



Universiteit
Leiden
The Netherlands

Power and dignity: the ends of online behavioral advertising in the European Union

Zardiashvili, A.

Citation

Zardiashvili, A. (2024, May 7). *Power and dignity: the ends of online behavioral advertising in the European Union*. Retrieved from <https://hdl.handle.net/1887/3753619>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3753619>

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

POWER & DIGNITY

*The Ends of Online Behavioral Advertising
in the European Union*

POWER & DIGNITY

The Ends of Online Behavioral Advertising in the European Union

PROEFSCHRIFT

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr.ir. H. Bijl,
volgens besluit van het College voor Promoties

te verdedigen op dinsdag 7 mei 2024
klokke 16.15 uur

door

ALEKSANDRE ZARDIASHVILI

geboren te Tbilisi (Georgië)

in 1992

Promotoren: Prof.mr.dr.ir. B. H.M. Custers
Prof.dr.mr. S. van der Hof

Co-promotor: Dr. F. Dechesne

Promotiecommissie: Prof.mr.dr. B.W. Schermer
Prof.dr.mr. V. Mak
Dr. G. Malgieri
Prof.dr. S. Zuboff (Harvard University, Boston, USA)
Prof.mr. F.J. Zuiderveen Borgesius (Radboud Universiteit)

Copyright © by Aleksandre Zardiashvili, 2024
All rights reserved
ISBN 978-94-6473-432-4, Lex Zard.
Printed by *IPSKAMP printing*, Enschede, the Netherlands



**Universiteit
Leiden**
The Netherlands

for joy

TABLE OF CONTENTS

LIST OF FIGURES.....	XI
LIST OF TABLES	XII
ACRONYMS	XIII
CHAPTER 1. INTRODUCTION: POWER & DIGNITY	1
1.1. Setting the Stage	1
1.2. Research Questions	8
1.3. Methodology	9
1.4. Scope.....	12
1.5. Structure	13
CHAPTER 2. ONLINE BEHAVIORAL ADVERTISING	16
2.1. The OBA Paradigm.....	17
2.1.1. Targeting	17
2.1.2. Behaviorism	18
2.1.3. The Internet.....	19
2.2. The OBA Configuration	21
2.2.1. Online Targeted Advertising.....	21
2.2.2. Profiling: Behavioral Personalization	23
2.3. The OBA Markets	25
2.3.1. Publishers and Advertisers.....	26
2.3.2. Walled Gardens and AdTech	27
2.3.3. Markets and Power.....	30
2.4. The OBA Infrastructures	32
2.4.1. Real-Time Bidding (RTB)	33
2.4.2. Cookies and Mobile IDs.....	35
2.4.3. Cookieless OBA.....	38
2.5. Conclusion: Online Behavioural Advertising	41
CHAPTER 3. MANIPULATION.....	43
3.1. Influencing Human Behavior	44

3.1.1. Influence.....	44
3.1.2. Persuasion, Coercion, and Manipulation.....	45
3.1.3. Manipulation: Hidden, Successful, Intentional Influence.....	50
3.2. Methods: Exploitation of Vulnerability	52
3.2.1. Cognitive Biases	53
3.2.2. Beliefs, Desires, Emotions, and Nudges	55
3.3. Measuring Manipulativeness	58
3.3.1. Vulnerability	59
3.3.2. Levels of Vulnerability	61
3.3.3. The Spectrum of Influences	65
3.4. Conclusion: Manipulation	67
CHAPTER 4. CONSUMER MANIPULATION VIA OBA	69
4.1. Manipulation in Contexts	70
4.1.1. Consumer Manipulation.....	70
4.1.2. Consumer Manipulation Online	75
4.1.3. Consumer Manipulation via OBA	79
4.2. Manipulative Extraction of Attention, Time, and Data.....	80
4.2.1. “Free” Internet.....	81
4.2.2. Maximizing Time.....	84
4.2.3. “Accept All” Data Extraction.....	87
4.3. Manipulative Advertisement Personalization.....	93
4.3.1. Covert Personalization	93
4.3.2. Targeting Vulnerability	98
4.4. Conclusion: Consumer Manipulation via OBA.....	102
CHAPTER 5. CONSUMER MANIPULATION HARMS OF OBA	105
5.1. Theories of Harm	106
5.1.1. Consumer Manipulation Harms	106
5.1.2. Welfare: Free Market Approach	109
5.1.3. Dignity: Human Rights Approach	113
5.1.4. Unifying Strands: Capability Approach.....	119
5.2. Typology of Consumer Manipulation Harms.....	122

5.2.1. Economic Harms.....	123
5.2.1.1 Economic Loss: Personal Detriment	123
5.2.1.2 Market Harms: Structural Detriment.....	124
5.2.2. Environment Harms	130
5.2.3. Affinity Harms	132
5.2.4. Privacy Harms.....	133
5.2.5. Authenticity Harms	134
5.2.6. Integrity Harms	136
5.2.7. Dignity Harms.....	137
5.2.7.1 Threat to Children.....	139
5.2.7.2 Threat to Democracy	140
5.2.7.3 Threat to Vulnerability	141
5.3. Conclusion: Consumer Manipulation Harms of OBA.....	143
CHAPTER 6. BOUNDARIES OF CONSUMER MANIPULATION VIA OBA.....	145
6.1. The EU Legal Framework for OBA	146
6.1.1. EU Consumer Protection Law	146
6.1.2. EU Personal Data Protection Law.....	152
6.1.3. EU Competition Law	156
6.1.4. EU Digital Single Market.....	161
6.1.4.1 Before the DSA and the DMA	161
6.1.4.2 The DSA and the DMA.....	163
6.1.4.3 Artificial Intelligence Act (AIA)	167
6.2. Prohibited OBA Practices	169
6.2.1. The Prohibition of OBA Using Special Categories of Data.....	170
6.2.2. The Prohibition of OBA for Minors.....	175
6.2.3. The Prohibition of Profiling with Significant Effects	177
6.2.4. The Prohibition of Unfair Practices and OBA	179
6.2.5. The Proposed Prohibitions of Manipulation via AI	185
6.3. Legal Grounds for OBA	188
6.3.1. Consent.....	188
6.3.1.1 Conditions.....	189

6.3.1.2 Consent in AdTech	193
6.3.1.3 OBA Contracts	196
6.3.2. Contractual Necessity.....	198
6.3.3. Legitimate Interest	200
6.4. OBA Transparency & Fairness	203
6.4.1. Information Disclosure.....	203
6.4.2. OBA Scrutiny: Archives, Access, Audit.....	206
6.4.3. Managing OBA Risks	209
6.5. Conclusion: Boundaries of Consumer Manipulation via OBA.....	213
CHAPTER 7. CONCLUSIONS: THE ENDS OF OBA.....	216
7.1. Conclusion.....	216
7.2. Recommendations	221
7.3. Going Forward	225
EPILOGUE	228
ACKNOWLEDGMENTS	229
BIBLIOGRAPHY.....	231
GLOSSARY	267
SAMENVATTING (DUTCH SUMMARY)	270
CURRICULUM VITAE.....	274
INDEX	276

LIST OF FIGURES

Figure 2:1. <i>Real Time Bidding (RTB)</i> (by Veale & Zuiderveen Borgesius)	33
Figure 3:1. <i>Quadrant of influence with examples</i> (by author)	46
Figure 3:2. <i>Levels of vulnerability</i> (by author).....	65
Figure 3:3. <i>Spectrum of influences with situations</i> (by author).....	66
Figure 4:2. <i>Levels of online consumer vulnerability</i> (by author)	78

LIST OF TABLES

Table 4-1. <i>Manipulative practices for attracting consumers</i> (by author)	84
Table 4-2. <i>Manipulative practices for maximizing engagement</i> (by author)	87
Table 4-3. <i>Exploitative patterns in cookie banners</i> (by author).....	90
Table 4-4. <i>Manipulative practices for data extraction</i> (by author)	92
Table 4-5. <i>Covert advertising personalization</i> (by author)	97
Table 4-6. <i>Hardship targeting</i> (from Google Ad Policy).....	99
Table 4-7. <i>Targeting identity</i> (from Google Ad Policy, examples added)	100
Table 4-8. <i>Advertising practices that exploit vulnerabilities</i> (by author).....	102
Table 4-9. <i>Manipulative practices of OBA</i> (by author).....	103
Table 5-1. <i>Consumer manipulation harms of OBA</i>	143
Table 6-1. <i>Article 5(1)(a)-(b) EC.AIA, EP.AIA and C.AIA</i> (by author)	185
Table 6-2. <i>The EU Legal framework for consumer manipulation via OBA</i> ...	213
Table 7-1. <i>Safeguarding consumer manipulation harms of OBA</i> (by author)	220

ACRONYMS

AI	Artificial Intelligence
AIA	Artificial Intelligence Act
AVMSD	Audiovisual Media Services Directive
CA	Competition Authority
CFREU	Charter for the Fundamental Rights of the EU
CJEU	The Court of Justice of the European Union
CMP	Consent Management Platform
CRD	Consumer Rights Directive
CPA	Consumer Protection Authority
C.AIA	Council Mandate of AIA
DMA	Digital Markets Act
DPA	Data Protection Authority
DSA	Digital Services Act
DSC	Digital Service Coordinator
DSP	Demand Side Platform
DPIA	Data Protection Impact Assessment
EAIB	European Artificial Intelligence Board
EBDS	European Board for Digital Services
EC	European Commission
ECHR	European Convention of Human Rights
EC.AIA	European Commission Proposal for AIA
ECtHR	The European Court of Human Rights
EDPB	European Data Protection Board
EDPS	European Data Protection Supervisor
EP.AIA	European Parliament Mandate for AIA
EU	European Union
GDN	Google Display Network (GDN)
GDPR	General Data Protection Regulation
OBA	Online Behavioral Advertising
PKM	Persuasion Knowledge Model
RTB	Real-Time Bidding
SSP	Supply Side Platform
TEU	Treaty of the European Union
TFEU	Treaty of the Functioning of the European Union
UCPD	Unfair Commercial Practices Directive
UCTD	Unfair Contract Terms Directive
UK	United Kingdom
US	United States of America
VLOP	Very Large Online Platform
VLOSE	Very Large Online Search Engine

