TOWARD PERMEABLE BOUNDARIES OF ORGANIZATIONS?

RESEARCH IN THE SOCIOLOGY OF ORGANIZATIONS

Series Editor: Michael Lounsbury

Recent Volumes:

Volume 43:	Elites on Trial
Volume 44:	Institutions and Ideals: Philip Selznick's Legacy for Organizational Studies
Volume 45:	Towards a Comparative Institutionalism: Forms, Dynamics and Logics Across the Organizational Fields of Health and Higher Education
Volume 46:	The University Under Pressure
Volume 47:	The Structuring of Work in Organizations
Volume 48A:	How Institutions Matter!
Volume 48B:	How Institutions Matter!
Volume 49:	Multinational Corporations and Organization Theory: Post Millennium Perspectives
Volume 50:	Emergence
Volume 51:	Categories, Categorization and Categorizing: Category Studies in Sociology, Organizations and Strategy at the Crossroads
Volume 52:	Justification, Evaluation and Critique in the Study of Organizations: Contributions from French Pragmatist Sociology
Volume 53:	Structure, Content and Meaning of Organizational Networks: Extending Network Thinking
Volume 54A:	Multimodality, Meaning, and Institutions
Volume 54B:	Multimodality, Meaning, and Institutions
Volume 55:	Frontiers of Creative Industries: Exploring Structural and Categorical Dynamics
Volume 56:	Social Movements, Stakeholders and Non-Market Strategy

RESEARCH IN THE SOCIOLOGY OF ORGANIZATIONS VOLUME 57

TOWARD PERMEABLE BOUNDARIES OF ORGANIZATIONS?

EDITED BY

LEOPOLD RINGEL

Bielefeld University, Germany

PETRA HILLER

University of Applied Sciences Nordhausen, Germany

CHARLENE ZIETSMA

Pennsylvania State University, USA



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

First edition 2018

Copyright © 2018 Emerald Publishing Limited

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: 978-1-78743-829-3 (Print) ISBN: 978-1-78743-828-6 (Online) ISBN: 978-1-78743-991-7 (Epub)

ISSN: 0733-558X (Series)



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

Certificate Number 1985 ISO 14001



CONTENTS

ABOUT THE AUTHORS	ix
INTRODUCTION	
TOWARD PERMEABLE BOUNDARIES OF ORGANIZATIONS?	
Leopold Ringel, Petra Hiller and Charlene Zietsma	3
SECTION 1	
CONCEPTUALIZING ORGANIZATIONAL BOUNDARIES	
ACCOUNTING, BOUNDARY-MAKING, AND ORGANIZATIONAL PERMEABILITY	2.1
Michael Power	31
BOUNDARIES OF VISIBILITY IN THE AGE OF TRANSPARENCY: AN INTEGRATIVE CONCEPTUALIZATION	
Leopold Ringel	55
COLLABORATION AS AN ORGANIZATION DESIGN FOR SHARED PURPOSE	
Paul S. Adler and Charles Heckscher	81
PLATFORM ORGANIZING IN THE NEW DIGITAL ECONOMY: REVISITING ONLINE COMMUNITIES	
AND STRATEGIC RESPONSES Georg Reischauer and Johanna Mair	113

vi CONTENTS

SECTION 2 BOUNDARIES AND ORGANIZATIONAL DYNAMICS ORGANIZATIONAL BOUNDARIES IN FLUID FORMS OF PRODUCTION: THE CASE OF APACHE OPEN-SOURCE SOFTWARE Vitaliano Barberio, Markus A. Höllerer, Renate E. Meyer 139 and Dennis Jancsary REDESIGNING ORGANIZATIONAL BOUNDARIES AND INTERNAL STRUCTURES: A SOCIOLOGICAL INTERPRETATION OF ACTIVATION POLICIES Martin Heidenreich, Petra Hiller and Steffen Dörhöfer 169 WORKING FOR AN APP: ORGANIZATIONAL BOUNDARIES, ROLES, AND MEANING OF WORK IN THE "ON-DEMAND" ECONOMY Anna Roberts and Charlene Zietsma 195 THE PERILS OF ORGANIZATIONAL TRANSPARENCY: CONSISTENCY, SURVEILLANCE, AND AUTHORITY **NEGOTIATIONS** Oana Brindusa Albu and Leopold Ringel 227 SECTION 3 EXTENDING BOUNDARIES: META-ORGANIZATION AND ORGANIZATIONAL NETWORKS HOW DO META-ORGANIZATIONS AFFECT EXTRA-ORGANIZATIONAL BOUNDARIES? THE CASE OF UNIVERSITY ASSOCIATIONS Jelena Brankovic 259 THE EFFECT OF SPACE ON BOUNDARIES WITHIN ORGANIZATIONAL NETWORKS

283

Maja Apelt and Jana Hunnius

Contents

SECTION 4	
BOUNDARIES AND ORGANIZATIONAL FIELDS	
BIG DATA, BIGGER QUESTIONS: DATA-BASED BUSINESS MODELS AND THEIR IMPLICATIONS FOR ORGANIZATIONAL BOUNDARIES, DATA GOVERNANCE, AND SOCIETY Angelique Slade Shantz	305
DISCIPLINE-MAKING AND ORGANIZATIONAL PERMEABILITY OF THE UNIVERSITY: DISCUSSING THE NOTION OF ORGANIZATIONAL FIELD	

331

INDEX 361

Kari Kantasalmi and Juha Tuunainen

This page intentionally left blank

ABOUT THE AUTHORS

Paul S. Adler is currently Harold Quinton Chair in Business Policy at the Marshall School of Business, University of Southern California, USA. His research and teaching focus on organization theory and design, most particularly in R&D, engineering, software, healthcare, and manufacturing operations.

Oana Brindusa Albu is Associate Professor in the Department of Marketing and Management at the University of Southern Denmark, Odense. Her research focuses on organizational transparency, organizational communication, and information and communication technologies use in the Middle East and North Africa country contexts.

Maja Apelt is Professor of Organizational and Administrative Sociology at the University of Potsdam, Germany. Her main research interests are organizational theories, the relationships between gender and organizations, violent organizations, and qualitative organizational studies. She was the Principal Investigator of a project on the organization of airport security. Currently, she investigates male alliances of military and fire departments.

Vitaliano Barberio is Postdoctoral Researcher at the Research Institute for Urban Management and Governance at WU Vienna, Austria. His research interests include the causes and consequences of social and organizational identities, European integration and policies, institutional organization theory, new organizational forms, meaning making in social media, the relationship between rhetorical strategies, vocabularies and legitimacy, text analysis, and social and semantic network analysis.

Jelena Brankovic is Postdoctoral Researcher and Lecturer at the Faculty of Sociology, Bielefeld University, Germany. She holds a PhD in Sociology from Ghent University. Her research interests are in globalization, forms of interaction between organizations, and competition. She specifically focuses on universities and the ways in which they interact with the broader environment.

Steffen Dörhöfer is Professor of Business Administration, in particular, Personnel Management and Organization at the University of Applied Sciences Nordhausen, Germany. His publications cover organizational theory and organizational behavior, human resource management, and systemic change management. Steffen's current research focuses on dialogic organization development, solution-focused coaching, and new management systems.

Charles Heckscher is a Distinguished Professor at Rutgers University, USA, and Co-Director of the Center for the Study of Collaboration. His research interests include societal trust, the design of collaborative organization, and the changing nature of employee representation. He has also worked as a practitioner and consultant on processes of organizational development, primarily in telecommunications and K-12 education.

Martin Heidenreich is Jean-Monnet Professor of European Studies in the Social Sciences and Director of the Jean Monnet Centre for Europeanization and Transnational Regulations at the University of Oldenburg, Germany. His publications cover the Europeanization of national societies, social inequalities in the EU, regional and national employment trends, and regional innovation systems.

Petra Hiller is Professor of Organization and Governance at the University of Applied Sciences Nordhausen, Germany. Her research interests center on cognitive theories of organization and public governance. Related publications cover articles and books on systems theory, the sociology of risk, and cognitive theories of organizations.

Markus A. Höllerer is Professor of Public Management and Governance at WU Vienna, Austria, and Professor of Organization Theory at UNSW Sydney Business School, Australia. His research focuses on the study of institutions, meaning, and novel forms of organization and governance.

Jana Hunnius studied Sociology at the universities of Bielefeld and Hamburg, Germany. Between 2014 and 2016, she was a Research Associate working on the project "Soft Parts — Social Factors of Airport Security." Since 2016, Jana has been a Doctoral Researcher and Lecturer at the Chair of Organizational and Administrative Sociology at the University of Potsdam, Germany.

Dennis Jancsary is Assistant Professor at the Institute for Organization Studies at WU Vienna, Austria. His research draws on institutional approaches in organization theory with a focus on the roles of verbal, visual, and multimodal forms of rhetoric, narrative, and symbolism. Empirically, he explores these issues mainly in the context of the institutionalization of management knowledge. He is interested in methodology that captures meaning structures from a variety of communicative traces.

Kari Kantasalmi is Sociologist of education focusing on boundary issues in the organization of education and schooling. He has studied popular adult education and university adult education arrangements, indigenous education issues, topics in professions, and doctoral education. He is docent in politics of education at the University of Helsinki, Finland, currently teaching in the Faculty of Educational Sciences. He is currently Vice-President for Europe in

About the Authors xi

the International Sociological Association's Research Committee on Sociology of Education.

Johanna Mair is Professor of Organization, Strategy, and Leadership at the Hertie School of Governance in Berlin, Germany. She is also the Co-Director of the Global Innovation for Impact Lab at the Stanford Center on Philanthropy and Civil Society, USA. Her research focuses on how organizational and institutional arrangements affect social and economic development, and the role of innovation in this process. She received her PhD from INSEAD.

Renate E. Meyer is Professor of Organization Studies at WU Vienna, Austria. She is also part-time Professor in the Department of Organization at CBS and Co-director of the Research Institute for Urban Management and Governance at WU. She focuses on meaning structures and has recently studied structural forms of institutional pluralism, institutions as multimodal accomplishments, novel organizational forms, and patterns of management ideas mostly in areas of urban governance challenges.

Michael Power is Professor of Accounting at the London School of Economics and Political Science, UK, and a Fellow of the British Academy. He was formerly Co-Founder and Director of the Centre for Analysis of Risk and Regulation at LSE. His research and teaching address problems in auditing and evaluation, risk management, corporate governance, and organization theory.

Georg Reischauer is Local Project Manager and Senior Research Associate at the Hertie School of Governance in Berlin, Germany. His research focuses on collaborative innovation and collaborative organization in digital and interstitial contexts. He received his PhD from the Technical University of Vienna, Austria.

Leopold Ringel is Lecturer at the Faculty of Sociology at Bielefeld University, Germany. His scholarly work focuses on the emergence of transparency as a global norm and its impact on organizations, with a special focus on unintended consequences. Currently, he investigates the production, institutionalization, and organizational effects of rankings.

Anna Roberts is a Doctoral Student at the Smeal College of Business, Pennsylvania State University, USA. Anna studies the future of work, new organizational forms, and the microfoundations of institutions. She earned her BA from Rice University (magna cum laude) and received the Muhammad Yunus Commencement Award for Humanitarian Leadership.

Angelique Slade Shantz is Assistant Professor of Strategic Management and Organization at the Alberta School of Business, Canada. Her research focuses on the role of business in addressing grand challenges, predominantly occurring at the intersection of entrepreneurship and poverty alleviation but also

including other social issues such as environmental and data governance challenges. Angelique's current research explores institutional, cultural, and cognitive barriers to entrepreneurship in contexts of resource scarcity. Her methodological approach is experimental, complemented by qualitative data, often in partnership with organizations.

Juha Tuunainen is Associate Professor of Management and Organization in the University of Oulu, Finland. His research has covered a range of topics stretching from science and technology studies to organizational sociology and innovation studies. Tuunainen's research has included innovation policy, processes, networks, university organization and commercialization of science. Presently, he is involved in studies that focus on university—society interaction and distributed leadership in university entrepreneurship hubs.

Charlene Zietsma is Associate Professor, Smeal College of Business, Pennsylvania State University, USA. She studies emotions and institutions, institutional change, field theory, and entrepreneurship. In 2016, she received the ASQ Scholarly Contribution Award for the paper published in 2010 that had the most significant impact on the field of Organization Studies.

INTRODUCTION

This page intentionally left blank

TOWARD PERMEABLE BOUNDARIES OF ORGANIZATIONS?

Leopold Ringel, Petra Hiller and Charlene Zietsma

ABSTRACT

Boundaries are a popular topic among organizational researchers, many of whom argue that over the past decade we have witnessed a trend toward permeable boundaries and in some cases a blurring between organization and environment. Contrary to received wisdom, we argue that the question as to whether organizational boundaries have become more permeable or not cannot be decided empirically but is mainly a theoretical issue. Whether or not data indicate permeability or impermeability depends on the theoretical lens employed. Against this backdrop, we review how two prominent approaches to the study of boundaries, sociological systems theory and new institutionalism, not only arrive at different conclusions but also mandate diverging avenues of research. We focus in depth on several empirical trends: advances in information and communication technologies, increasingly dynamic fields and markets, invasive transparency regimes, and metaorganizations. We then introduce the contributions in this volume, showing how they elaborate on these and other empirical trends, drawing on different theoretical perspectives, to advance our understanding of the importance of boundaries within and around organizations.

Keywords: Boundaries; permeability; systems theory; new institutionalism; transparency; organizational fields

The status of organizational boundaries has been frequently debated over the past decades (Santos & Eisenhardt, 2005). While scholars have long assumed organizations to be monoliths, clearly demarcated from their environment, recent accounts have shifted their perspective and argue that organizations are, in fact, shaped significantly by their environment (Scott, 1998). The present volume sets out to explore the issue of permeable organizational boundaries, both in theoretical and in empirical terms. The question mark in the title indicates that we do not promulgate a certain view on this matter but rather wish to provide a framework for discussions and open the floor for debate. The aim of this introduction is to map the field, show how historically organizational research shifted its attention from the focal organization to the relation of organizations and their environment and outline the contours of a research agenda.

The first section discusses the paradigms of the closed and the open system, both of which have implications for the theorization of organizational boundaries (or the lack thereof). We begin with classical accounts and their neglect of the issue of environments. Boundaries were seen as long protective barricades, establishing strong - rather impenetrable - metaphorical walls around organizations. Accordingly, organizations were conceptualized as rational actors in the true sense of the word in that they skillfully navigated environments that merely restricted their possibilities but did not shape them. From the 1960s onward, however, researchers increasingly theorized the impact of the environment on organizations, thereby considering boundaries as permeable to external influences. Systems theory and new institutionalism stand out in particular as two approaches that take the environment into account. While systems theory focuses on exchange relations between systems and their environment as well as matters of stability, new institutionalism highlights that institutions in many cases dramatically influence the formal structure of organizations, thus directly permeating their boundaries. In the second section, we draw on recent developments in systems theory and new institutionalism to outline two diverging research agendas with regard to the assumption of increasingly permeable organizational boundaries. While new institutionalism at its core conceptualizes organizations as being shaped by institutional forces, systems theory rejects the idea of environments penetrating organizations. Luhmann (1995), who arguably offers the most complex and ambitious version of systems theory, defines organizations as radically bounded decision-making entities. Organizations are self-referential (they recursively connect new decisions to their constitutive network of previous decisions) and autopoietic (they produce and reproduce themselves out of their own operations). Social systems are thus, in Luhmann's words, "operatively closed." Recent developments in new institutionalism still assume organizations to be shaped by institutions, though, with terms such as "institutional heterogeneity," "institutional complexity," "institutional logics," or "organizational field," its proponents suggest a more nuanced take on how to analyze under what conditions organizational boundaries are

more or less permeable, and to what influences. We then discuss the implications of these two theories in the third section by analyzing different empirical trends such as technological progress, increasingly dynamic markets, the rise of invasive transparency regimes and dense entanglements among organizations in the guise of associations. The fourth section presents the contributions to this volume, which elaborate some of the trends discussed in the fourth section. The contributions span a wide spectrum, ranging from conceptual to empirical considerations, from public organizations to organizations in the sharing economy, from field-level to organizational-level analysis, and finally: from accounts of the permeability to accounts of the impermeability of organizational boundaries.

ORGANIZATIONS AS CLOSED AND OPEN SYSTEMS

In the first half of the twentieth century, management scholars and organizational sociologists saw organizations as the focal point for their analysis and therefore neglected the embeddedness of their research object in social environments such as nation states, markets, fields, or cultures. Scott (1998) subsumes early efforts of theorizing organizations as the paradigm of the "rational system," in the case of management scholars, and the paradigm of the "natural system," in the case of organizational sociologists. While the former emphasizes the formal order and sees organizations as means to achieve rational goals such as profit-making, the healing of patients, or the production of commodities, the latter is also concerned with informal processes that are beyond the control of management. Since both, however, focus exclusively on "the organization," they can be summarized as closed systems approaches.

At its core, the paradigm of the "rational system" is grounded in the belief that organizations can be shaped according to conscious and rational design. Just like in the case of technical objects, clever engineering allows organizations to be steered in any direction: "formal organization is that kind of cooperation among men [sic] that is conscious, deliberate, purposeful" (Barnard, 1938, p. 4). The most influential representative of the rational system paradigm is Taylor (1967 [1913]). Taylor and his successors were fascinated by the idea of discovering the optimal productivity of workers and emphasized the role of finding the right material incentives (i.e., wages). Simon (1997 [1945]) and March and Simon (1993 [1958]) put limits on that rationality, suggesting that individuals are only cognitively capable of "bounded rationality." For this reason, people cooperate to achieve complex goals they would otherwise be unable to pursue. Whether scholars subscribed to perfect or bounded rationality, they tended to focus on internal processes, while neglecting the connection of organizations to their (external) environments.

Classical organizational sociologists (Gouldner, 1954; Selznick, 1949) were less interested in the formal structure of organizations. Albeit not disputing that organizations to some degree are consciously designed, they emphasized that no matter how encompassing and tightly enforced formal rules are, individuals unwittingly create a vibrant organizational underlife of patterns, relations, traditions, myths, cliques, and practices that are more emergent than designed. The term these authors used for making sense of such phenomena was informality, the flipside of the formal order. As a result, organizational sociologists rejected the idea of the formal structure representing organizational activities and argued for carefully analyzing the informal patterns that permetate organizational life.

Both paradigms, the rational and the natural systems approaches, focused on different dimensions (formal and informal processes) but primarily analyzed intraorganizational phenomena. As a result, research neglected the issue of organizational boundaries and the question of (im-)permeability between system and environment. This does not mean that organizations were not influenced by their environment, but that the environment did not appear on the radar of observers due to their theoretical frameworks.

In the 1960s and 1970s, theories emerged which identified a gap in the conceptualizing of organizational environments and their impact on organizations. Following different trajectories, these theories assume that organizations are "open systems" (Scott, 1998), meaning they are influenced and often shaped significantly by forces beyond their formal boundaries. As a result, the dominance of the focal organization as the prime object of research was called into question. Concepts of open systems should not be understood as considering organizations to be directly penetrated and controlled by larger structures in their environment, however. They merely drew attention to organizational environments as a category in need of theorization. Prominent examples are new institutionalism and systems theory. We discuss each in the remainder of this section.

Classical systems theory defines social and natural systems as striving toward stability and survival. To this end, organizations must establish relations with their environment to deal with environmental complexities and the problem they pose for system stability. Systems are fundamentally dependent on inputs which they have to process internally and transform into outputs (Katz & Kahn, 1966). Parsons (1956), in line with his structural-functionalist framework, argues that organizations exist because they are agents of broader societal systems, thus emphasizing the harmonization of outputs with societal needs. Organizations, in other words, serve society — they fulfill certain functions for "the greater good."

As these examples demonstrate, different versions of classical systems theory discuss the connection of organizations and society in terms of input, throughput and output relations, all of which serve the function of stabilizing the organizational system. What these different versions have in common is that

organizations, while obviously being connected to their environment, are "boundary maintaining systems" (Aldrich, 1971, p. 279). A crucial difference between some of the classical approaches and the contemporary version outlined by Luhmann (see below) is that some of the former conceptualize the degree of boundary closure as an empirical variable. For instance, Aldrich (1971) assumes that those organizations which cannot decide on who is granted organizational membership have more permeable boundaries than organizations that are able to decide autonomously upon such matters. In other words, there are "limits on organizational authority over boundary maintenance" (Aldrich, 1971, p. 285).

New institutionalist theory builds upon Berger and Luckmann's (1991 [1966]) notion of institutions as historically emergent, taken-for-granted and objectified typifications of actors and actions. Its proponents define supposedly efficient formal structural elements as rationalized myths that permeate modern society and grant organizations legitimacy (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Zucker, 1977). The following quote from Meyer and Rowan's (1977, p. 346) seminal article demonstrates how classical new institutionalism conceptualizes organizational boundaries [emphasis added]:

According to the institutional conception as developed here, organizations tend to disappear as distinct and bounded units. Quite beyond the environmental interrelations suggested in open systems theories, institutional theories in their extreme forms define organizations as dramatic enactments of the rationalized myths pervading modern societies, rather than as units involved in exchange — no matter how complex — with their environments.

The rationalized myths that permeate organizations operate not only at the societal level, but also within organizational fields. Fields are defined as the set of organizations that interact together frequently, share a "common meaning system" (Scott, 2014, p. 6) in a "recognized area of institutional life," and comprise "key suppliers, resource and product consumers, regulatory agencies and other organizations that produce similar services or products" (DiMaggio & Powell, 1983, p. 48). Organizations share common institutionalized structures, norms and values with other organizations in their field, which diverge from (and may be challenged by) institutions in other fields, making field boundaries a key issue of concern (Greenwood & Suddaby, 2006; Zietsma & Lawrence, 2010).

Classical systems theory and new institutionalism have offered innovative theoretical insights into the relationship between organizations and their environment — and with respect to the observation of organizational boundaries. According to systems theory, organizations strive toward an equilibrium by means of regulated inputs, throughputs and outputs from and with the environment, whereas new institutionalism draws on the sociological concept of institutions to conceptualize formal structures as templates organizations adopt to be granted legitimacy. The focal organization was no longer investigated as a self-sufficient entity, but instead embedded in broader societal structures.

As a result, these approaches discarded the imagery of the atomistic organization that inhabits but is not impacted by or dependent upon its social environment.

TOWARD PERMEABLE BOUNDARIES OF ORGANIZATIONS? RECENT DEVELOPMENTS IN SYSTEMS THEORY AND NEW INSTITUTIONALISM

Both systems theory and new institutionalism embed organizations in a larger habitat. This begs the following question: how do these theories observe and conceptualize organizational boundaries? Both theories have divergent answers to this question because their claims of increasing or decreasing permeability of organizational boundaries rest on different premises. Depending on the theoretical perspective, the same piece of data could thus be interpreted as a sign that organizational boundaries remain impermeable, or, that they have become more permeable. In this section, we outline further developments of systems theory and new institutionalism since the 1970s. In the case of systems theory, we draw on the sociologist Luhmann (1995), whose general theory of social systems has been incorporated and further developed in organization studies in the course of the past two decades (Hernes & Bakken, 2003; Kühl, 2013; Schoeneborn, 2011; Schreyögg & Sydow, 2010; Seidl & Becker, 2006). In the case of new institutionalism, we draw on accounts that argue for conceptualizing organizations as being shaped by powerful institutional forces, which may be heterogeneously experienced by different organizations (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Hallett & Ventresca, 2006; Kraatz & Block, 2008)

Systems Theory

Luhmann (1995) outlined an original theory according to which systems come into existence by means of self-(re)production, a mode he calls "autopoiesis." The basic premise of his theory is that social systems are self-referential systems of communication, whereby communication is defined as sequences of communicative events that are selectively related to one another in a meaningful way. In the following, we outline his general systems theory and relate it to the issue of organizational boundaries.

Systems reduce the complexity of natural, psychic, or social environments. They are able to do so by realizing one event at a time (a certain thought, a certain utterance) and by connecting it to another event in the next moment and so forth. In this process of connecting past to present events, systems reproduce their existence. By recursive self-(re)production via the connection of internal events, a system effectively differentiates itself from the environment

and is — in Luhmann's terms — *operatively closed*. An important implication of such a radical concept of autonomy is that systems cannot be determined but merely "irritated." How such irritations are processed internally is mediated by the system, depending on its own state. However, and this is crucial for Luhmann's distinctive understanding of boundaries, systems are autonomous but not autarkic: they need an environment from which to distinguish themselves to come into existence. They can therefore only exist when they are able to reproduce the difference of system and environment.

The modus operandi and building block of social systems is the recursive connection of communicative events, an operation that is based in meaning, whereas, for instance, the building block of psychic systems are thoughts (Luhmann, 1995). Communication is the threefold selection of information, utterance, and understanding. Ego chooses a specific information, for instance, that he or she is tired; he or she then chooses a specific utterance to materialize this information, say, yawning; Alter closes the circle by understanding the utterance in a specific way, for instance, by deeming it impolite to yawn in public. By making the dimension of understanding a part of communication, systems theory emphasizes that Alter is always an active interpreter of Ego's utterances, who, in turn, interprets Alter's communicated reactions. Social systems thus emerge in the recursive connection of the threefold selection of information, utterances, and understandings.

Luhmann (2012) defines three types of social systems: face-to-face interactions, organizations, and societies. These three types of systems are not containers, with society encompassing organizations and interactions, but autonomous, operatively closed entities that are environments to each other. To understand the autonomy of systems it is crucial to recognize that the basic operative reproduction of systems has to be distinguished from the content of communication. Operatively closed systems might very well observe themselves to be controlled by external forces. For instance, two scientists who are engaged in a conversation might bemoan the sway neoliberalism holds over their current situation and thus observe the environment to have direct control over what they do. Thus, while they constitute an autonomous interaction system at the operative level, they observe themselves to be externally dominated. Systems theory recognizes such observations of external determinations but interprets them strictly as system-internal constructs and attributions. The following quote vividly describes the methodological consequences of such position:

New boundaries must continue to be accounted for by the rules of attributing decisions to the organization as opposed to their environment. And these rules are still bound by the fact that it is the employees of the organization and not customers or suppliers who make the decisions relevant to the organization, that is to say, decisions reflected in their books, in their programs and in their "visions." (Baecker, 1999, p. 11, our translation)

Systems theory offers novel avenues for research on the permeability of organizational boundaries. First and foremost, the quote by Baecker illustrates that a systems theoretical perspective compels researchers to explore attribution rules. If we claim that currently organizational boundaries are more permeable than those of classical formal organizations, the system-internal attribution of decisions as "own" is called into question. Such problems of attribution arise when interdependences between organization and environment increase. To understand the issue at hand, we have to keep in mind that boundaries of social systems do not have thing-like properties, but are boundaries of meaning. They arise "from the fact that the system itself must recognize which past and which future operations are to be treated as 'own'" (Luhmann, 2000, p. 79). If indeed boundaries become more permeable and organizations are controlled by their environment, we might assume the following: (a) organizations find it difficult to identify a decision as their "own" and / or (b) the attribution rules are amended. The interesting question is: can such changes be proven empirically? Are there indications that organizational rules of attribution have effectively been altered and that it is no longer the organizational members who make the decisions?

A second contribution of a systems theoretical perspective to research on organizational boundaries is its focus on how organizations construct representations of their environment. As already mentioned, such constructs are necessarily based on internal processes of sensemaking: "The system can only make sense of the outside world through the observation of its own experiences" (Hernes & Bakken, 2003, p. 1516; see also Hiller, 2005; Schreyögg & Sydow, 2010; Heidenreich, Hiller, & Dörhöfer, this volume). Environments are, in Weick's (1979) terms, "enacted." Corresponding research questions will therefore address changes in the modes of how organizations enact environments if they consider their own boundaries to be permeable.

Third, considering that interpersonal networks increasingly transect organizational boundaries, systems theory compels researchers to investigate the processes through which such constellations to arise. This implies a variety of questions: How is the often claimed increased network activity of organizational members (which, it seems, facilitates an organization's permeability) integrated into the organization? Which internal structures ensure that the relation of networking to the environment does not just increase but also reduces complexity in a meaningful way? Which structures ensure (according to internal criteria) that some types of interdependencies can be formally expected?

Fourth, organizations are the only social systems capable of communicating "on their own behalf" (Luhmann, 1994, p. 191, translation), which enables them to communicate with other organizations (Luhmann, 2000). From this perspective, it is of great interest how organizations are involved in the manufacturing of formal structural templates that ought to increase the permeability of those organizations adopting them. For instance, government agencies may rule certain organizational forms or practices to be (il)legal, but since

systems cannot directly control other systems in terms of their operative closure, those organizations interested in influencing other organizations instead try to shape the context in which the latter act, thus influencing them indirectly (Willke, 1995). In other words, shaping the context of a given set of organizations motivates them to do certain things; however, the targeted organization remains autonomous in terms of its communicative reaction to or practical ignorance of these expectations.

New Institutionalism

New institutionalism rarely theorizes organizational boundaries and their significance, though sometimes focusing instead on boundaries of the organizational field (Greenwood & Suddaby, 2006; Zietsma & Lawrence, 2010). While early theorists assumed that organizations simply "disappear as distinct and bounded units" (Meyer & Rowan, 1977, p. 346), as their environments embed and permeate them, more recently there have multiple developments that suggest that organizations indeed have (limited) agency (Oliver, 1991; Scott, 2014), particularly when they face institutional contradictions or competing institutional pressures (Beckert, 1999; Seo & Creed, 2002). Such institutional complexity (Greenwood et al., 2011) moderates the direct and deterministic influence suggested by Meyer and Rowan and opens opportunities for agency. Streams of work on this (embedded) agency include ideas of strategic choice, that is, whether to conform to or avoid, defy, manipulate, or compromise with institutional demands (Oliver, 1991); institutional entrepreneurship (Garud, Hardy, & Maguire, 2007); institutional work, involving intentional efforts to disrupt, create, or maintain institutions (Lawrence & Suddaby, 2006); and the situated improvising (Smets, Morris, & Greenwood, 2012), imperfect enactment (Oliver, 1992), or collaborative sensemaking by actors who inhabit institutions and bring them to life (Hallett & Ventresca, 2006). While fully embedded agency is associated with isomorphic compliance and faithful enactment of institutional prescriptions, various factors reduce embeddedness and enable more reflexivity, with the potential to increase agentic potential. These factors include institutional complexity, multiplicity, or plurality (Greenwood et al., 2011; Kraatz & Block, 2008; Oliver, 1991), which highlights simultaneous embeddedness in more than one institutional context (Fan & Zietsma, 2017; Ruebottom & Auster, 2018), institutional biographies, which feature differences in prior embeddedness (Kraatz & Moore, 2002; Suddaby, Viale, & Gendron, 2016), and participation in free, experimental or interstitial spaces (Bucher & Langley, 2016; Kellogg, 2009; Rao & Dutta, 2012; Zietsma & Lawrence, 2010). Each of these factors pertains to boundaries: in the first, organizations are embedded in overlapping field boundaries; in the second, actors have crossed field boundaries, but retain the memory of the institutions of their past jurisdictions; in the

third, boundaries around experimental spaces protect occupants from the institutional discipline they would normally face within their own field (Zietsma & Lawrence, 2010). In sum, institutional theory focuses on various social boundaries (Lamont & Molnár, 2002) and recognizes that actors are affected by, and must navigate, the demands associated with the (sometimes overlapping) boundaries within which they are, or have been, embedded (Vermeulen, Zietsma, Greenwood, & Langley, 2016).

Permeability thus becomes an empirical variable. Differentiating between fields, organizations, individual actors and the institutional logics which operate within and across them, allows for a nuanced take on permeability. For instance, an institutional logic, defined as the meanings and practices, prescribed, accepted, and enforced, which are associated with a given social group (Thornton, Ocasio, & Lounsbury, 2012), might permeate a field in general, but not all of the organizations that are part of the field. Some organizations may be weakly embedded (Leblebici, Salancik, Copay, & King, 1991), dually embedded in other logics (Fan & Zietsma, 2017), or they may be boundary spanners, exposing them to the demands of other logics (Greenwood & Suddaby, 2006). This is especially likely to be the case in hybrid organizations, where not all of the members prioritize logics in the same way, and conflict often ensues (Battilana & Dorado, 2010; Toubiana & Zietsma, 2017).

Permeable boundaries might open organizations to many sources of competing institutional pressures. Research could investigate the mechanisms by which some institutional pressures take precedence over others or gain more resonance, or how organizations or actors within them may become dually embedded (Fan & Zietsma, 2017) and able to integrate divergent institutional prescriptions. Furthermore, research could compare the relative constraints on agency associated with fields that mandate organizations to be permeable with fields that restrict permeability.

EMPIRICAL TRENDS

Theoretical frames of reference guide the type of data researchers collect and the inferences they make. In this section, we explore the empirical implications of either drawing on systems theory or new institutionalism when investigating organizational boundaries. Specifically, we focus on how technological progress, increasingly dynamic markets and fields, invasive transparency regimes and dense entanglements between organizations and their environment have sparked intense discussions about how to (re-)conceptualize organizational boundaries.

Advances in Information and Communication Technologies

The first trend concerns rapid advances in information and communication technology. These changes result in a compression (Harvey, 1990) or distanciation (Giddens, 1990) of time and space: electronically mediated communication can travel long distances (space) almost immediately (time), thereby creating a synchronized and connected global world. Some scholars assume that these processes have dramatic impacts on organizations, both in terms of structure and exchange relations with their environment (Puranam, Alexy, & Reitzig, 2014). Especially in the case of organizing via the Internet, they argue that it is sometimes not clear if a collective is an organization as it seems to be not clearly distinguishable from its environment. These accounts entail questions such as: are drivers using the Uber app members of the company? Are hosts on AirBnB organization members? They conclude that in what is often called "the sharing economy," it is not clear what organizational membership means (Roberts & Zietsma and Reischauer & Mair in this volume). Dobusch and Schoeneborn (2015) present the extreme case of the online collective Anonymous: on the one hand, its members obviously act on behalf of a socially identifiable entity; on the other hand, it is not clear where the boundaries between Anonymous and society are – individuals can always participate without being formal members. Cases such as these create the impression that innovations in information and communication technologies facilitate "organizing without organization," to quote the title of Shirky's (2008) book. Advances in digital technologies thus make matters of boundary formation and (im-) permeability a crucial topic of research at the organizational level (Barberio, Hoellerer, Meyer, & Jancsary, this volume) as well as at the field-level (Slade Shantz, this volume).

Systems theory: From the perspective of systems theory, advances in information and communication technologies beg the question of how mediated communication offers new opportunities for organizing and system formation. Online forms of communication often exhibit some properties of face-to-face interactions such as changing members, ambiguous or no hierarchies and little or no division of labor. The question is if and how these volatile forms of online communication eventually transform into more stable boundaries by means of constituting organizations, that is, by having relatively fixed members, some sort of hierarchy and at least rudimentary forms of division of labor. This process is interesting as it points to a change from fragile, on-and-off styles of communication to the operative closure of an organizational system on the grounds of recursive decision-making. However, it might be asked whether digital technologies, to some degree, offer the possibility of organizing without creating a formal organization of sorts. Do truly new forms of systems emerge as functional equivalents to the classical formal organization? And if so, what are the properties of such systems?

New institutionalism: Advances in information and communication technology provide interesting challenges to conventional institutional theory, as they bring actors together who are embedded in diverse organizational fields and would otherwise not interact. Social media, for example, expose people to rich narratives, affective expression and impactful visual images through socially influential networks (Lewis, Gray, & Meierhenrich, 2014; Ruebottom, Toubiana, & Zietsma, 2018). To the extent that people attend to these communications, they may be exposed to institutional contradictions (Seo & Creed, 2002), which may have the effect of making them more reflexive. Such communications provide the means by which field and organizational boundaries may become more porous, as members of bounded spaces import ideas they are exposed to online and potentially challenge field or organizational meanings or practices. Online platforms have also acted as free spaces, making the organization of protest and other types of institutional work easier (Toubiana & Zietsma, 2017), especially for marginalized actors as we saw in the case of movements like Arab Spring (Comunello & Anzera, 2012) and Occupy (Nielsen, 2013). However, much of the informal communication we see online appears to be "troll" behavior, involving people virulently promoting their own tribal viewpoints and attacking those of others. Under what conditions should we expect to see more permeability in organizational or field boundaries versus increased tribalism? What facilitates the permeability and what will its effects be on field-level norms and practices?

New information and communication technologies thus bring significant social changes: they disaggregate organizations into platforms and connect atomized producers and consumers, thereby changing the nature of work (Davis, 2016) and taken-for-granted expectations such as privacy rights (Slade Shantz, this volume). How will these changes affect the social fabric of society? From where will our identities and attachments come (Roberts & Zietsma, this volume)?

Increasingly Dynamic Field and Markets

Organizational fields and markets may face turbulent environments, which require them to constantly adapt to the latest trends and fads. From this perspective, classical bureaucratic structures that outline long-term rules, standards, hierarchies and categories of membership are seen as an impediment (Ashkenas, 1999; Ashkenas, Ulrich, Jick, & Kerr, 2002). As a result, some sort of "dissolution of boundaries between organizations and their environments" (Heydebrand, 1989, p. 331) has come increasingly into fashion among practitioners to allow organizations to successfully navigate their turbulent environments. The fluid organization, with flexible boundaries, is the new normative ideal:

Although these models differ on many dimensions, they all have a common core, i.e., the critical emphasis on fluidity and cooperative networking, both inside the organization and between organizations. High-performing organizations are seen as constantly redesigning and reinventing themselves, with increasingly fuzzy and eventually dissipating boundaries. (Schreyögg & Sydow, 2010, p. 1252)

As a result, some dismiss stability altogether and assume that the boundaries of successful companies

along vertical, horizontal, external, and geographic dimensions, are like membranes — strong enough to provide shape and definition but permeable enough to permit an easy flow of information and ideas to all parts of the firm. (Ashkenas, 1999, p. 6)

Systems theory: From a systems theoretical perspective, the idea of improving an organization's flexibility by means of creating permeable boundaries is seriously flawed. Instead of one-sidedly favoring flexibility over stability, it assumes the necessity of both states and argues that the fad of the boundaryless organization "downplays the role of organizational identity and boundary in organizational processes" (Schreyögg & Sydow, 2010, p. 1252; see also Baecker, 1999). The very concept of reducing complexity to a level an organization can administer, which lies at the core of the systems theoretical imagination, implies creating a simplified picture of the environment. If an organization tried to replicate the complexity of its environment internally, it would effectively cease to exist as a bounded entity. For this reason, organizations always face uncertainty; they reduce environmental complexity, but "can never be sure whether they have developed a successful boundary, identity, and selection pattern for future situations" (Schreyögg & Sydow, 2010, p. 1254). Against this backdrop, research could investigate how organizations incorporate the ideal of the "boundaryless organization" and how this affects internal representations of the environment. Given that stability and flexibility are both required (Luhmann, 2003), cases that exhibit a one-sided tendency for either stability or flexibility might be of particular interest. Furthermore, systems theory highlights a trend seldom recognized as a potential avenue of research: the emergence of boundaryless careers (Becker & Haunschild, 2003). Becker and Haunschild argue that traditionally, the intraorganizational career of long lasting members served as a means of reducing complexity. With the increasing turnover in personnel, "(b)oundaryless careers reduce the evaluative capacity of the form 'career'" (Becker & Haunschild, 2003, p. 722).

New institutionalism: New institutionalism provides rich accounts of organizational fields (Zietsma, Groenewegen, Logue, & Hinings, 2017), an analytical category unknown to systems theory, and thereby facilitates comparisons between fields (Kantasalmi & Tuunainen, this volume). Research could provide accounts of how permeable or impermeable the formal structures of organizations in dynamic and stable fields are, and indeed, how permeable the fields themselves are (van Wijk, Stam, Elfring, Zietsma, & den Hond, 2013). Furthermore, how permeability arises is also a question worth addressing. Concepts such as "institutional

entrepreneur" (DiMaggio, 1988) draw attention to powerful and/or creative originators of norms or ideals of permeability in different fields. However, these ideas have been criticized as underplaying socio-structural dimensions, treating individuals as hypermuscular agents (Suddaby, 2010), unconstrained by institutions. Other ideas focus on intersections and overlaps among institutional fields, which bring competing institutional prescriptions to bear (Evans & Kay, 2008; Zietsma et al., 2017), and interstitial spaces wherein people from different fields interact and innovate (Furnari, 2014). Furthermore, globalization creates boundary openings as organizations that did not formerly interact now come into regular contact and must have some means of governing their interactions (Muzio & Faulconbridge, 2013; Smets et al., 2012).

In addition, institutional theory focuses on professional fields, interactions among and between professions as well as other actors. Boundaries and boundary work plays a significant role in this body of work. For example, medical professionals in many countries are working to implement more interprofessional care teams, with the idea that patient care would be improved and costs could be reduced if medical professionals such as nurses, doctors, psychologists and physiotherapists could coordinate with one another. These efforts have stimulated significant boundary work by professionals seeking to protect or expand their turf (see, e.g., Bucher, Chreim, Langley, & Reay, 2016; Currie, Lockett, Finn, Martin, & Waring, 2012). This trend, often mandated by governments, has created significant dynamism within professional fields, but is also substantially resisted by participants, particularly physicians, whose role is privileged in existing arrangements. Much of this work has focused on defensive boundary work to maintain status quo arrangements or to (often unsuccessfully) try to expand the boundaries of a given profession at the expense of another (Reay, Golden-Biddle, & GermAnn, 2006). Yet, some work shows how actors may be able to partially disembed themselves from their home institutional programing and open themselves reflexively to others from different organizational fields through shared social and moral emotions and emotional energy (Cartel, Boxenbaum, & Aggeri, 2018; Fan & Zietsma, 2017; Ruebottom & Auster, 2018).

Still other work identifies how technological, market, or social changes have driven disparate actors together to collaborate on significant projects, with implications for boundary work, such as the formation of the nanotechnology field (Grodal & O'Mahony, 2017). One route to manage such projects is through the formation of boundary organizations or boundary settlements, which set the rules and manage the ongoing relationships of actors from different fields (Helms, Oliver & Webb. 2012; O'Mahony & Bechky, 2008).

Given that one of the drivers of dynamic fields and markets is an increasing interdependence among actors of many different persuasions in addressing social problems or technological markets, the ability to identify integrative projects or solutions across field and market boundaries is highly beneficial. Work on public-private partnerships or other types of cross-sector partnerships,

facing problems with divergent institutional commitments, norms and values, and further work into the processes of embedding, disembedding and dually or multiply embedding would be very beneficial both theoretically and societally.

Invasive Transparency Regimes

For a long time, organizations conveyed only limited information about internal activities to external audiences. If they did, they disclosed little more than their formal structure (Roberts, 2006). In the post-World War II era, different forms of making organizations more visible emerged. For instance, starting in the 1960s in the United States, freedom of information legislation coerced public organizations to release information to any interested party, regardless of whether they were US citizens or not, when requested (Schudson, 2015). From the 1980s onward, the popularization of the term transparency (Ringel, 2017) by scientists, NGOs, politicians, consultants, journalists and civil society activists has compelled different types of organization to adhere to pervasive forms of information disclosure, such as auditing, benchmarking, quality management, rankings, open government initiatives and Corporate Social Responsibility (CSR) reporting among others. Many of these visibility instruments not only concern inputs (such as budgets) or outputs (such as legislations passed or commodities produced) but mandate activities (such as decision-making processes) to be available for public scrutiny. As a result, organizations today face the challenge of tearing down boundaries of visibility between internal activities and public self-presentations in order to provide an unrestricted flow of information to a host of external audiences (expert commissions, shareholders, government agencies, or even the general public).

Systems theory: The system theoretical concept of communication suggests a radically different view of the possibility of creating true insight into a social system. From this perspective, organizations have to select a specific disclosure mode for the sake of transparency. The ideal of "authentic" self-disclosure is thus flawed as communication by default entails altering information by transforming it into an utterance. Furthermore, organizations, when revealing hitherto undisclosed information, cannot be sure how external audiences are going to react as they might understand it in rather different ways than originally intended — a phenomenon also recognized by transparency research (Fenster, 2015). It might thus be asked how specifically external audiences interpret the information emanating through organizational boundaries and how the sending organization responds to the reaction, effectively creating an interorganizational communication network in which the meaning of the original information is negotiated. As a result, systems theory is skeptical of the potential of true transparency (Ringel, this volume).

New institutionalism: New institutionalism conceptualizes transparency as a typical example of a rationalized myth (Jang, Cho, & Drori, 2014; Ringel,

2017), which provides legitimacy and the modernity prestige to those who publicly embrace it. In terms of organizational boundaries, the notion of transparency is particularly interesting as it is supposed to prevent decoupling activities. In other words, transparency poses grave challenges to an organization's ability to maintain what Meyer and Rowan (1977, p. 357) call a "logic of confidence and good faith," that is, the maintenance of the appearance that organizations truly are the way they present themselves by means of ceremonial inspections and evaluations. When inspections are substantive instead of ceremonial, the question is how this impedes an organization's ability to perform its tasks effectively, as this sometimes implies deviations from formal rules (Anechiarico & Jacobs, 1996; Mathur, 2012) but also from cultural or moral standards (Ringel, 2017; Ringel and Albu & Ringel in this volume). In addition, when one combines demands for transparency with the trends mentioned earlier, it becomes clear that the audiences of organizations are diverse and hold different ideas about what is legitimate. How can an organization that pursues a transparency agenda maintain legitimacy when the very actions that make it legitimate with one group may make it illegitimate with another? It is no surprise that industry groups around the world seek self-governance of their own standards, such as corporate social responsibility standards, since such control enables them to set process goals instead of outcome goals, and self-governance can be expected to reduce transparency and enable decoupling of structure and practice (see, e.g., Buchanan, 2016; O'Sullivan & O'Dwyer, 2009, 2015).

Meta-organizations

Nationally as well as internationally, organizations are increasingly inclined to form associations for various purposes: Governments join supranational political associations such as the European Union or the United Nations, professional sports teams are usually part of national leagues, which, in turn, often participate in international organizations such as the FIFA, businesses join trade associations and social responsibility organizations, social movements join coalition organizations, universities join university associations (Brankovic, this volume), and international airports require all kinds of organizations to develop cooperative structures (Apelt & Hunnius, this volume). All these are, in Ahrne and Brunssons (2008) terms, meta-organizations.

The creation of meta-organizations differs from mergers, acquisitions, and conquests; it does not entail the disappearance of any organization. [...] They retain their organizational boundaries, but a new boundary is placed around them all. (Ahrne & Brunsson, 2008, p. 64)

In terms of permeable boundaries, meta-organizations force organizations to take other organizations much more into account than, say, organizational fields, thereby requiring them to give up some decisional discretion while they simultaneously try to maintain their status "as independent actors" (Ahrne,

Brunsson, & Seidl, 2016, p. 97). For example, it is relatively common practice for trade associations to require their members to adopt certain performance standards (particularly around social responsibility) as a condition of membership (Buchanan, 2016; O'Sullivan & O'Dwyer, 2009; van Wijk et al., 2013).

Systems theory: Systems theoretically, the term meta-organization is problematic in that systems do not contain other systems: the FIFA is not a container that encompasses national football associations, the Russell Group is not a container for British universities. Meta-organizations are thus organizations that are specific types of environments to other organizations. The FIFA is then a relevant environment of Manchester United, just like Arsenal London, the UEFA or the Premier League. As these different types of organizations are related to one another, we might ask how operatively closed organizations create internal representations of other organizations within which they have a membership. In his early writings, Luhmann (1999 [1964]) outlines a mechanism that helps explain how organizations are able to take the actions of other organizations into account. He argues that organizations regularly create positions that are mainly occupied with monitoring and acting in the environment and are thus able to represent the environment in the organization. However, since organizations are operatively closed systems based on recursive decisionmaking, the question is how such internal representations of what Ahrne and Brunsson call meta-organizations are integrated and renegotiated in the internal flow of communication.

New institutionalism: In new institutionalism, meta-organizations and the field configuring events (Lampel & Meyer, 2008) they often create are key sites within which field-level norms are negotiated and through which they are enforced (see, e.g., Greenwood & Suddaby, 2006; Helms et al., 2012). Meta-organizations such as industry or professional associations often manage external pressures to protect their members from individual scrutiny (Buchanan, 2016; O'Sullivan & O'Dwyer, 2015; van Wijk, et al., 2013). When meta-organizations serve multiple organizational fields, how are agreements reached across those with different logics and conceptions of value? How do such voluntary organizations maintain the power to govern field members? As globalization challenges and neo-liberal changes in many countries reduce the power of governments and we increasingly rely on meta-organizations for self-governance, what societal outcomes can we expect? How do we ensure that these meta-organizations exhibit the transparency and permeability necessary for good governance?

CONTRIBUTIONS TO THE VOLUME

Systems theory and new institutionalism have different implications in the analysis of organizational boundaries and their permeability. While new

institutionalism is to a certain degree based on the premise that organizations are permeated by field-level and societal norms and values, systems theory maintains that social systems only come into existence when they achieve operative closure and draw a distinction between themselves and the environment. A new institutionalist framework then lets us see that organizations are permeated by and, in turn, create institutional templates, whereas a systems theoretical framework leads us to believe that we need to trace the ways in which organizations achieve operative closure by linking communicative events. However, we need to stress that these are only two of a rich variety of options. While some of the contributors to this volume share the theoretical frameworks we outlined, others take different avenues. The volume has four sections, which we discuss in the remainder of this chapter.

Conceptualizing Organizational Boundaries

The first section discusses conceptual and theoretical perspectives, ranging from systems theory to resource dependence theory, from boundaries between the organization and the environment to intraorganizational boundaries. The contributions poignantly demonstrate that different theoretical frameworks highlight different phenomena. Michael Power draws attention to the role of accountants in socially constructing what is to be considered as within or outside the confines of an organization, making boundaries an object of attribution and thus negotiation as well as interactive struggle. Boundaries are then not permeable in themselves, but are made permeable by negotiated attribution processes: if accountants successfully institutionalize organizations as having permeable boundaries, for instance, by making them responsible for the impact of their own actions on the natural environment, then they are indeed more permeable.

Leopold Ringel outlines a framework for analyzing the impact of increased societal pressures for organizational transparency. Implementing transparency measures of various kinds is supposed to tear down boundaries of visibility that prevent external audiences from monitoring organizational activities. By combining the interaction theory of Erving Goffman and sociological systems theory the author sheds light on the emergence of new forms of secrecy in reaction to efforts to create more transparency. Accordingly, the transparency imperative does not necessarily make organizations more permeable and has unintended generative properties: boundaries of visibility do not vanish, they shift, which the author considers to be an interesting topic of research in its own right and not a nuisance, as normative takes suggest.

Paul S. Adler and Charles Heckscher focus on internal boundaries. Their contribution deals with how organizations can create and sustain a sense of shared purpose in large, complex organizations. They argue that shared

purpose in such contexts requires a distinctive organizational design that they call "collaboration." This design aims to institutionalize what Max Weber calls value-rational action. Where instrumental-rational action takes for granted the ultimate ends of activity and focuses the actor's mind on how best to achieve those ends, value-rational action is shaped by constant reflection on the meaning and implications of the ends to which the activity is oriented. The chapter identifies four organizational principles that undergird the collaborative design, and that allow larger, more complex organizations to preserve value-rationality, and that thus enable the maintenance of shared purpose in such contexts. In terms of boundaries the chapter assumes the possibility of certain norms of collegiality to permeate large and complex organizations despite all forms of division of labor.

Georg Reischauer and Johanna Mair argue that the sharing economy is as prime example of new contexts strongly relying on information and communication technologies that blur several traditional boundaries of economic life. To make better sense of organizing in such contexts, they propose two avenues. First, they put forward the concept of hybrid community to denote a variant of an online community that mirrors the boundary-blurring nature of the sharing economy. In a hybrid community, individuals interact both online and offline (instead of only online) and consume as well as produce. Second, they revisit the range of strategic responses suggested by extant literature to minimize the dependence of a platform organization on its hybrid community.

Boundaries and Intraorganizational Processes

Section two discusses intraorganizational dynamics. The contributions focus on the creation of organizational boundaries, their supposed permeability, unintended consequences, and how actors make sense of them. Vitaliano Barberio, Markus Höllerer, Renate Meyer, and Dennis Jancsary explore shifting organizational boundaries in the Apache open software community between 1995 and 2002. Their findings suggest that both purposeful organizational design and unintended and informal adjustments function as drivers of boundary formation and impact the permeability of boundaries. However, while both the salience and the formalization of boundaries increase exponentially, different boundary concepts (ranging from efficiency to identity) gain traction at different points of time. Contrary to received wisdom, increasing formalization does not necessarily reduce the permeability of organizational boundaries, but in some cases even increases it.

Martin Heidenreich, Petra Hiller, and Steffen Dörhöfer use sociological systems theory to criticize the claim that organizations are open systems. They argue that such theories overlook organizational strategies aimed at continuing

their own logics and their standard operating procedures, all external challenges notwithstanding. The empirical example the authors use is the activation discourse in employment policies and its assumption that job centers should follow the model of open network organizations, which are considered to be best equipped to deliver individualized offers of employment and social services. In the case studied by the authors, the job centers responded to attempts to implement activation policies by developing their own decision-making criteria in a procedural, structural and personal dimension, thereby practicing simultaneously, in system theoretical terms, operative closure and cognitive openness.

Anna Roberts and Charlene Zietsma shed light on how "on-demand" workers attach meaning and belongingness to their work. They argue that "on-demand" organizations such as the provider of the driving-app Uber have unclear and sometimes conflicting boundaries constructed by organizational and societal boundary discourse. In a qualitative study they investigate how workers (i.e., users who provide services via apps) make sense of their connection to the organization in light of the ambiguous boundaries. The findings suggest that workers often felt frustration, cynicism, and even fatalism since the positive identity available to them (entrepreneurial driver-partner) was belied by boundary discourse and organizational practices which "disappeared them" as driver-bots and app-users lacking both autonomy and connection.

Oana Albu and Leopold Ringel present a comparative case study of two organizations, the German Pirate Party and the international lobbying organization Epsilon, which voluntarily seek to implement extensive forms of transparency. The authors focus on the impact of such measures on organizational practices in three dimensions: First, organizations have to deal with the tension between manufacturing a consistent self-presentation to external audiences on the one hand and the danger of transparency measures to expose inconsistency on the other. Second, transparency enables all kinds of actors to use disclosed information to surveil other actors, which, in turn, triggers various kind of data ordering, sorting, and aggregation. Third, as organizations are imbued with complex webs of micro political struggles, transparency measures might become a resource in power games.

Extending Boundaries: Meta-organization and Organizational Networks

The contributions of the third section revolve around the phenomenon of interorganizational processes and their effects on boundaries. Jelena Brankovic investigates how the long-established practice among universities to form associations affects categorical boundaries within and across organizational fields. The chapter looks into 185 such associations established since the end of the nineteenth century and finds that the majority of associations effectively demarcate members of organizational categories from nonmembers. This dynamic, the author argues, may affect category meanings, identities and ultimately organizational boundaries. The chapter also looks into how the changing global-cultural conditions over the past century have been conducive to the worldwide diffusion of different types of associations and, by extension, to the strengthening or weakening of boundaries between universities within and across organizational fields.

Maja Apelt and Jana Hunnius focus on how spatial proximity impacts the boundaries of organizational networks. The authors assume that members of organizations who share similar experiences develop a sense of community and cooperation. However, they argue that organizational boundaries do not become fully permeable. Drawing on Henri Levebre, they distinguish three dimensions of spatial practice: the spatial practice proper, that is, the way in which organizations organize literal physical space; the organizational practice, that is, the establishment of formal and informal structures; and, finally, the representative practice, that is, the meaning organizations attach to physical space and the different forms in which they legitimize their actions. The authors use this framework to analyze interorganizational networks at two German airports. While one airport is characterized by a strong sense of community and organizational boundaries, the other airport has a weak sense of community, but possesses structures of cooperation that induce permeable boundaries between the different organizations involved. As these cases suggest, whether boundaries between spatially proximate organizations that need to cooperate on a daily basis become more permeable is an empirical question.

Boundaries and Organizational Fields

The fourth section closes the volume with organizational fields and their impact on the permeability of organizational boundaries. Angelique Slade Shantz presents the case of an emerging field of big data governance, specifically access to personal data, which often underlies many online or app-based business models. Such models treat users, who are outside of the traditional organizational boundaries, as product, content, and customer simultaneously. The emerging field is thus characterized by high degrees of permeability in terms of exchange relations between organizations and different categories of individuals. Furthermore, it compels research to reconsider classical categories of organizational membership, which usually designate individuals to be members or non-members of organizations. In addition, it raises serious societal issues with respect to privacy and data governance.

Kari Kantasalmi and Juha Tuunainen investigate patterns of interactions between universities, industries and governments, which have created the entrepreneurial university — a type of hybrid organization that blurs the boundaries between economic development, scientific research and higher education. The authors draw on new institutionalism, Pierre Bourdieu, and Niklas Luhmann to theorize organizational fields. They analyze reflective contesting of the states of what Bourdieu calls "doxa" in disciplinary struggles and discuss the organizational aspects of disciplinary boundaries in higher education, specifically the way in which universities draw boundaries with respect to businesses, schools and science policy.

CONCLUSION

Boundaries are a key concept in the sociology of organizations, whether within organizations or between organizations and their environment. Yet their status and relative permeability is an empirical question, affected by the theoretical lens one uses to examine them. In this introduction to the volume, we have contrasted systems theory and neo-institutional approaches to boundaries, focusing in depth on several empirical trends: advances in information and communication technologies, increasingly dynamic fields and markets, invasive transparency regimes and meta-organizations. The contributions in this volume elaborate on these and other empirical trends, drawing on different theoretical perspectives, to advance our understanding of the importance of boundaries within and around organizations.

REFERENCES

Ahrne, G., & Brunsson, N. (2008). Meta-organizations. Cheltenham: Edward Elgar Publishing.

Ahrne, G., Brunsson, N., & Seidl, D. (2016). Resurrecting organizations by going beyond organizations. *European Management Journal*, 34(1), 93–101.

Aldrich, H. (1971). Organizational boundaries and inter-organizational conflict. *Human Relations*, 24(4), 279–293.

Anechiarico, F., & Jacobs, J. (1996). The pursuit of absolute integrity: How corruption control makes government ineffective. Chicago: University of Chicago Press.

Ashkenas, R. (1999). Creating the boundaryless organization. Business Horizons, 42(5) 5-10.

Ashkenas, R., Ulrich, D., Jick, T., & Kerr, S. (2002). The boundaryless organization. *Facilities*, 20(10), 350.

Baecker, D. (1999). Organisation als system. Frankfurt am Main: Suhrkamp.

Barnard, C. I. (1938). The functions of the executive. Cambridge: Harvard University Press.

Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, 53(6), 1419–1440.

Becker, K. H., & Haunschild, A. (2003). The impact of boundaryless careers on organizational decision making: An analysis from the perspective of Luhmann's theory of social systems. *International Journal of Human Resource Management*, 14(5), 713–727.

Beckert, J. (1999). Agency, entrepreneur and institutional change. The role of strategic choice and institutionalized practice in organizations. *Organization Studies*, 20(5), 777–799.

- Berger, P., & Luckmann, T. (1991 [1966]). The social construction of reality. A treatise in the sociology of knowledge. New York, NY: Penguin Books.
- Buchanan, S. C. (2016). Trade associations and the strategic framing of change in contested issue organizational fields: The evolution of sustainability in the Canadian mining Industry, 1993–2013. Retrieved from https://yorkspace.library.yorku.ca/xmlui/bitstream/handle/10315/32254/Buchanan_Sean_C_2016_PhD.pdf?sequence=2&isAllowed=y
- Bucher, S., & Langley, A. (2016). The interplay of reflective and experimental spaces in interrupting and reorienting routine dynamics. *Organization Science*, 27(3), 594–613.
- Bucher, S. V., Chreim, S., Langley, A., & Reay, T. (2016). Contestation about collaboration: Discursive boundary work among professions. *Organization Studies*, *37*(4), 497–522.
- Cartel, M., Boxenbaum, E., & Aggeri, F. (2018). Just for fun! How experimental spaces stimulate innovation in institutionalized fields. *Organization Studies*. doi:10.1177/0170840617736937
- Comunello, F., & Anzera, G. (2012). Will the revolution be tweeted? A conceptual framework for understanding social media and the Arab Spring. *Islam and Christian-Muslim Relations*, 23(4), 453–470.
- Currie, G., Lockett, A., Finn, R., Martin, G., & Waring, J. (2012). Institutional work to maintain professional power: Recreating the model of medical professionalism. *Organization Studies*, 33(7), 937–962.
- Davis, G. F. (2016). The vanishing American corporation: Navigating the hazards of a new economy.

 Oakland, CA: Berrett-Koehler Publishers.
- DiMaggio, P. (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment* (S. 3-21). Cambridge: Ballinger.
- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48(2), 147–160.
- Dobusch, L., & Schoeneborn, D. (2015). Fluidity, identity, and organizationality: The communicative constitution of Anonymous. *Journal of Management Studies*, 52(8), 1005–1035.
- Evans, R., & Kay, T. (2008). How environmentalists "greened" trade policy: Strategic action and the architecture of field overlap. *American Sociological Review*, 73(6), 970–991.
- Fan, G. H., & Zietsma, C. (2017). Constructing a shared governance logic: The role of emotions in enabling dually embedded agency. *Academy of Management Journal*, 60(6), 2321–2351.
- Fenster, M. (2015). Transparency in search of a theory. European Journal of Social Theory, 18(2), 150–167.
- Furnari, S. (2014). Interstitial spaces: Microinteraction settings and the genesis of new practices between institutional fields. *Academy of Management Review*, 39(4), 439–462.
- Garud, R., Hardy, C., & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies*, 28(7), 957–969.
- Giddens, A. (1990). The consequences of modernity. Cambridge: Polity Press.
- Gouldner, A. W. (1954). Patterns of industrial bureaucracy. A case study of modern factory management. New York. NY: The Free Press.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *The Academy of Management Annals*, 5(1), 317–371.
- Greenwood, R., & Suddaby, R. (2006). Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, 49(1), 27–48.
- Grodal, S., & O'Mahony, S. (2017). How does a grand challenge becomes displaced? Explaining the duality of field mobilization. *Academy of Management Journal*, 60(5), 1801–1827.
- Hallett, T., & Ventresca, M. (2006). Inhabited institutions: Social interactions and organizational forms in Gouldner's patterns of industrial bureaucracy. *Theory & Society*, *35*(2), 213–236.
- Harvey, D. (1990). The condition of postmodernity: An enquiry into the origins of cultural change. Cambridge, MA: Blackwell.
- Helms, W. S., Oliver, C., & Webb, K. (2012). Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility. Academy of Management Journal, 55(5), 1120–1145.

- Hernes, T., & Bakken, T. (2003). Implications of self-reference: Niklas Luhmann's autopoiesis and organization theory. Organization Studies, 24(9), 1511–1535.
- Heydebrand, W. V. (1989). New organizational forms. Work and Occupations, 16(3), 323-357.
- Hiller, P. (2005). Organisationswissen. Eine wissenssoziologische Neubeschreibung der Organisation. Wiesbaden: VS.
- Jang, Y. S., Cho, M., & Drori, G. S. (2014). National transparency. Global trends and national variations. *International Journal of Comparative Sociology*, 55(2), 95–118.
- Katz, D., & Kahn, R. L. (1966). The social psychology of organizations. New York, NY: John Wiley & Sons
- Kellogg, K. C. (2009). Operating room: Relational spaces and microinstitutional change in surgery. American Journal of Sociology, 115(3), 657–711.
- Kraatz, M., & Block, E. (2008). Organizational implications of institutional pluralism. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), The Sage handbook of organizational institutionalism (pp. 243–275). Thousand Oaks, CA: Sage.
- Kraatz, M., & Moore, J. H. (2002). Executive migration and institutional change. Academy of Management Journal, 45(1), 120–143.
- Kühl, S. (2013). Organizations: A system approach. Farnham: Burlington.
- Lamont, M., & Molnár, V. (2002). The study of boundaries in the social sciences. Annual Review of Sociology, 28(1), 167–195.
- Lampel, J., & Meyer, A. D. (2008). Guest Editors' introduction. Field-configuring events as structuring mechanisms: How conferences, ceremonies, and trade shows constitute new technologies, industries, and markets. *The Journal of Management Studies*, 45(6), 1025–1035.
- Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *Handbook of organization studies* (pp. 215–254). London: SAGE.
- Leblebici, H., Salancik, G. R., Copay, A., & King, T. (1991). Institutional change and the transformation of interorganizational fields: An organizational history of the US radio broadcasting industry. *Administrative Science Quarterly*, 36(3), 333–363.
- Lewis, K., Gray, K., & Meierhenrich, J. (2014). The structure of online activism. *Sociological Science*, *I*(1), 1–9.
- Luhmann, N. (1994). Die Gesellschaft und ihre Organisationen. In H. -U. Derlien, U. Gerhardt, & F. W. Scharpf (Eds.), *Systemrationalität und Partialinteresse. Festschrift für Renate Mayntz* (pp. 189–201). Baden-Baden: Nomos.
- Luhmann, N. (1995). Social systems. Stanford, CA: Stanford University Press.
- Luhmann, N. (1999 [1964]). Funktionen und Folgen formaler Organisation. Fünfte Auflage. Berlin: Duncker & Humblot.
- Luhmann, N. (2000). Organisation und Entscheidung. Wiesbaden: Westdeutscher Verlag.
- Luhmann, N. (2003). Organization. In T. Bakken & T. Hernes (Eds.), Autopoietic organization theory. Drawing on Niklas Luhmann's social systems perspective (pp. 31–52). Oslo: Abstrakt forlag.
- Luhmann, N. (2012). Theory of society. Stanford, CA: Stanford University Press.
- March, J., & Simon, H. (1993 [1958]). Organizations. Cambridge, MA: Blackwell Publishers.
- Mathur, N. (2012). Transparent-making documents and the crisis of implementation: A rural employment law and development bureaucracy in India. *Political and Legal Anthropology Review*, 35(2), 167–185.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Muzio, D., & Faulconbridge, J. (2013). The global professional service firm: 'One firm' models versus (Italian) distant institutionalized practices. *Organization Studies*, 34(7), 897–925.
- Nielsen, R. K. (2013). Mundane internet tools, the risk of exclusion, and reflexive movements Occupy Wall Street and political uses of digital networked technologies. *The Sociological Quarterly*, 54(2), 159–228.

- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145–179.
- Oliver, C. (1992). The antecedents of deinstitutionalization. Organization Studies, 13(4), 563-588.
- O'Mahony, S., & Bechky, B. A. (2008). Boundary organizations: Enabling collaboration among unexpected allies. *Administrative Science Quarterly*, 53(3), 422–459.
- O'Sullivan, N., & O'Dwyer, B. (2009). Stakeholder perspectives on a financial sector legitimation process: The case of NGOs and the Equator Principles. *Accounting, Auditing & Accountability Journal*, 22(4), 553–587.
- O'Sullivan, N., & O'Dwyer, B. (2015). The structuration of issue-based fields: Social accountability, social movements and the Equator Principles issue-based field. *Accounting, Organizations and Society*, 43(3), 33–55.
- Parsons, T. (1956). Suggestions for a sociological approach to the theory of organizations. *Administrative Science Quarterly*, *I*(1), 63–83; 225–239.
- Puranam, P., Alexy, O., & Reitzig, M. (2014). What's "new" about new forms of organizing? Academy of Management Review, 39(2), 162–180.
- Rao, H., & Dutta, S. (2012). Free spaces as organizational weapons of the weak: Religious festivals and regimental mutinies in the 1857 Bengal Native Army. Administrative Science Quarterly, 57(4), 625–668.
- Reay, T., Golden-Biddle, K., & GermAnn, K. (2006). Legitimizing a new role: Small wins and microprocesses of change. *Academy of Management Journal*, 49(5), 977–998.
- Ringel, L. (2017). Transparenz als Ideal und Organisationsproblem. Eine Studie am Beispiel der Piratenpartei Deutschland. Wiesbaden: Springer VS.
- Roberts, A. (2006). Blacked out: Government secrecy in the information age. New York, NY: Cambridge University Press.
- Ruebottom, T., & Auster, E. R. (2018). Reflexive dis/embedding: Personal narratives, empowerment and the emotional dynamics of interstitial events. *Organization Studies*, 39(4), 1–24. doi:10.1177/0170840617709308.
- Ruebottom, T., Toubiana, M., & Zietsma, S. (2018). Tweets, likes, and hashtags: Reflexive engagement and the influence of social media characteristics. Working paper.
- Santos, F. M., & Eisenhardt, K. M. (2005). Organizational boundaries and theories of organization. *Organization Science*, 16(5), 491–508.
- Schoeneborn, D. (2011). Organization as communication: A Luhmannian perspective. *Management Communication Quarterly*, 25(4), 663–689.
- Schreyögg, G., & Sydow, J. (2010). Organizing for fluidity? Dilemmas of organizational forms. *Organization Science*, 21(6), 1251–1262.
- Schudson, M. (2015). The rise of the right to know. Politics and the culture of transparency (pp. 1945–1975). Cambridge, MA: The Belknap Press of Harvard University Press.
- Scott, W. (1998). Organizations: Rational, natural, and open systems. Englewood Cliffs, NJ: Prentice-Hall.
- Scott, W. R. (2014). Institutions and organizations. Thousand Oaks, CA: Sage.
- Seidl, D., & Becker, K. H. (2006). Organizations as distinction generating and processing systems: Niklas Luhmann's contribution to organization studies. *Organization*, 13(1), 9–35.
- Selznick, P. (1949). TVA and the grass roots. Berkeley, CA: University of California Press.
- Seo, M., & Creed, W. (2002). Institutional contradictions, praxis and institutional change: A dialectical perspective. *The Academy of Management Review*, 27(2), 222–247.
- Shirky, C. (2008). Here comes everybody: The power of organizing without organizations. London: Penguin.
- Simon, H. (1997 [1945]). Administrative behaviour. A study of decision-making processes in administrative organizations. New York, NY: The Free Press.
- Smets, M., Morris, T. I. M., & Greenwood, R. (2012). From practice to field: A multilevel model of practice-driven institutional change. *Academy of Management Journal*, 55(4), 877–904.
- Suddaby, R. (2010). Challenges for institutional theory. *Journal of Management Inquiry*, 19(1), 14–20.

- Suddaby, R., Viale, T., & Gendron, Y. (2016). Reflexivity: The role of embedded social position and entrepreneurial social skill in processes of field level change. *Research in Organizational Behavior*, 36(12), 225–245.
- Taylor, F. W. (1967 [1913]). The Principles of Scientific Management. New York, NY: Norton.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: A new approach to culture, structure, and process*. Oxford: Oxford University Press.
- Toubiana, M., & Zietsma, C. (2017). The message is on the wall? Emotions, social media and the dynamics of institutional complexity. *Academy of Management Journal*, 60(3), 922–953.
- Van Wijk, J., Stam, W., Elfring, T., Zietsma, C., & Den Hond, F. (2013). Activists and incumbents structuring change: The interplay of agency, culture, and networks in field evolution. *Academy of Management Journal*, 56(2), 358–386.
- Vermeulen, P. A. M., Zietsma, C., Greenwood, R., & Langley, A. (2016). Strategic responses to institutional complexity. *Strategic Organization*, 14(4), 277–286.
- Weick, K. E. (1979). The social psychology of organizing. New York, NY: Random House.
- Willke, H. (1995). Systemtheorie III: Steuerungstheorie. *Grundzüge einer Theorie der Steuerung komplexer Sozialsysteme*. Stuttgart: Gustav Fischer Verlag.
- Zietsma, C., Groenewegen, P., Logue, D., & Hinings, C. R. (2017). Field or fields? Building the scaffolding for cumulation of research on institutional fields. *Academy of Management Annals*, 11(1), 391–450.
- Zietsma, C., & Lawrence, T. B. (2010). Institutional work in the transformation of an organizational field: The interplay of boundary work and practice work. *Administrative Science Quarterly*, 55(2), 189–221.
- Zucker, L. G. (1977). The role of institutionalization in cultural persistence. *American Sociological Review*, 42(5), 726–743.