (e.g. dumping) of hazardous wastes or

[578] Rome Statute, articles 17(1)(d) and 53.
[579] See infra Chapter I(C)(1) (discussion of sources of law).
[580] The purposes of the Basel Convention are (a) to minimize the generation of hazardous wastes and other wastes (in terms both of quantity and potential hazard); (b) to treat and dispose of hazardous wastes and other wastes as close as possible to their source of generation in an environmentally sound manner; (c) to reduce transboundary movements of hazardous wastes and other wastes to a minimum consistent with their environmentally sound management
[581] Basel Convention, article 1(b).

other wastes in contravention of the Basel Convention and of general principles of international law.[582] Accordingly, the key elements that must be established to prosecute illegal transboundary movement are whether a substance is a "waste"; whether the waste is a "hazardous" or "other" waste according to the Convention (or is designated so in the State concerned); whether a "transboundary movement" occurred; and whether any of the elements (a)–(e) given in paragraph 1 of Article 9 to the Convention, as listed above, are deemed to have taken place.[583]

States that are party to the Basel Convention are required to criminalize the improper movement or disposal of chemical products which may seriously harm the environment.[584] An example is provided by Colombia which has prohibited the introduction into its territory of toxic wastes,[585] and penalised the illegal traffic of wastes covered by international treaties ratified by Colombia with sentences between 48 to 144 months imprisonment and fines between US$ 40,000 and US$10,000,000.[586] In the Netherlands, movement of hazardous waste is governed by the Economic Offences Act, which differentiates between intentional violations of the law (which are crimes) and non-intentional violations (which are misdemeanours).[587] Under Dutch law, illegal transboundary transport or dumping of hazardous waste can result in a natural person facing a custodial sentence of up to six years' imprisonment and a fine of 76,000 euros and legal persons facing a maximum fine of 760,000 euros per offence, as well as confiscation of illegal profits.[588] In Mexico, article 414 of the Federal Criminal Code provides for a penalty of between one and nine years in prison for a person who unlawfully, or without applying the necessary preventive or safety measures, engages in production, storage, traffic, import or export, transport, abandonment, disposal, discharge of, or any other activity with hazardous substances due to their corrosive, reactive, explosive, toxic, flammable, radioactive or similar characteristics, resulting in damage to natural resources, flora, fauna, ecosystems, water quality, soil, groundwater or the

[582] Basel Convention, article 9.
[583] United Nations Environment Program: Instruction Manual on the Prosecution of Illegal Traffic of Hazardous Wastes or Other Wastes (2012), ("Basel Convention Manual (2012)"), para.62.
[584] See, e.g., paragraph 3 of Article 4 of the Convention asserts that the parties consider that the illegal traffic in hazardous wastes is criminal, and paragraph 5 of Article 9 requires each party to introduce national/domestic legislation to prevent and punish illegal traffic.
[585] Colombia National Constitution (1991), article 8; Law No. 1252 of 2008.
[586] Colombia Criminal Code (Law 599 of 2000): Article 358.
[587] Basel Convention Manual (2012), para.125.
[588] Basel Convention Manual (2012), p.25.

environment. Domestic prosecution of illegal transport and dumping of hazardous and other controlled waste shows that the penalties imposed are almost always fines.[589]

Typically, unlawful transboundary movement and storage of hazardous substances is conducted by networks of individuals. There are many potential targets for investigation and prosecution including the generator, the exporter, the importer, the individuals completing the paperwork (freight forwarder, broker, shipping facilitator or coordinator) and the disposer.[590] International criminal law is well-suited to addressing organized crime involving multiple actors. The links between the crime and the high-level suspects responsible for its occurrence can result in criminal conviction if they meet the elements of modes of liability.[591]

While the Basel Convention may provide a useful guide as to the gravity of toxic dumping, and a means of distinguishing unlawful dumping from lawful industrial and commercial activities, it is not part of the legal framework of any international tribunal, let alone the ICC. Nonetheless, its terms could be formally incorporated as a benchmark if a jurisdiction were able to deal with toxic dumping as a matter of international criminal law. The Malabo Protocol on Amendments to the Protocol on the Statute of the African Court of Justice and Human Rights provides a potential model for the incorporation of international environmental law into the framework of an entity capable of adjudicating transnational and international crimes.[592] The Malabo Protocol incorporates a definition of the trafficking hazardous waste, which is intended to fall within the jurisdiction of the African Court of Justice and Human and Peoples Rights. To define hazardous waste and the illegal activities concerning this harmful type of product, the Protocol refers to the list of prohibited wastes contained in Annex 1 of the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa. The long list of prohibited wastes in the Bamako Convention is highly technical, including "waste substances and articles containing or contaminated with polychlorinated biphenyl (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polybrominated biphenyl (PBBs)", "congener[s] of

[589] Basel Convention Manual (2012), para.164.
[590] Basel Convention Manual (2012), para.68.
[591] Rome Statute, article 25.
[592] African Union Specialized Technical Committee on Justice and Legal Affairs, Protocol on Amendments to the Protocol on the Statute of the African Court of Justice and Human Rights, Doc.STC/Legal/Min/7(I) Rev. 1, 15 May 2014, p.28, Article 28L ("Malabo Protocol"). The AU Assembly adopted the Malabo Protocol on 30 June 2014 at its 23rd Ordinary Session. See, AU Doc. No. Assembly/AU/Dec.529 (XXIII). The Malabo Protocol is intended to extend the jurisdiction of the planned African Court of Justice and Human Rights (AFCJHR) to encompass crimes under international law (aggression, piracy, genocide, crimes against humanity, and war crimes) and transnational crimes (such as terrorism, money laundering, trafficking in persons, drugs, hazardous wastes, and illicit exploitation of natural resources).

polychlorinated dibenzo-furan", and "Organohalogen compounds".[593] In this manner, criminal sanctions for toxic dumping can be pegged to international environmental conventions, furthering the coherence of international law and avoiding further fragmentation.

(b) Prosecuting toxic dumping under the Rome Statute

Under the Rome Statute in its current form, there is no substantive provision that addresses unlawful transboundary movement and storage of hazardous substances.[594] This is not because toxic dumping is generally lawful. Toxic dumping in the form of trafficking of hazardous substances is included as a crime in the Malabo Protocol.[595] Moreover, States that are party to the Basel Convention on toxic dumping are required to criminalize within their domestic system acts that may result in severe damage to the environment.[596] Accordingly, it is apposite to examine whether such conduct could nonetheless potentially be prosecuted under existing prohibitions in the Court's jurisdiction.

(i) Toxic dumping as genocide

Though unlikely, it is conceivable that toxic dumping could form part of a genocidal campaign. Establishing liability would largely depend on the pivotal element of genocidal intent. It would also require proof that the dumping was one of the acts used to contribute to the genocidal conduct. Typically, this would be charged where there was a multitude of underlying acts targeting the victim group. The charges in the ICC proceedings against Omar Al-Bashir are broadly analogous as they include genocide allegations and claims that Bashir's forces used methods including poisoning of wells to target the victim communities (though it is not clear that this was done by any form of toxic dumping, particularly any form involving a transboundary transaction).[597]

(ii) Toxic dumping as crimes against humanity

[593] Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, 30 January 1991, Annex I.
[594] Toxic dumping in the form of trafficking of hazardous substances is intended for inclusion as a crime before the African Court of Justice and Human and Peoples' Rights, see above the Malabo Protocol, article 28L.
[595] African Union Specialized Technical Committee on Justice and Legal Affairs, Draft Protocol on Amendments to the Protocol on the Statute of the African Court of Justice and Human Rights, Doc.STC/Legal/Min/7(I) Rev. 1, 15 May 2014, p.28, Article 28L.
[596] E.g. the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
[597] See *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7 (discussing the poisoning of wells as one of the crimes for which Bashir is charged).

Toxic dumping could potentially be prosecuted as crimes against humanity, depending on the specific circumstances in question and the context in which they occurred.[598] Under the Rome Statute crimes against humanity require a widespread or systematic attack against a civilian population pursuant to or in furtherance of a state or organisational policy.[599] It would not be necessary to show that the toxic dumping constituted such an attack in and of itself; the attack may comprise a variety of different acts amounting to underlying crimes against humanity under article 7.[600] Nonetheless, it would be necessary to show the link between the toxic dumping and the other acts committed as part of the attack on the civilian population. Mere simultaneity would not be sufficient. If toxic dumping were found to constitute an underlying crime against humanity such as other inhumane acts or persecution, then the repeated dumping of dangerous materials could constitute an attack under article 7 as it would meet the requirement of multiple commission of acts under article 7.[601]

The requirement of showing a policy would depend on the nature of the dumping. If it were conducted in an organized manner, it would be indicative of the presence of a policy, as required under article 7(2)(a) of the Rome Statute. This would include circumstances where the State or organisation in question repeatedly failed to respond to toxic dumping, despite its responsibility to do so, demonstrating the existence of a policy of tacit support. However, mere inaction by the State or organisation would not be sufficient in and of itself to infer such a policy, without some additional indication in the evidence demonstrating the existence of a policy.[602] Moreover, if the dumping was an unplanned and panicked reaction to potentially being caught with toxic substances, it would be less likely to satisfy the policy element.

Large-scale toxic dumping is likely to be motivated by financial incentives, in the quest to avoid regulatory costs of proper transportation and storage.[603] Whatever the motivation, if the

[598] Rome Statute, article 7(1)(k). See also Statute of the ICTY Article 5(i); Statute of the ICTR Article 3(i) (for the analogous provisions).
[599] Rome Statute, article 7(1) and (2).
[600] In the context of ongoing allegations by Ecuadoreans against Chevron for pollution committed while extracting oil, a representative of the victims submitted a request to the Office of the Prosecutor of the ICC arguing that Chevron's actions amounted to crimes against humanity, as they formed a "non-violent attack". The request was dismissed; Request to the Office of the Prosecutor of the ICC from the Legal Representatives of the Victims, 'Communication: Situation in Ecuador', 23 October 2014, available at chevrontoxico.com/assets/docs/2014-icc-complaint.pdf. See Lambert (2017), pp.707-729.
[601] See Lambert (2017), p.721.
[602] Rome Statute, Elements of Crimes, Introduction to Crimes Against Humanity, p.5 ("A policy which has a civilian population as the object of the attack would be implemented by State or organizational action. Such a policy may, in exceptional circumstances, be implemented by a deliberate failure to take action, which is consciously aimed at encouraging such attack. The existence of such a policy cannot be inferred solely from the absence of governmental or organizational action.").
[603] Prospieri and Terrosi (2017), p.513.

improper dumping of hazardous waste is conducted in an organized manner by a state or organization, and presuming that the dumping met the elements of one or more underlying crimes against humanity as discussed below, then it would qualify as a crime against humanity.[604] In the case of governmental approval, the question arises whether this would be unlawful at all. However, toxic dumping could not be prosecuted *per se*, and would have to be prosecuted in connection with a listed crime under the Rome Statute, which are acts that cannot be simply legalized by a government providing approval. At the same time, reliance on official assurances from a state that the conduct was not illegal could be raised as a defence under article 31(3) if it could be shown that reliance on official assurances constitutes a means of avoiding liability under international law or general principles of law, as applicable under article 21 of the Rome Statute.

Several crimes against humanity could be committed through toxic dumping. The most likely applicable crime against humanity is other inhumane acts under article 7(1)(k). The crime of other inhumane acts essentially requires a showing that the perpetrator inflicted great suffering, or serious injury to body or to mental or physical health on the victims.[605] In the incidents set out above, there were several casualties, with some extremely serious reported injuries.[606] The harm could also potentially be caused by the loss of access to particularly important areas or land. Because the toxic dumping can render the land inaccessible to the local inhabitants and peoples, an analogy can be made to cases concerning the dispossession of land. In this respect, the Inter-American Court case of *Sawhoyamaxa Indigenous Community v. Paraguay* which related to the division and sale of indigenous territories by Paraguay, noted that the Commission alleged that Paraguay violated the community's right to property in this case, as it deprived the indigenous Community 'not only of the material possession of their lands but also from the fundamental basis to develop their culture, their spiritual life, their integrity and their economic survival'.[607]

The crimes against humanity of murder and extermination could potentially be carried out through toxic dumping.[608] There have been allegations of deaths resulting from toxic

[604] See, e.g., Lambert (2017), p.723.
[605] ICC Elements of Crimes, p.12.
[606] See infra Chapter I(C)(4).
[607] Inter-American Court of Human Rights Case of the Sawhoyamaxa Indigenous Community v. Paraguay Judgment of March 29, 2006 (Merits, Reparations and Costs), para.113(a).
[608] See also Prospieri and Terrosi (2017), text accompanying footnote 31.

dumping, such as the 2006 toxic dumping in Côte d'Ivoire by the Trafigura company.[609] If the deaths were sufficiently large-scale, they could qualify as extermination.[610] Proving causation between the toxic dumping and the deaths, and proving the perpetrator's *mens rea*, would be the major variables necessary to establish liability.

For example, in the case of the dumping of chemicals in Abidjan, the United Nations Disaster Assessment & Coordination (UNDAC) Commission noted that while there were reports that seven people had died, no autopsies had been performed to verify the cause of death.[611] Moreover, although hazardous material was discharged into the Ebrie Lagoon and that diluted liquid had been running from the polluted sites into these waters, the pre-existing pollution levels in the lagoon prior to the dumping was considered too high to allow for identification of the hazardous waste in question.[612] With such high pre-existing levels of pollution, it was difficult to determine the number of deaths resulting from the illegal dumping, and would be particularly difficult to establish to the requisite level of certainty for criminal proceedings.[613]

Mass displacement can also be caused by toxic dumping and improper handling of hazardous materials. Based on this conduct, the crimes of forcible transfer, and, if the victims were displaced across a *de jure* or *de facto* border, deportation,[614] could be established, subject to the causation and *mens rea* standards being fulfilled.[615] An analogous example is provided by the charges against Omar Al-Bashir at the ICC. The Prosecution claims that "Militia/Janjaweed and the Armed Forces repeatedly destroyed, polluted or poisoned these wells so as to deprive the villagers of water needed for survival" and that "at least 2,700,000

[609] See Amnesty Report on Cote d'Ivoire (2012); Reports of Special Rapporteur on Toxic Dumping (2009), para.6; White (2008), p.119.
[610] According to *ad hoc* tribunal jurisprudence, there is no specific numeric minimum threshold for extermination; *Prosecutor v Lukić and Lukić*, Case NO.IT-98-32/1, Appeal Judgement, 4 December 2012, para. 537; Case Matrix Network, ICC Commentary (CLICC), Commentary Rome Statute: Part 2, Article 7(1)(b) by Matthew Gillett.
[611] UNDAC (2006), p.10. See also Prospieri and Terrosi (2017), p.518.
[612] UNDAC (2006), p.10.
[613] See also Amnesty Report on Cote d'Ivoire (2012), Annex 1, p.212 ("Predicting or detecting any mid and long-term implications for the environment arising from the dumping would be a speculative exercise and a near impossibility against a background of poor waste management practice, a huge variety of dumping places, poor baseline data on environmental pollution and unresolved issues around the exact composition of the waste.").
[614] For the distinction between deportation and forcible transfer see *Prosecutor v. Ruto et al*., ICC PT. Ch. II, ICC-01/09-01/11-373, 23 January 2012, para. 268.
[615] Case Matrix Network, ICC Commentary (CLICC), Commentary Rome Statute: Part 2, Article 7(1)(d) by Barbara Goy.

people, including a very substantial part of the target groups attacked in their villages, have been forcibly expelled from their homes."[616]

An additional crime against humanity potentially engaged by toxic dumping is persecution. Persecution must be committed in connection with another crime under the Rome Statute, making it a contingent crime.[617] Presuming that the requisite connection to another crime were established, the determining factor would be demonstrating that the severe deprivation of fundamental rights contrary to international law was committed by reason of the identity of the group or collectivity on a prohibited basis.[618] The States gathered at the World Conference on Human Rights in 1993 adopted by consensus the Vienna Declaration and Programme of Action, which recognised that toxic dumping potentially violates the human rights to life and health.[619]

For each of these crimes against humanity, a key consideration would be the *mens rea* – specifically whether the accused had sufficient intent and knowledge under article 30 of the Rome Statute to be convicted. For all crimes against humanity, it is required that the accused knows that their conduct forms part of a widespread or systematic attack against a civilian population, but it is not required to show that the perpetrator had knowledge of all characteristics of the attack or the precise details of the plan or policy of the State or organization.[620] For the underlying crimes against humanity, the intent requirement under article 30 of the Rome Statute applies in the absence of a more specific intent element for the crime in issue.[621] The requisite knowledge has been interpreted to mean knowledge that the resulting harm would occur as a virtual certainty of the *actus delictus* (in this case the dumping).[622] This will be a difficult standard to demonstrate in relation to toxic dumping, particularly in light of the multiple factors which can impact the level of environmental harm linked to the dumping of chemicals.

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[616] *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7.
[617] Rome Statute, article 7(1)(h).
[618] Persecution involves discrimination on a political, racial, national, ethnic, cultural, religious, gender as defined in paragraph 3, or other ground universally recognized as impermissible under international law; Rome Statute, article 7(1)(h), 7(2)(g).
[619] Vienna Declaration and Programme of Action, Adopted by the World Conference on Human Rights in Vienna on 25 June 1993 para.11 ("the World Conference on Human Rights recognizes that illicit dumping of toxic and dangerous substances and waste potentially constitutes a serious threat to the human rights to life and health of everyone.").
[620] Elements of Crimes, Overview for Crimes Against Humanity, para.2.
[621] Rome Statute, article 30(1); Elements of Crimes, General Introduction, para.2.
[622] See *Lubanga* Appeal Judgment, para.447.

(iii) Toxic dumping as a war crime

Looking to war crimes under article 8 of the Rome State, unlawful storage or dumping of hazardous materials could qualify as several war crimes if the dumping were conducted in connection with an armed conflict, and particularly if perpetrated as a tactic of war.[623] The ICC jurisdiction over war crimes where there is a showing of a sufficient connection to an applicable form of armed conflict.[624]

There are three main scenarios in which toxic dumping could occur during armed conflict. The first would be if the dumping were intentionally conducted as a method of war. In this case, it would also certainly constitute one of the war crimes discussed below. The second scenario would occur if the toxic dumping were perpetrated because the fog of war provided the cover to dispose of the toxic substances without adhering to the proper methods. If the perpetrators were shown to be taking advantage of the situation to conduct the dumping, this would satisfy the connection to an armed conflict, and the focus would then shift to whether a specific war crime was perpetrated. The third scenario would occur if the toxic dumping merely happened to occur at the same time as armed conflict, but without any substantive connection to the fighting or the circumstances created by the fighting. In this third scenario, the jurisdictional requirement of a link to an armed conflict would not be met.

The two most relevant war crimes under the Rome Statute include article 8(2)(b)(xvii) / 8(2)(e)(xiii) (employing poison or poisonous weapons), and article 8(2)(b)(xviii) / 8(2)(e)(xiv) (Employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices). For these crimes, it must be shown that the perpetrator employed a substance or a weapon or gas or such-like that causes death or serious damage to health in the ordinary course of events, through its toxic or asphyxiating properties.[625] Presuming these elements were met, the prosecution of toxic dumping for these crimes would depend on establishing the

[623] The specific war crimes that would apply depend on which type of armed conflict is established; see Roe Statute, article 8.
[624] In this respect, see *Bemba* article 74 Decision, paras.128-130. See also *Kunarac* AJ, para. 58 ("What ultimately distinguishes a war crime from a purely domestic offence is that a war crime is shaped by or dependent upon the environment - the armed conflict - in which it is committed. It need not have been planned or supported by some form of policy. The armed conflict need not have been causal to the commission of the crime, but the existence of an armed conflict must, at a minimum, have played a substantial part in the perpetrator's ability to commit it, his decision to commit it, the manner in which it was committed or the purpose for which it was committed. Hence, if it can be established, as in the present case, that the perpetrator acted in furtherance of or under the guise of the armed conflict, it would be sufficient to conclude that his acts were closely related to the armed conflict.").
[625] Rome Statute, Elements of Crimes, pp.26, 41.

mens rea of the perpetrators to use the poison or similar substances that were of a nature to cause death or serious damage to health.[626]

To assist the delineation of lawful from unlawful storage and handling of chemical products for the purposes of these war crimes under the Rome Statute, resort could be made to the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (BWC). This instrument prohibits the development, production, stockpiling or any other possession of microbial agents, toxins and weapons, as well as equipment or means of delivery designed to use these agents or toxins for hostile purposes or in armed conflict. No exceptions are made. Although the use of biological and toxin weapons is not expressly covered, the drafters took the view that the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (1925), would cover this conduct.[627]

Similarly, the 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC) indicates that the use of toxic chemicals as means of conducting warfare is prohibited.[628]

Another war crime potentially engaged by toxic dumping is article 8(2)(b)(xxv) (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). The ICRC commentary concerning article 54(2) of Additional Protocol I, which was a basis of the prohibition in article 8(2)(b)(xxv) of the Rome Statute, simply states that the objects referred to in this provision are those "of basic importance for the population from the point of view of providing the means of existence", but the reference to objects such as "foodstuffs, agricultural areas for the production of foodstuffs, crops and drinking water installations" in the provisions of international

[626] Rome Statute, article 30.
[627] Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, 1925; UNEP Study (2009), p.15.
[628] 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC), Preamble ("*Recognizing* the prohibition, embodied in the pertinent agreements and relevant principles of international law, of the use of herbicides as a method of warfare."); Dinstein (2001), p.539.

humanitarian law suggests that these would qualify.[629] Forests have also been mentioned as objects that destruction of which may lead to the starvation of the civilian population.[630]

Were toxic dumping used to deprive civilians of their means of survival, for example by poisoning water supplies for a besieged city's population, the elements of this crime could be demonstrated. The charges against Omar Al-Bashir are analogously instructive in this respect. He is charged with the systematic pillaging and destruction of villages and civilian property across a large area,[631] in which the attackers destroy all the targeted 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.[632]

Several other war crimes could be fulfilled by toxic dumping, including wilful killing / murder (on essentially the same basis as the underlying crime against humanity of murder set out above),[633] inhuman treatment / cruel treatment,[634] unlawful deportation or transfer (on essentially the same basis as the underlying crimes against humanity of deportation and forcible transfer),[635] and intentionally directing attacks against civilians and civilian objects.[636] Two significant issues concerning toxic dumping charged as war crimes would be (i) whether it would be necessary to show that the dumping itself constituted an attack or military strategy, and (ii) whether toxic dumping as a result of the production and/or use of legitimate military weapons and equipment would be covered.

Toxic dumping frequently affects water resources. There are other instruments of international law that would protect these natural resources of an occupied territory from toxic dumping. For example, the United Nations Watercourses Convention obliges State Parties to avoid causing significant harm to waterways that are shared between states in an equitable and reasonable manner, and to avoid causing significant harm to an international watercourse. Notably, the Watercourse Convention lists natural and ecological considerations as the first to

[629] Dam-de Jong (2015), pp.236-237.
[630] Dam-de Jong (2015), fn.100 citing Democratic Republic of Vietnam explicitly mentioned the destruction of forests "for the purpose of starving the civilian population and forcing them to become refugees". *Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts*, Geneva (1974-77), Vol. XIV, CDDH/III/SR.17, p.143.
[631] Bashir Arrest Warrant, pp.5-7; Second Bashir Arrest Warrant, pp.5-8.
[632] *Situation in Darfur, The Sudan,* Case No.ICC-02/05, Summary of Prosecution's Application under Article 58, 14 July 2008, pp.5-7.
[633] Rome Statute, article 8(2)(a)(i), 8(2)(c)(i).
[634] Rome Statute, article 8(2)(a)(ii), article 8(2)(c)(i).
[635] Rome Statute, article 8(2)(a)(vii). See also Rome Statute, article 8(2)(b)(viii), 8(2)(e)(viii).
[636] Rome Statute, article 8(2)(b)(i) and (ii), article 8(2)(e)(i) and (ii).

be taken into account when determining what use to make of an international watercourse.[637] Similarly, the Berlin Rules on Water Resources, which were approved by the International Law Association's Water Resources Law Committee in 2004, purport to set out rules of customary international law relating to fresh water resources. Article 54 requires that "an occupying State shall administer water resources in an occupied territory in a way that ensures the sustainable use of the water resources and that minimizes environmental harm." This accords with the established principles of the law of occupation whereby an occupying State is only the administrator of the occupied territory, acting as the usufructuary of State property.[638] However, this instrument does not directly relate to any of the crimes in the Rome Statute.

For the purposes of the present study, it can be seen that although there are no crimes under the Rome Statute directly addressing toxic dumping, there are several crimes which could be used to indirectly address this form of environmental harm. Nonetheless, even for indirect anthropocentric cases, it will be difficult to prove criminal charges concerning the use of chemicals harmful to the environment. For example, a civil case from the United States concerning an analogous form of harm concerns the use of Agent Orange and associated chemical defoliants during the Vietnam War. The heads of claims were brought by a collective of victims against DOW and other companies that provided carcinogenic chemicals, including the infamous Agent Orange, to the US Army to conduct a herbicide campaign in Vietnam from 1962-1971. The victims' claims were dismissed in their entirety, primarily on the basis that the use of Agent Orange was designed to protect American soldiers and was not intended to harm civilians.[639]

While it can be questioned whether a military motive is mutually exclusive of also having some form of intent or reckless responsibility for harm to civilians, of more significance to the potential criminalization of toxic dumping are the views of the Department of Defence of the United States concerning the use of Agent Orange. In a 1971 letter, the Office of General Counsel for the Department of Defense commented on the application of Articles 23(a) and (e) of the Hague Regulations of 1907—which had been incorporated into the Army Department Field Manual—stating that these international law sources did not prohibit the

[637] United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses of 1997 (entered into force 2014), Article 6 (requiring parties to take into account all relevant factors including "Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character").
[638] International Law Association, Berlin Conference on Water Resources Law (2004), Fourth Report, Commentary to Article 54.
[639] Vietnam Victims' Case.

use of chemical defoliation "provided that their use against crops does not cause such crops as food to be poisoned nor cause human beings to be poisoned by direct contact, and such use must not cause unnecessary destruction of enemy property."[640] The opinion indicates that prior to the adoption of the Additional Protocol 1 of 1977, in which article 35(1) prohibited widespread, long-term and severe damage to the environment, there was little regard for the eco-centric impact of large-scale attacks on flora and fauna, and that it was the possible harm to anthropocentric interests that was of primary legal concern to military planners.

3. Wildlife exploitation

While there is no universally accepted definition of wildlife and forestry offences,[641] for the purposes of this analysis, the term wildlife crime describes "the illegal taking, possession, trade or movement of animals and plants or their derivatives in contravention of international, regional, or national legislation."[642] It also includes the destruction of animals and/or plants or their derivatives. Wildlife exploitation can occur within or outside of armed conflict. It is often perpetrated by armed criminal groups or non-state actors including rebel armed forces and criminal networks.

(a) Assessing the unlawfulness of wildlife exploitation

In order to be prosecuted before the ICC, the exploitation would have to be considered to be sufficiently grave unlawful conduct.[643] In this respect, international conventions provide reference points for the illegality of the wildlife exploitation.

(i) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

One of the difficulties in prosecuting wildlife exploitation is distinguishing unlawful conduct from lawful conduct. The bovine meat industry, for example, is reprehensible to some, but necessary and normal to others. Whatever the moral position, there is currently no general legal prohibition on the production and trade of cattle meat under international law. The various international standards and controls that are placed on the use and movement of

[640] See April 5, 1971 letter opinion of J. Fred Buzhardt ("Buzhardt Opinion") from the Office of General Counsel for the Department of Defense, in response to a request from Senator J.W. Fulbright, Chairman of the Senate Foreign Relations Committee.
[641] UNODC Toolkit (2012), p.4.
[642] Cooper et. al. (2009), p.2.
[643] Rome Statute, articles 17(1)(d) and 53.

animals will be significant to separate legal from illegal conduct, and are relevant to the gravity of the offences. By analogy, Dam and Stewart note that non-criminal international initiatives such as the Kimberly Process or the 2010 OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas may assist to distinguish unlawful extractive practices concerning minerals from lawful activities for the purposes of applying the crime of Illicit exploitation of natural resources under Article 28A(1)(13) of the Malabo Protocol.[644]

The lead public international law treaty on wildlife exploitation is the 1973 CITES Convention. The CITES treaty controls these processes and transactions to ensure that the international trade of wild animals and plants does not threaten their survival.[645] Under CITES, State Parties, which number over 170, must put in place a system of permits for any import, export, re-export, or introduction from the sea of any listed species, and to designate management authorities to administer the licensing system with advice from scientific authorities. Annex 1 of CITES listed the most endangered species and prevents their trade except in exceptional circumstances.[646] CITES obliges Parties to take measures to penalize trade in the protected specimens.[647] Under the CITES regime, trade in certain species, and sometimes in all species, from specific states have been suspended.[648]

(b) Prosecuting wildlife exploitation under the Rome Statute

At the ICC there is no provision directly or explicitly imposing individual criminal responsibility for wildlife exploitation. There is also essentially no precedent of wildlife exploitation being prosecuted before international courts. Proceedings in the wake of the Second World War saw nine German civilian officials in occupied Poland charged with environmental crimes, for the large-scale exploitation and profiting of Polish forestry. The Committee of the United Nations War Crimes Commission found that a *prima facie* case of pillage under article 53 of the Four Geneva Conventions was established and listed the

[644] Dam-de Jong and Stewart (2017), p.6.
[645] Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973), article 2.
[646] UNODC Toolkit (2012), p.14-15; https://www.cites.org/eng/disc/what.php.
[647] CITES, Article VIII; UNODC Toolkit (2012), p.15.
[648] See CITES, Countries currently subject to a recommendation to suspend trade https://cites.org/eng/resources/ref/suspend.php.

German officials as accused war criminals.[649] However, the officials were not tried before an international tribunal and so the case is of limited precedential significance.

(i) Wildlife exploitation as genocide

Given that genocide focuses on the biological destruction of human beings when committed with the specific intent to destroy a racial, religious, national or ethnic group in whole or in part,[650] it would be difficult to prosecute wildlife exploitation as genocide. Wildlife exploitation may well be committed in connection with genocide,[651] and could conceivably constitute a form of condition contributing to the destruction of the targeted group, but that would depend on the facts of the specific case.

(ii) Wildlife exploitation as crimes against humanity

Critical to prosecuting wildlife exploitation as crimes against humanity would be the context in which the offences occurred.[652] It would have to be demonstrated that the wildlife exploitation took place as part of a widespread or systematic attack against a civilian population pursuant to or in furtherance of a state or organisational policy. It would not be necessary to show that the wildlife exploitation was such an attack in and of itself, but a mere coincidence in time would not be sufficient.

Wildlife exploitation could be perpetrated pursuant to a policy if it were conducted in an organized manner, as required under article 7(2)(a) of the Rome Statute. This would include circumstances where the State or organisation in question repeatedly failed to respond to the wildlife exploitation, despite its responsibility to do so, demonstrating its tacit support for the illegal acts. At the same time, inaction by the State or organisation would not be sufficient in and of itself to infer such a policy, without some additional indication in the evidence demonstrating the existence of a policy.[653] Purely private poaching by unorganised

[649] History of the United Nations War Crimes Commission and the Development of the Laws of War 496 (Her Majesty's Stationary Office, 1948) (discussing Case No. 7150); *cited in* Schwabach 2004, p.17.
[650] Rome Statute, article 6.
[651] There are reports that the Janjaweed militia, which is allegedly used by Sudanese President Omar Al-Bashir to conduct genocide in Darfur, is involved in elephant poaching in Chad, though it is unclear if this is connected in any way with the facts giving rise to the ICC allegations; Rose (2014), p.17.
[652] Rome Statute, article 7(2)(a).
[653] Rome Statute, Elements of Crimes, Introduction to Crimes Against Humanity, p.5 ("A policy which has a civilian population as the object of the attack would be implemented by State or organizational action. Such a policy may, in exceptional circumstances, be implemented by a deliberate failure to take action, which is consciously aimed at encouraging such attack. The existence of such a policy cannot be inferred solely from the absence of governmental or organizational action.").

individuals or small bands of outlaws would be unlikely to meet the State or organisational policy requirement. Large-scale wildlife exploitation is likely to be motivated by financial incentives. That would not prevent it qualifying as a crime against humanity, as long as it was conducted in an organized manner by a state or organization, and met the elements of one or more underlying crimes against humanity as discussed below.

Wildlife exploitation could potentially be prosecuted as the crime against humanity of other inhumane acts under article 7(1)(k),[654] which requires a showing that the perpetrator inflicted great suffering, or serious injury to body or to mental or physical health on the victims.[655] The Prosecution would have to show that the species being harmed was of special significance to a people and the perpetrator was aware that by destroying and seriously damaging it s/he was causing that people great suffering or physical or mental harm.[656] Similarly, if an indigenous people relied on a specific animal or plant as a food or medicine source, the elements of inhumane acts could be established by the intentional damage or destruction of those species.[657] In the Mau Ogiek case, the African Court on Human and Peoples' Rights noted that the Mau Ogiek people's eviction from the Mau forest adversely affected their existence because they were "a hunter-gatherer population, the Ogieks have established their homes, collected and produced food, medicine and ensured other means of survival in the Mau Forest".[658]

[654] Rome Statute, Article 7(1)(k). See also Statute of the ICTY Article 5(i); Statute of the ICTR Article 3(i) (for the analogous provisions).
[655] ICC Elements of Crimes, p.12.
[656] Elements of Crimes, Article 7(1)(k). See also Wattad 2009, p.282.
[657] The concept of indigenous people has been defined by the United Nations Special Rapporteur on Minorities as ""Indigenous communities, peoples and nations which having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of societies now prevailing in those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop, and transmit to future generations, their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems"; Report of the Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities E/CNA/Sub.2/1986/7/AddA, paragraph 379. The issue was also explored by the African Court on Human and Peoples' Rights, which identified several factors relevant to determining whether a people constitutes an indigenous people; Mau Ogiek Judgment (2017), para.107 ("the presence of priority in time with respect to the occupation and use of a specific territory; a voluntary perpetuation of cultural distinctiveness, which may include aspects of language, social organisation, religion and spiritual values, modes of production, laws and institutions; self-identification as well as recognition by other groups, or by State authorities that they are a distinct collectivity; and an experience of subjugation, marginalisation, dispossession, exclusion or discrimination, whether or not these conditions persist.").
[658] Mau Ogiek Judgment (2017), para.155.

Showing that suffering to persons arose due to the abuse or exploitation of a species would be a difficult task.[659] A broad interest in the health of the environment and biodiversity would likely be insufficient.[660] The deprivation of the livelihood or means of survival of a group has been considered to be sufficiently serious to constitute persecution, where it entails "inhumane consequences".[661] It is not inconceivable that such impact could arise where a species supports the livelihood and well-being of a people or tribe, which could potentially encompass economic, medical, and spiritual impact on a people due to the harm to a species. Dam and Stewart have observed that wildlife exploitation may undermine people's basic human rights while also jeopardizing their physical security and economic well-being.[662] Nonetheless, it remains unclear what type of connection and causation would suffice. For example, in the Mau Ogiek case, the African Court on Human and Peoples' Rights noted that while the Mau Ogiek's people's existence in the Mau forest had been adversely impacted by the Kenyan Government's decision to evict them, no causal connection between this decision

[659] Given that other inhumane acts must be of similar gravity to the other crimes against humanity e.g. ICC: article 7(1)(k). See also Kordić AJ, para. 102: ("[T]he acts underlying persecutions as a crime against humanity, whether considered in isolation or in conjunction with other acts, must constitute a crime of persecutions of gravity equal to the crimes listed in Article 5 of the Statute."), conduct that has been classified as either other inhumane acts or persecution can be relevant to the assessment of the gravity of the other. In the Brdjanin case, the Appeals Chamber dismissed the Accused's challenge that denial of access to judicial institutions was insufficiently serious to constitute the crime against humanity of persecution. However, the Appeals Chamber noted that the denial of access to justice could be considered in combination with other breaches of rights that Brdjanin contributed to, leaving open the question of whether the denial of access to justice could be sufficiently serious to constitute persecution in and of itself; *Brdjanin* AJ, paras.297, 302-303.

[660] For example in the ECtHR case of Kyrtatos v Greece, the Applications, who owned nearby property, objected that a tourist development on a wetland endangered an important natural habitat for several protected species and thereby adversely affected their rights, particularly the right to effective enjoyment of private and family life and the home under Article 8 of the ECHR. The ECtHR rejected the argument, finding that the ECHR "was not specifically designed to provide general protection of the environment as such"; Kyrtatos v. Greece [2003] ECHR 242 at 376.

[661] *Blaskić* AJ, para. 146: ("The destruction of property has been considered by various Trial Chambers of the International Tribunal to constitute persecutions as a crime against humanity. The Trial Chamber in Kupreskic considered that whether such attacks on property constitute persecutions may depend on the type of property involved, and that 'certain types of property whose destruction may not have a severe enough impact on the victim as to constitute a crime against humanity, even if such a destruction is perpetrated on discriminatory grounds: an example is the burning of someone's car (unless the car constitutes an indispensable and vital asset to the owner).' The Kupreskic Trial Chamber held, however, that in the circumstances of that case, which concerned the comprehensive destruction of homes and property, this constituted 'a destruction of the livelihood of a certain population,' and may have the 'same inhumane consequences as a forced transfer or deportation.' The Trial Chamber concluded that the act 'may constitute a gross or blatant denial of fundamental human rights, and, if committed on discriminatory grounds, it may constitute persecution.' The Appeals Chamber agrees with this assessment.")

[662] Dam-de Jong and Stewart (2017), p.2 ("The illicit exploitation of natural resources is associated with the financing of armed conflicts, which unsurprisingly, has very negative effects on local populations' enjoyment of basic human rights, physical security and economic wellbeing.").

and the deaths of some Mau Ogiek people had been established, and so an insufficient basis to claim a violation of the right to life.[663]

(iii) Wildlife exploitation as war crimes

As with the previously discussed forms of environmental harm, wildlife exploitation would have to be committed in connection with an armed conflict to be prosecuted under article 8 of the Rome Statute, requiring a sufficient connection to the applicable form of armed conflict. Wildlife offences are frequently committed in connection with armed conflict, both as a means of sustenance for armed groups, and as a means to obtain finances to purchase additional weapons and recruit additional personnel.

In terms of specific offences under article 8, it is possible that wildlife exploitation could be prosecuted as the war crime of pillage. The International Criminal Court's elements of crimes define pillage as the intentional appropriation of property for private or personal use, wildlife exploitation would be an awkward fit if directly prosecuted as pillage as it would require a showing that the species themselves constituted property.[664] Similarly, prosecuting wildlife exploitation as the crime of destruction or appropriation of protected property under article 8(2)(a)(iv) would require demonstrating the commodification of wildlife. One view holds that all wildlife forms either property of their territorial state[665] or else a shared resource (in the case of migratory species).[666] This builds on the concept of permanent sovereignty over natural resources.[667] However, prosecuting wildlife crime as pillage remains a prospective but untested possibility, with considerable uncertainty particularly given that there is no generally applicable convention or customary rule of international law holding that all wildlife throughout the world is property.

Nonetheless, if the wildlife in question did qualify as property that was protected under international humanitarian law, any appropriation of that wildlife would be unlikely to meet the exclusionary test of military necessity. Given that wildlife does not make a direct military contribution to armed conflict, any contribution through the provision of food or funding for

[663] Mau Ogiek Judgment (2017), para.155.
[664] Elements of Crimes, article 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.
[665] Dam-de Jong (2015), pp.217-218.
[666] Shared resources could fit with the notion of range states set out in the Bonn Convention: United Nations, Treaty Series, vol. 1651, No. 28395. Adopted on 23 June 1979 and entered into force on 1 November 1983, in Bonn, Germany, the Convention on the Conservation of Migratory Species of Wild Animals is a "is a framework agreement which relies on appendices for expanding or changing its commitments over time."
[667] See below, Chapter II(D)(3)(b) (section on permanent sovereignty over natural resources).

the war effort would be indirect, rendering its destruction less urgent than the destruction of weapons and other directly contributing material property of the adversary.[668]

The trade and use of bushmeat, including from gorillas and other endangered animals, as food for workers and militias engaged in pillage has been documented by UNEP, and is on the increase.[669] Pillagers of natural resources have also killed gorillas as retaliation against authorities for interfering with their ongoing extraction of natural resources.[670] Ivory is often used directly to finance conflicts and purchase arms for warring groups. If leaders and organisers of the pillage were aware that endangered species were killed as a matter of course by their subordinates when carrying out the pillage of natural resources, this could form a part of the criminal plans undertaken by the group, potentially leading to criminal liability.[671]

In *Ntaganda*, the Pre-Trial Chamber confirmed charges of pillage. However, the underlying conduct is concentrated more on the appropriation of private property, such as DVD players, computers and motorcycles, than on the destruction of the environment.[672] In *Katanga*, the Trial Chamber found that the charges under 8(2)(e)(xii) (Destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war) and 8(2)(e)(v)[673] (Pillaging a town or place, even when taken by assault), were fulfilled based on the destruction of homes and the stealing of livestock and other material goods; though the accused were not ultimately convicted for these crimes.[674] In the Uganda situation, which focuses on members of Joseph Kony's Lord's Resistance Army, the charges of pillage focus on attacks on internally displaced persons' camps.[675] The charges against other accused are largely analogous in terms of concentrating on the theft, looting and destruction of people's property,[676] and so provide little direct guidance for the prosecution of environmental harm.

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[668] See, by analogy, Dam-de Jong (2015), pp.225-226.
[669] UNEP Gorilla Study, p.6, 11, 24, 46.
[670] UNEP Gorilla Study, p22.
[671] See Rome Statute, article 25(3).
[672] *The Prosecutor v. Bosco Ntaganda*, Case No. ICC-01/04-02/06, Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Bosco Ntaganda, paras.59-63.
[673] This provision mirrors article 8(2)(b)(xvi) but applies in non-international armed conflict.
[674] *Katanga* article 74 Decision, paras.917-932.
[675] See*, e.g.*, the Situation in Uganda, No. ICC-02/04-01/05, Warrant of Arrest for Joseph Kony issued on 8 July 2005 as Amended on 27 September 2005.
[676] Other ICC indictees facing charges of pillage and destruction of property include Germain "Simba" Katanga and Mathieu Ngudjolo for crimes committed during the armed conflict in the Democratic Republic of Congo, Jean-Pierre Bemba Gombo for crimes committed in the Central African Republic, Ahmad Muhammad Harun and Ali Muhammad Ali Abd-Al-Rahman for crimes committed in Darfur, Sudan, Bahr Idriss Abu Garda for

Relevant guidance can also be gleaned from the ICJ's judgment in the case of *Democratic Republic of the Congo v. Uganda*. The ICJ addressed questions concerning responsibility for the pillage and looting of the natural environment in a separate State, and the principle of permanent sovereignty over natural resources. It held that permanent sovereignty over natural resources is a "principle of customary international law".[677] DRC alleged that Uganda was responsible for widespread environmental harm and exploitation of natural resources[678] committed by Ugandan armed forces and also rebels supported by the Ugandans.[679] The ICJ found that the looting and plunder of natural resources in DRC by Ugandan forces was a violation of IHL, specifically Article 47 of The Hague Regulations of 1907,[680] and Article 33 of the Fourth Geneva Convention of 1949.[681] The ICJ stated that "whenever members of the [Ugandan People's Defence Force] were involved in the looting, plundering and exploitation of natural resources in the territory of the DRC", they were perpetrating pillage.[682] In Ituri, where Uganda was an occupying power,[683] Uganda's responsibility extended not only to its failure to prevent looting and pillage by its forces but also to looting and pillage by private persons (including rebel groups), and it found that Uganda's failings constituted a breach of the duties of an occupying power under article 43 of the Hague Regulations of 1907.[684] In light of these internationally wrongful acts, the ICJ found that Uganda was required to make reparations to DRC for the harm. The DRC requested that the specificities of the compensation be left for determination by the parties outside of court, but that the ICJ stand ready to determine the nature, amount and form of the reparations should the States be unable

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crimes committed in South Sudan, and Joseph Kony, Vincent Otti, Okot Odhiambo and Dominic Ongwen for crimes committed in Uganda.

[677] Case concerning armed activities on the territory of the Congo (Democratic Republic of the Congo v. Uganda), Judgment of 19 December 2005 ("*Armed Activities: DRC v Uganda*"), para.244.

[678] The ICJ found that the principle of permanent sovereignty over natural resources, which is expressed in General Assembly Resolution 1803 (XVII) of 14 December 1962 and related instruments, constitutes customary international law, but is not applicable to the looting and plunder of natural resources by members of an army of a State militarily intervening in another State. Consequently, the ICJ did not find that UNGA Resolution 1803 provided a basis for DRC's claim against Uganda; *Armed Activities: DRC v Uganda*, para.244.

[679] *Armed Activities: DRC v Uganda*, para.242.

[680] Article 47 reads "Pillage is formally forbidden."

[681] Article 33, in relevant part, reads "Pillage is prohibited."

[682] *Armed Activities: DRC v Uganda*, para.245.

[683] The ICJ found that the occupying power had the following duties under IHL: "This obligation comprised the duty to secure respect for the applicable rules of international human rights law and international humanitarian law, to protect the inhabitants of the occupied territory against acts of violence, and not to tolerate such violence by any third party."; *Armed Activities: DRC v Uganda*, para.178.

[684] *Armed Activities: DRC v Uganda*, paras.178, 248. Article 43 reads "Art. 43. The authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country."

to reach an agreement. The ICJ has granted the parties several extensions to file their memorials on reparations, including in 2016.[685]

While sovereignty over natural resources is ascribed to both the "nation" (or "State") and the "people" (or "peoples"), the right to extract, utilize and benefit from these resources is exercised by the governmental authorities in a State.[686] The government must exercise this power for the State or people, and must do so in accordance with human rights law, environmental law, and in armed conflict, humanitarian law.[687] The *DRC v Uganda* case shows that environmental harm committed during armed conflict is justiciable between States and that responsibility for environmental harm extends beyond the direct perpetrators to also include occupying powers which fail to take measures to prevent such destruction in areas under their control.

In both the *DRC v Uganda* case and the polish forestry case[688] the wrong-doing parties were foreigners with no rights over the resources that they appropriated. In such cases, the unlawfulness of the resource extraction can be easily established, and the issue for pillage at the ICC would revolve around the issue of the personal or private use requirement under the elements of crimes.[689]

The legal position is less clear where the entity extracting the resources is indigenous to the territorial state, whether it be a rebel group, the State authorities, or a local population. In such cases, a key consideration is the application of the international law principle of permanent sovereignty over natural resources.[690] The right is typically framed as accruing to the "peoples" and "nations" of the states of the world.[691] Conventional approaches to international law designate the government of a State as the entity responsible for implementing the right of

[685] See update at http://www.toxicremnantsofwar.info/natural-resources-plunder-and-reparations-in-the-drc-how-the-icj-is-setting-precedents/.
[686] Dam-de Jong (2015), p.8.
[687] Dam-de Jong (2015), pp.8-9.
[688] History of the United Nations War Crimes Commission and the Development of the Laws of War 496 (Her Majesty's Stationary Office, 1948) (discussing Case No. 7150); *cited in* Schwabach 2004, p.17.
[689] The ICJ found violations of provisions of international humanitarian law, but declined to apply the principle of permanent sovereignty over natural resources to the circumstances of the Ugandan forces looting and pillaging the resources in DRC, as set out above.
[690] See, e.g., General Assembly Resolution 1803 (XVII) of 14 December 1962, "Permanent sovereignty over natural resources" ("UNGA Resolution 1803").
[691] See, e.g., UNGA Resolution 1803, article 1 ("The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned.").

the nation and people to benefit from the State's natural resources.[692] However, the interpretation of these terms, particularly the term "peoples", is less clear and leaves room for debate.[693]

In the case of a rebel group extracting the resource, a conventional reading of international law indicates that this is unlawful and not protected by the right of permanent sovereignty over natural resources.[694] General Assembly Resolution 1803 on Permanent Sovereignty over Natural Resources recalls that "respect [for this principle] must be based on the recognition of the inalienable right of all States freely to dispose of their natural wealth and resources in accordance with their national interests, and on respect for the economic independence of States".[695] Arguments have been made that if a rebel group extracts the resource on behalf of the people of the area, it may be protected by the principle of permanent sovereignty over natural resources, at least at the level of international law.[696] However, several instruments of international law indicate that the right to permanent sovereignty over natural resources is held by States together with the peoples living within their borders.[697] Extending the right to rebel groups would be difficult to reconcile with the sources of international law that recognise States' right to permanent sovereignty over natural resources, and would almost inevitably clash with domestic law, under which the rebels' activities would almost always be unlawful.

In the case of an indigenous or local population extracting the natural resources, international law provides some support for the rights of indigenous peoples over lands and resources,[698]

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[692] See Daniella Dam-de Jong, 'Armed Opposition Groups and the Right to Exercise Control over Public Natural Resources: A Legal Analysis of the Cases of Libya and Syria', *Netherlands International Law Review* 62(1) 2015 ("Dam-de Jong *NILR* (2015)"), pp.8-9.

[693] See Dam and Stewart (2017), pp.11-13 (""peoples" can refer either to the population of a State, to specific groups in a State or to the State itself").

[694] See Dam-de Jong *NILR* (2015), p.4 ("international law does not formulate a clear-cut right for armed opposition groups to exploit natural resources."… "The previous sections showed that current international law does not provide a legal basis for granting armed opposition groups a right to exploit natural resources found within national jurisdiction." Note that Dam-de Jong argues that there may be an emerging basis for a right of armed non-state groups to dispose of resources, as long as this is done on behalf of the people).

[695] UNGA Resolution 1803, Preamble. See also Charter of Economic Rights and Duties of States, GA Res 3281 (XXIX), UN GAOR, 29th sess, 2315th plen mtg, Agenda Item 48, Supp No 31, UN Doc A/RES/3281(XXIX) (12 December 1974) annex ("Charter of Economic Rights and Duties of States").

[696] Dam-de Jong and Stewart (2017), pp.13 ("If, on the other hand, one adopts a more human rights oriented approach, the ultimate question would be whether the armed group concerned, in this case UNITA, would be considered a representative of the people.").

[697] See, e, g., Charter of Economic Rights and Duties, UN Doc A/RES/3281(XXIX), annex art 2(1).

[698] Ricardo Pereira and Orla Gough, "Permanent Sovereignty Over Natural Resources In The 21st Century: Natural Resource Governance and the Right to Self-Determination of Indigenous Peoples Under International Law", *Melbourne Journal of International Law*, 2007, p.473.

although the extent of these rights is controversial.[699] Several human rights instruments refer to the rights of "peoples" over natural resources, including the ICCPR[700] and the ICESCR,[701] and UNGA Resolution 1803 itself refers to the right of "peoples and nations" to permanent sovereignty over their natural wealth and resources.[702] Recognising indigenous people as benefiting from the right to dispose of natural resources is also in keeping with the United Nations Declaration on the Rights of Indigenous Peoples of 2007.[703]

In the case of the State itself exploiting or using the natural resources, this would typically fall within its prerogative rights of permanent sovereignty over its natural resources.[704] Given that the right "must be exercised in the interest of their national development and of the well-being of the people of the State concerned"[705] an argument could be made that agreements manifestly concluded for the personal gain of a ruler or ruling clique and to the detriment of the people would not fall within the parameters of the right.[706] However, established international law does not provide specific guidelines for the assessment of whether an agreement concluded by a Government would fall afoul of the obligation to deal with natural resources in the interests of the people, making it difficult to mount a prosecution under international criminal law on this basis.[707]

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[699] See Dam-de Jong and Stewart (2017), p.14 citing N.J. Schrijver, 'Unravelling State Sovereignty? The Controversy on the Right of Indigenous Peoples to Permanent Sovereignty over their Natural Wealth and Resources', in Boerefijn, I. & Goldschmidt, J. (ed.), *Changing Perceptions of Sovereignty and Human Rights: Essays in Honour of Cees Flinterman* (Intersentia 2008), at 85-98; Final Report of the Special Rapporteur of the Commission on Human Rights, Mrs. Erica Daes, on Indigenous peoples' permanent sovereignty over natural resources, *UN Doc. E/CN.4/Sub.2/2004/30* of 13 July 2004 and its addendum, UN Doc. E/CN.4/Sub.2/2004/30/Add.1, 12 July 2004

[700] ICCPR, Article 47 '[n]othing in the present Covenant shall be interpreted as impairing the inherent right of all peoples to enjoy and utilize fully and freely their natural wealth and resources'.

[701] ICESCR, Article 1(2) "all peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic cooperation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence."

[702] UNGA Resolution 1803, article 1.

[703] UNDRIP, GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Agenda Item 68, Supp No 49, UN Doc A/RES/61/295 (2 October 2007) annex ('United Nations Declaration on the Rights of Indigenous Peoples'), annex article 4 ("[i]ndigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions.").

[704] See Dam-de Jong *NILR* (2015), p.7 ("International law establishes a right for states and peoples to freely exploit their natural resources."… "It is therefore the government which is entitled to exercise control over the state's natural resources to the exclusion of other entities.").

[705] UNGA Resolution 1803, article 1.

[706] See Dam-de Jong and Stewart (2017), p.14.

[707] See Dam-de Jong and Stewart (2017), p.15 ("For these reasons, it is uncertain if and to what extent the sub-offense would cover agreements concluded by the State to the detriment of indigenous peoples"). Any such prosecution under the African Protocol would also be difficult in light of the preclusion of head of state liability under Article 46A *Bis,* which provides "No charges shall be commenced or continued before the Court against

The survey of established international law relevant to permanent sovereignty over natural resources reinforces the possibility of prosecuting the pillage and exploitation of natural resources where the perpetrators are members of foreign armed forces or rebel groups, while also showing the difficulty of such prosecutions where those carrying out the extraction are agents of the territorial State.

Aside from these crimes, it is difficult to envisage wildlife exploitation *per se* constituting other anthropocentric crimes under the ICC's jurisdiction. Nonetheless, wildlife exploitation may well be committed in connection with other crimes, or else as a by-product of armed conflict and social upheaval.

E. Conclusion

The above survey shows that the substantive jurisdiction of the ICC does not focus explicitly or centrally on the repression of harm to the environment. The tenor of the Preamble and the large majority of the Court's substantive provisions is demonstrably anthropocentric in nature. Only one provision in the Rome Statute, article 8(2)(b)(iv) provides a basis to directly prosecute serious harm to the environment. However, a number of restrictions make it unlikely that charges under this provision could ever be established, particularly due to the exacting proportionality test which will render the likelihood of any conviction negligible. In this manner, the anthropocentric nature of the Rome Statute's orientation, as signaled by its Preamble and confirmed by the framing of its prohibitions, prejudices, and virtually excludes, the chances of effective and efficient proceedings on charges of damaging the natural environment. The substantive crimes indicate that the ICC is a court to redress harm to humans and their property, rather than a court designed to address harm to the environment.

Conversely, there are several anthropocentric crimes under the Rome Statute, ranging from war crimes to crimes against humanity to genocide, which could be used to provide incidental protection to the environment. A number of commentators maintain that these anthropocentric provisions provide a viable and effective means to curb environmental damage.[708] The anthropocentric provisions have the advantage of avoiding the restrictions of article 8(2)(b)(iv), such as its limitation to international armed conflict and its requirement that the anticipated environmental harm be "clearly excessive" to the military advantage sought.

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any serving AU Head of State or Government, or anybody acting or entitled to act in such capacity, or other senior state officials based on their functions, during their tenure of office."

[708] See *for example* Weinstein (2005), pp.698, 712 et seq.

However, prosecution under these provisions alone leaves the full extent of the harm to the environment *per se* unrecognised. It would result in environmental harm only being addressed and condemned indirectly as an offshoot of harm to human beings and their property.

International criminal law has an important declaratory function – it records the human race's moral opprobrium against crimes of concern to the international community as a whole. In this sense, prohibiting environmental harm would serve not only the expressivist goal of criminal justice (social disapproval and reinforcement of norms),[709] but also the utilitarian goal (general and special prevention), through the increased awareness of the international condemnation of this conduct, and provides a basis for possible criminal cases which would serve the retributivist goal (just desert).[710] The framing of the Court's substantive jurisdiction sends a clear declaratory message condemning anthropocentric crimes while at the same time implicitly conveying a message de-prioritizing environmental harm as a concern of international criminal law.

[709] M. Drumbl, *Accountability for Property Crimes and Environmental War Crimes: Prosecution, Litigation, and Development*, International Center for Transitional Justice, 2009, pp.21-22.
[710] K. Ambos, 'The Overall Function of International Criminal Law: Striking the Right Balance Between the *Rechtsgut* and the Harm Principles', 9(2) *Criminal Law and Philosophy* (2015), 301; Cusato (2017), text accompanying footnote 51.