CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Leading from the Periphery and Network Collective Action

Political revolutions, economic meltdowns, mass ideological conversions and collective innovation adoptions occur *often*; nevertheless, when they happen, they tend to be the *least* expected. Based on the paradigm of "*leading from the periphery*", this groundbreaking analysis offers an explanation for such spontaneity and apparent lack of leadership in contentious collective action. Contrary to existing theories, the author argues that network effects in collective action originating from marginal leaders can benefit from a total lack of communication. Such network effects persist in isolated islands of contention instead of overarching action cascades, and are shown to escalate in globally dispersed, but locally concentrated networks of contention. This is a trait that can empower marginal leaders and set forth social dynamics distinct from those originating in the limelight. *Leading from the Periphery and Network Collective Action* provides evidence from two Middle Eastern uprisings, as well as behavioral experiments of collective risk taking in social networks.

Navid Hassanpour is an associate professor of political science at the Higher School of Economics in Moscow. Previously he taught at Columbia University and was a Niehaus Fellow in Regional Political Economy at Woodrow Wilson School of Public and International Affairs at Princeton. He studies politics in hybrid regimes: collective action and elections under authoritarianism leading to social revolutions or stable electoral institutions. His ongoing research in Tehran, Moscow, Beijing, and Istanbul examines the inception of electoral institutions past the era of constitutional revolutions and the logic of their pursuing transformations.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Structural Analysis in the Social Sciences

Mark Granovetter, editor

The series *Structural Analysis* in the Social Sciences presents studies that analyze social behavior and institutions by reference to relations among such concrete social entities as persons, organizations, and nations. Relational analysis contrasts on the one hand with reductionist methodological individualism and on the other with macro-level determinism, whether based on technology, material conditions, economic conflict, adaptive evolution, or functional imperatives. In this more intellectually flexible structural middle ground, analysts situate actors and their relations in a variety of contexts. Since the series began in 1987, its authors have variously focused on small groups, history, culture, politics, kinship, aesthetics, economics, and complex organizations, creatively theorizing how these shape and in turn are shaped by social relations. Their style and methods have ranged widely, from intense, long-term ethnographic observation to highly abstract mathematical models. Their disciplinary affiliations have included history, anthropology, sociology, political science, business, economics, mathematics, and computer science. Some have made explicit use of social network analysis, including many of the cutting-edge and standard works of that approach, whereas others have kept formal analysis in the background and used "networks" as a fruitful orienting metaphor. All have in common a sophisticated and revealing approach that forcefully illuminates our complex social world.

Recent Books in the Series

Philippe Bourgois, *In Search of Respect: Selling Crack in El Barrio* (Second Edition)
Nan Lin, *Social Capital: A Theory of Social Structure and Action*
Robert Franzosi, *From Words to Numbers*
Sean O'Riain, *The Politics of High-Tech Growth*
James Lincoln and Michael Gerlach, *Japan's Network Economy*
Patrick Doreian, Vladimir Batagelj, and Anujka Ferligoj, *Generalized Blockmodeling*
Eiko Ikegami, *Bonds of Civility: Aesthetic Networks and Political Origins of Japanese Culture*
Wouter de Nooy, Andrej Mrvar, and Vladimir Batagelj, *Exploratory Social Network Analysis with Pajek*
Peter Carrington, John Scott, and Stanley Wasserman, *Models and Methods in Social Network Analysis*
Robert C. Feenstra and Gary G. Hamilton, *Emergent Economies, Divergent Paths*
Martin Kilduff and David Krackhardt, *Interpersonal Networks in Organizations*
Ari Adut, *On Scandal: Moral Disturbances in Society, Politics, and Art*
Zeev Maoz, *The Networks of Nations: The Evolution and Structure of International Networks, 1815–2002*
Noah E. Friedkin and Eugene C. Johnsen, *Social Influence Network Theory*
Sean F. Everton, *Disrupting Dark Networks*
Dean Lusher, Johan Koskinen, and Garry Robins, eds, *Exponential Random Graph Models for Social Networks: Theory, Methods, and Applications*
Silvia Domínguez and Betina Hollstein, eds., *Mixed Methods in Studying Social Networks*
Benjamin Cornwell, *Social Sequence Analysis*
Luke M. Gerdes, ed., *Illuminating Dark Networks*
Mariela Szwarcberg, *Mobilizing Poor Voters*
Isabella Alcañiz, *Environmental and Nuclear Networks in the Global South*
Cheol-Sung Lee, *When Solidarity Works*

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Leading from the Periphery and Network Collective Action

NAVID HASSANPOUR
Higher School of Economics, Moscow

CAMBRIDGE
UNIVERSITY PRESS

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

4843/24, 2nd Floor, Ansari Road, Daryaganj, Delhi – 110002, India

79 Anson Road, #06-04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781107141193

© Navid Hassanpour 2016

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2016

Printed in the United States of America by Sheridan Books, Inc.

A catalog record for this publication is available from the British Library

ISBN 978-1-107-14119-3 Hardback
ISBN 978-1-316-50645-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Contents

List of Figures *page* vi
List of Tables ix
Acknowledgments xi

1 Mobilization from the Margins 1
2 Decentralization of Revolutionary Unrest: *Dispersion Hypothesis* 27
3 Vanguards at the Periphery: A Network Formulation 69
4 Civil War and Contagion in *Small Worlds* 103
5 Peripheral Influence: Experimentations in Collective Risk Taking 140
6 Decentralization and Power: Novel Modes of Social Organization 163
7 Appendix 171

Bibliography 196
Index 206

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Figures

1.1 Participation levels in 2011 Egyptian Revolution among survey respondents *page* 21
1.2 Size of *minimal core* as a function of *radius of connectivity* 23
1.3 Daily dispersion of conflict in Damascus and its suburbs 24
1.4 Sum action rates in cascade sessions of the network experiment 25
2.1 Rumors as instigation during the Russian Revolution of February 1917 29
2.2 Email sent out by the April 6 Youth Movement calling for protests on January 25 39
2.3 Protest dispersion and internet traffic, 2011 Egyptian Revolution 43
2.4 Fully connected → Local sparse graphs 44
2.5 Participation levels among all survey respondents and the vanguard, 2011 Egyptian Revolution 60
3.1 Centralized sources of information and individual consumers 76
3.2 Topology of dispersed clusters of contention shaping in the absence of centralized media 77
3.3 Connectivity is not always helpful to collective action, an example 78
3.4 Equilibria of a homogeneous network game 80
3.5 Equilibria of a heterogeneous network game 80

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

3.6 Equilibria of a network game with the vanguard at the periphery 81
3.7 Increasing size of the minimal core with higher connectivity 88
3.8 Size of the minimal core for two-dimensional grids 89
3.9 *Radius of diffusion*, regular ring network 91
3.10 A ring network with bridges 92
3.11 Suppression of the public signal in a four-member signal space 98
3.12 A *small world network* with random bridges 100
3.13 Decentralization and localization processes after media disruption 100
4.1 Conflictual incidents in 1 square mile cells, 2012, Damascus and suburbs 114
4.2 Communication disruptions during the Syrian Civil War 116
4.3 Dispersion of conflictual incidents in Damascus, 2012 118
4.4 Population and elevation patterns, Damascus and suburbs 125
4.5 Damascus, neighborhood delineations superimposed 126
4.6 Histogram of distances from the nearest incident in space and time, Damascus, 2012 127
4.7 Average distance from nearest neighboring incident, Damascus, 2012 128
4.8 OLS coefficients, distance from nearest incident regressed over indices for coordination, orientation, communication disruption 131
4.9 Coefficients from Poisson regressions in Table (4.9) 136
4.10 Odds of violent incident based on previous violent incidents in the spatio-temporal vicinity 137
5.1 Two realizations of the Erdös-Rényi graphs used in the network experiments 147
5.2 Rounds 1, 8 and 15 for peripheral, random and central assignments 149
5.3 Proportion of sessions in *action* cascade status for each treatment in the network experiment 151
5.4 Sum of action rates in all sessions in cascade status 153

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

5.5 Kaplan–Meier survival analysis for each of the three network treatments 156
5.6 Temporal evolution of risk taking for peripheral action cascades 158
6.1 Romanian Revolution and the denial of emblem, December 1989 168
7.1 Demands of the protesters in the announcement sent on January 22, 2011 Egyptian Revolution 173
7.2 Groups' assignment to each six locations in Cairo on January 25, 2011 Egyptian Revolution 174
7.3 Preparations: distribution of pamphlets before January 25 175
7.4 Preparations: 15,000 pamphlets were distributed before January 25 in Cairo, 15,000 more in other cities 175
7.5 Distributing mobile numbers of the "control room" members on the 25th 176
7.6 Disruption of *control room*'s communications 176
7.7 *Control room*'s reaction to disruption of communication 176
7.8 Call to protests on January 28, 2011, "Friday of Rage", in all major Egyptian cities 177
7.9 4 p.m. update 178
7.10 5 p.m. updates 178
7.11 6 p.m. updates 179
7.12 7 p.m. updates 179
7.13 Cairo neighborhood where face-to-face interviews were conducted 186
7.14 A scan of sample filled questionnaire, Cairo protest survey 190
7.15 Media usage levels for the vanguard and nonparticipants 192
7.16 Distribution of *first incidents*, Damascus, late 2012 193
7.17 A snapshot of subject instructions for the second phase of the network experiments 195

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Tables

2.1 Communication disruptions, 2011 Egyptian Revolution *page* 38
2.2 Main protest locations in Cairo, January 25–February 11 42
2.3 Components of protest dispersion in Cairo, OLS regression 45
2.4 Components of protest participation on January 28, logistic regressions 63
2.5 Protest participation on January 25–27, media consumption components, logistic regression 64
2.6 Components of participation in protests in Tahrir on January 25, logistic regression 65
2.7 Components of participation in protests in Tahrir on January 28, logistic regression 65
2.8 Media consumption patterns and subjective reaction to media disruption, logistic regression 66
4.1 Four possibilities of coordination and orientation and their effect on clustering of conflict 108
4.2 Dispersion level at time *t*: three definitions, OLS regressions 119
4.3 Major neighborhoods in Damascus and suburbs 121
4.4 Components of number of violent incidents in each spatial cell, Poisson count regression 124
4.5 Components of distance from the nearest incident, OLS regression 130
4.6 Components of distance from the nearest incident, disruption index included, OLS regression 130

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

4.7	The relation between orientation and coordination indices, OLS regression	131
4.8	Four possibilities of coordination and orientation and their effect on clustering of conflict	132
4.9	Components of the existence of conflict in each cell-day, Poisson count regressions	134
4.10	Interaction of media disruption and contagion during the Syrian Civil War, Poisson count regressions	138
5.1	Summary statistics of collective risk taking in the network experiment	150
5.2	OLS regression, average centrality of risk taking in the first round on action cascade status by treatment	155
5.3	Logistic regression, subject-level components of collective risk taking in the network experiment	160
7.1	The distribution of participation in the four phases of the 2011 Egyptian uprising	191
7.2	Number of violent incidents in each spatial cell, Syrian Civil War, Poisson count regression	194

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Acknowledgments

The initial idea of this project occurred to me early during my stay at Yale. At a seminar James Scott pondered if the French Revolution was called a "revolution" in 1789 and if not, he asked when and how that event came to be known as a revolution to its instigators as well as the global audience. That curious point led me into a phase of archival research on revolutions and similar historical turning points. During my time in the archives I noticed how much the narrative of the momentous events I was studying had been transformed in the prism of time, and felt motivated to pursue a more careful exploration of their origins. As I was researching the candid media reflections of the Iranian and Russian Revolutions I became aware of occasional gaps in media activity during the events, an observation that later, combined with the predictions of a number of network stylizations I was simultaneously developing in Fall 2010, became the starting point and a major building block of this book. The protest wave of 2011 unfolded right in time, providing an opportunity to see similar historical processes as they happened in real time. Hence, my research strategy shifted from exploring the archives to surveying live processes of collective contestation, mainly taking place in the theaters of Middle Eastern capitals, and later led into a final phase of controlled experimentation with the dynamics of collective risk taking in a laboratory setting.

During the five years I spent observing and formulating the paradigm of *leading from the periphery*, I was fortunate to benefit from working with a group of remarkable collaborators. In particular, I would like to mention, in temporal order, the research assistance of Ji Liu with model building,

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE
Cambridge University Press
978-1-107-14119-3 — Leading from the Periphery and Network Collective Action
Navid Hassanpour
Frontmatter
More Information

Sergio Peçanha and Miral Brinjy with my examination of the Egyptian Revolution and the Cairo Survey, Stacey Maples and Joseph Holliday with the geolocated study of conflict in Damascus, and Dominik Duell and Mark McKnight with the network experiments of collective risk taking. The contributions of anonymous respondents to several surveys in Cairo and Damascus were also instrumental.

During my time at Yale and Princeton I benefited from countless deliberations with the faculty and graduate students at both institutions over the topic of this monograph and will remain indebted. I would like to thank Yale Political Science Department, Yale Law School's Information Society Project, Yale Institute for Network Science and Princeton's Niehaus Center for Globalization and Governance for their indispensable financial support.

© in this web service Cambridge University Press www.cambridge.org