INTERNET OLIGOPOLY

The Corporate Takeover of Our Digital World

DIGITAL ACTIVISM AND SOCIETY: POLITICS, ECONOMY AND CULTURE IN NETWORK COMMUNICATION

The Digital Activism and Society: Politics, Economy and Culture in Network Communication series focuses on the political use of digital everyday-networked media by corporations, governments, international organizations (Digital Politics), as well as civil society actors, NGOs, activists, social movements and dissidents (Digital Activism) attempting to recruit, organise and fund their operations, through information communication technologies.

The series publishes books on theories and empirical case studies of digital politics and activism in the specific context of communication networks. Topics covered by the series include, but are not limited to:

- the different theoretical and analytical approaches of political communication in digital networks;
- studies of socio-political media movements and activism (and 'hacktivism');
- transformations of older topics such as inequality, gender, class, power, identity and group belonging;
- strengths and vulnerabilities of social networks.

Series Editor

Dr Athina Karatzogianni

About the Series Editor

Dr Athina Karatzogianni is an Associate Professor at the University of Leicester, UK. Her research focuses on the intersections between digital media theory and political economy, in order to study the use of digital technologies by new sociopolitical formations.

Published Books in this Series

Digital Materialism: Origins, Philosophies, Prospects by Baruch Gottlieb

Forthcoming Titles

Nirbhaya, New Media and Digital Gender Activism by Adrija Dey

INTERNET OLIGOPOLY

The Corporate Takeover of Our Digital World

BY

NIKOS SMYRNAIOS Université de Toulouse, France



United Kingdom — North America — Japan India — Malaysia — China Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First published by Institut national de l'audiovisuel as Les Gafam Contre L'Internet: une économie politique du numérique, 2017

Copyright © Nikos Smyrnaios

English language translation published under licence by Emerald Publishing Limited, 2018

Translated by Cynthia J. Johnson

The moral right of the copyright holder and translator has been asserted.

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-78769-200-8 (Print) ISBN: 978-1-78769-197-1 (Online) ISBN: 978-1-78769-199-5 (EPub)



ISOQAR certified Management System, awarded to Emerald for adherence to Environmental standard ISO 14001:2004.

Certificate Number 1985 ISO 14001



CONTENTS

About the Author	ix
Foreword	xi
Introduction	1
The Internet as a Political Issue	
The Necessary Critique of the Digital Political Eco	onomy 6
1. The Commodification of the Internet	15
The Legacy of ARPA	16
A Progressive Project	16
Convergence of Design and Use	17
ARPANET – A Public Good	18
Free Circulation of Information	19
The Information Society and the Post-industri	ial Economy 20
The Convergence of Neoliberalism and	
Technological Determinism	21
Technology to Overcome the Critiques of	Capitalism 22
The Deregulation of Telecom and the Neolibe	eral Turn 23
The Pioneers: Thatcher and Reagan	24
Deregulation as a Remedy for Recession	25
European Dogma	25
From Counterculture to the Commodification	n of
Cyberculture	26
A New Audience for the Networked, Person	onal
Computer	27
The WELL, the First Digital Social Netwo	rk 28

vi Contents

	A Platform for Freelance Knowledge Workers	30
	The Digerati, Heralds of the Market	31
2.	The Privatisation of the Internet	37
	Information Highways Leading to Internet Privatisation	37
	From Keynesian Stimulus to Deregulation	38
	The Limits of Closed Networks	39
	Internet Privatisation: An Issue that was	
	Never Questioned	40
	Internet Start-up Culture Meets Venture Capital	41
	The Birth of Silicon Valley	42
	How to Finance Innovative Companies	43
	From Advising to Speculating	44
	Start-ups: Experiments in Deregulated Labour	45
	The 'Irrational Exuberance' of the New Economy and	
	of Convergence	46
	The Emergence of the 'New Economy'	47
	From Convergence to Concentration	48
	Failed Mergers with Big Impact	49
3.	The Conditions Leading to the Emergence of the	
	Internet Oligopoly	55
	The Internet's Effect on the Information Economy	55
	Non-rivalry of Digital Goods	56
	Distribution Advantages	58
	The Positive Externalities of the Internet	59
	Reducing Transaction Costs	59
	Winner-take-all Economics	61
	Financialisation and Deregulation Benefitting an	
	Oligopoly	63
	Regulators Avoid Challenging the Oligopoly	63
	Exceptional Financial Power	65
	Globalised Companies and Strategies	67
	Matrix Management	68
	Avoiding Taxes	69
	Exploiting Labour: a Pillar of the Oligopoly's	
	Profitability	71

Contents vii

	Subcontracting Content Moderators	72
	Flexibility, Precariousness and Wage-fixing	73
4.	The Oligopoly's Strategies for Integration and	
	Infomediation	83
	Infomediation: A key function of the internet	84
	Information Brokerage and Coopetition	87
	Google and Facebook: Emblematic Infomediaries	89
	The Vertical Integration of the Oligopoly	90
	Computers and Consumer Electronics	91
	Operating Systems	93
	The Cloud	93
	Networks	94
	The Horizontal Concentration of the Internet	96
	Communication and Networking Services	97
	Access to Information and Online Content	98
	Paid Downloads and Streaming	99
5.	The Advertising Dominance of the Internet	107
	The Critique of Advertising	108
	Influence on Public Policy	109
	A Two-Sided Market	109
	The Audience as a Product	111
	Advertising Heteronomy	112
	Mass Culture and Advertising	113
	The Critique of Advertising Discounted	114
	Advertising on the Internet	116
	The Internet's 'Original Sin'	117
	Advertising 2.0	118
	Collecting and Using Users' Data	119
	Tracking Methods: Beyond Cookies	119
	The Personal Data Market	121
	Programmatic Trading	122
	Google Advertising	123
	Facebook Advertising	126
	Resisting and Regulating Online Advertising	
	(or lack thereof)	129

130
131
133
134
145
149
165

ABOUT THE AUTHOR

Nikos Smyrnaios is an Associate Professor at the University of Toulouse, France, where he teaches theory, history, sociology and economics of the media and the Internet. Born in Athens, Greece, in 1976, he obtained a PhD in Information and Communication Sciences from the University of Grenoble, France. He has published numerous articles in peer-reviewed journals and book chapters in English, French and Greek and has presented at international conferences on the political economy of communication, digital journalism and the political use of social media.

FOREWORD

In *The Internet Oligopoly: The Corporate Takeover of Our Digital World*, Nikos Smyrnaios advances what is going to prove to be a seminal critique of the digital political economy. The book takes the reader on a journey tracking the commodification of the Internet from the legacy of ARPA, deregulation and the neoliberal turn, to the unquestioned privatisation of the Internet, the birth of Silicon Valley, start-ups and failed mergers. Smyrnaios is a real virtuoso in setting up his critique, and leaves no stone unturned: the conditions for the emergence of the oligopoly, winner-takes-all economics, regulators avoiding any challenge to the oligopoly, the exploitation of digital labour, intermediaries' strategies, Facebook and Google's advertising dominance, personal data as a political issue and the impossibility of democratic regulation.

Smyrnaios identifies four parameters which strengthened the GAFAM (Google, Apple, Facebook, Amazon and Microsoft) to the point of oligopoly: the emergence of a digital information economy, the technological convergence of previously separate sectors (IT, telecom, devices, software, online services), and the financialisation and global deregulation of the economy. GAFAM developed global market platforms, forcing traditional actors in the cultural industries to adapt and serve their owners exclusively, thus making the development of alternatives too difficult.

xii Foreword

As quite a few of these oligopolistic actors rely on indirect financing, algorithmic strategies were developed: strategies which exploit their customers by collecting and using data on their identity, socio-demographic characteristics and preferences. Resistance to Google, Amazon and the longestablished monopoly-targeting against Microsoft has been brought into sharp focus by the Facebook data breach and Cambridge Analytica scandal. Now the GAFAM problem has come to the fore in the European Union with the General Data Protection Regulation (GDPR), legislation in the United States, United Kingdom and elsewhere. Ultimately, these recent developments justified a decade-long academic scholarship cautioning against oligopoly, deregulation, privatization, privacy, surveillance, censorship, digital labour exploitation and broader issues, stemming from the fact that digital technologies are powerful vectors of neoliberal hegemony.

Within this context, Smyrnaios illustrates beautifully both the historical emergence of the Internet oligopoply and the theoretical development of the debates it has generated. Real gems in his account include Carmen Hermosillo's experience of the Whole Earth 'Lectronic Link (WELL, founded 1985), who already in 1994, predicted the future of the Internet: 'I began to see that I had commodified myself [...] I created my interior thoughts as a means of production for the corporation that owned the board I was posting to, and that commodity was being sold to other commodity/consumer entities as entertainment. That means that I sold my soul like a tennis shoe and I derived no profit from the sale of my soul'.¹

The mid-1990s are given intense treatment by Smyrnaios, and he explains forcefully how these years set up the conditions for the oligopoly's emergence: 'This crucial historical moment, in which the state pulled out of managing the Internet, would give birth to the start-up culture as well as financialisation that would lead to the speculative bubble of

Foreword xiii

the "new economy". Despite the spectacular bursting of this bubble, this new economy would contribute significantly to the concentration of the telecom and the media, thereby laying the groundwork for the advent of the internet oligopoly'.

The critical issue of the privatization of the Internet was never debated in American society, unlike for other comparable cases, such as the debates over bandwidth allocation or the railway network, and no significant political actor opposed its privatisation and deregulation. As Smyrnaios explains:

As such, negotiations were dominated by large firms such as telecommunications operators and online service providers. As a result, citizen and user groups which may have opposed it were excluded from the process. This was all the more true because the issue was highly technical, complex, and with future implications that were difficult to predict. In addition, some internet pioneers, including the hacker community, believed cyberspace was a separate universe and thus not subject to the laws of government and the market. And thus it was with a single decision, which seemed to be a mere technical matter, that the fate of the internet changed in April 1995.

When there is political will to fight the GAFAM, as was the case in Europe, especially from the 2013 Snowden revelations onwards, the complexity of the technical and legal transnational issues as well as the GAFAM lobbying proved an impediment to breaking down the ologopoly's hold on the global market. Indeed, the numbers supporting Smyrnaios' argument are staggering:

The GAFAM are in the top twenty companies in the world that spend the most on research and

xiv Foreword

development for new technologies and products (\$ 11.4 billion for Microsoft, \$ 9.8 for Google, \$ 9.3 for Amazon and \$ 6 for Apple in 2015). These four companies, as well as Facebook, also account for 280 mergers and acquisitions between 2011 and 2015 for a budget of several tens of billions of dollars.

Smyrnaios demonstrates how vertical integration proves a crucial weapon for the Internet oligopoly, as the oligopoly is present in four subsets and markets that are part of the infome-diation infrastructure: operating systems, consumer electronics, telecommunications networks, and data centres, whereby: 'A close examination of Google, Apple, Facebook, Amazon and Microsoft reveals that they are all well positioned throughout the chain, either through mergers or acquisitions, stock purchases, or exclusive and privileged partnerships with companies that are upstream or downstream of their core business'.

At the heart of GAFAM, tracking methods result in markets where gigantic quantities of information on the profiles and habits of Internet users are constantly bought and sold, and here Smyrnaios provides a wonderfully detailed account of the workings of the leaders in the tracking market and the fundamental political implications they raise in regards to mass surveillance and freedom of expression, but above all the ability of our societies to produce common goods to benefit everyone without a market goal.

Thus, in this invaluable work, Smyrnaios solidly concludes his argument: 'Among intellectuals interested in digital issues, as well as among practitioners and tech-savvy users, there is a collective realisation that the direction taken by the internet is not the right one: increased commodification, the concentration of resources, and ubiquitous surveillance. The internet, under the powerful sway of the oligopoly, increasingly resembles

Foreword xv

what it was supposed to oppose, namely, computing as a technology of domination'.

Considering the importance of this work for several disciplines cross-fertilising each other to push the area of platform economics to projects attuned to equality, solidarity and the end of digital labour exploitation and democratic disruption, it is a vital weapon in my own arsenal, and I foresee it to be thus for both our peers and students.

Athina Karatzogianni, Metz, 24 May 2018

NOTE

1. Hermosillo, Carmen (humdog), "pandora's vox: on community in cyberspace", 1994, available at https://gist.github.com/kolber/2131643#file-pandoras_vox-mdown