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The transformative power of network dynamics: a research agenda

Abstract

The emergence and proliferation of network forms of organization has sparked interest and debate in organization studies. We have learned much about the effects of networks but our understanding of how they are formed, how they change, and how networks can themselves possess agential properties that make them complex social actants is limited. In selecting papers for this special issue, we were persuaded by arguments that our understanding of networks and their transformative power can benefit from greater attention to culture and discourse, which provide meaning and direction to network participants and are indispensable agentic resources. The special issue contains two sets of papers. The first set debates the articulation between the organized and emergent dynamics of networks and its impact on knowledge exchanges and innovation. The second set seeks to inform our understanding of the manifestations of power in network dynamics. For each section, we provide a tentative research agenda. Our hope is that this Special Issue will both advance our ability to conceptualize, measure, and manage network evolution and enhance our understanding of the transformative impact of network dynamics on organizations and society.

Key words: Social network theory - Organizational development and change - Organizational form

The transformative power of network dynamics: a research agenda

Once scattered across the landscape of the social sciences, social network analysis has coalesced into a vibrant program of research, one with enviable inter-disciplinary reach, ranging from physics and biology to economics and criminology (for reviews see Borgatti, Mehra, Brass, & Labianca, 2009; Freeman, 2011). This explosion in the popularity of network research is readily discernible in the field of management where network research has already generated a "large research tradition" that has analysed relationships within and across organizations (Brass, Galaskiewicz, Greve, & Tsai, 2004, p. 809; Kilduff & Brass, 2010; Ahuja, Soda, & Zaheer, 2012). Moreover, the language of networks is no longer confined to academic discourse. With the emergence of online social networking services, such as Twitter and Facebook, as well as the rise of networked forms of organization around the globe, it is not hyperbolic to argue that "the network has become the dominant metaphor of our time" (Scott & Davis, 2007, p. 278; cf. Wellman & Berkowitz, 1988). In the increasingly global and technologically-connected world in which we live, networks can be considered the basic fabric of society. Sociologically oriented organizational theorists have noted the proliferation of networks, organizational configurations that are dissimilar from both markets and hierarchies. Networks are not a new form of organization but they have in recent years become "a key feature of social morphology" (Castells, 2010, p. 5). The network form of organization can be defined as a collection of two or more actors engaged in repeated and enduring exchange relations with one another but that lacks a legitimate organizational authority to resolve disputes that may arise during exchange (Podolny & Page, 1998, p. 59). Scholars have argued that the networked form of organization possesses its own logic (e.g. Powell, 1990; Hamel, 1991) and is becoming more prevalent because it offers

efficiency advantages—e.g., in learning—that neither markets nor hierarchies afford (Podolny & Page, 1998).

The progressive emergence of the network society has been captured in the field of organisation studies across at least three broad streams of research.

First, a succession of scholars since the early 80s have described the emergence of internal network forms that contributed to the establishment of the post-bureaucratic era. Criticisms of bureaucracy were associated with the questioning of control mechanisms, such as strategic planning or input controls (Lenz & Lyles, 1985; Huber, 1991; Marx, 1991). Critics such as Mintzberg and Waters (1985) argued that strategy was emergent rather than planned and that strategic planning was of limited value (Mintzberg, 1993). The classic tools of bureaucratic controls, it appeared, were less appropriate when confronted with unstable, unpredictable environments (Pascale, 1990; Daft & Lewin, 1993; Victor & Stephens, 1994).

Bureaucracies, by definition, tended to be set in their routines; hence, one important criticism of bureaucracy was that it hampered organizational learning (Argyris & Schon, 1978; Fiol & Lyles, 1985; Senge, 1990; Argyris, 1991; Quinn Mills & Friesen, 1992; Mintzberg, 1993). Inspired by the post-bureaucratic/network organisation perspective, various scholars pointed to seemingly new organizational forms characterized by autonomous connections between decentralized units and empowered individuals that stimulated collaboration, knowledge sharing and learning (Josserand, 2004). These new organizational forms included the adhocracy (Mintzberg, 1980), Silicon Valley organizations (Rahrami, 1992), the N-form (Hedlund, 1994) and the model of British Petroleum (Quinn Mills & Friesen, 1992). Increasingly, research stressed the collaborative and knowledge sharing capabilities of

these new organizations (Kogut & Sander, 1992; Winter, 1993; Ghoshal & Moran, 1996; Nahapiet & Ghoshal, 1998; Zack, 1999; Merali, 2000).

Rather than a pure form premised solely on networks, post-bureaucracies appear as hybrids (Josserand, Teo, & Clegg, 2006), located between a network logic (Eccles & Crane, 1987; Jarillo, 1988; Bradach & Eccles, 1989; Powell, 1990) and the remnants of bureaucratic controls (Josserand, 2004). Post-bureaucracy may not signal the end of bureaucracy so much as its refurbishment (Clegg & Courpasson, 2004). These new forms are not ideal structures free from domination (Herrschaft), the hallmark of bureaucratic relations as Weber (1978) defined them; these new form organizations articulate innovative forms of domination based on neo-liberal principles of governmentality in which orientations structuring goal attainment are internalized in terms of market norms, performance targets and other forms of discipline, rather than being bureaucratically imposed by regulation (Foucault, 1991). Regulation is instead increasingly defined in terms of the freedoms of the person managing the organization rather than their submission to rules. These freedoms, rather than democratizing bureaucracy, fragment resistance under cover of empowering distributed systems that are free to choose how targets and norms are oriented towards. Frameworks that empower individuals as they also direct their orientations, buttress the disciplines of rules, creating freedoms through which we are increasingly governed. Understanding the paradoxes, contradictions and ambiguities of the post-bureaucratic/networked organization remains an important undertaking for better understanding how such organizations operate in the networked economy.

Second, and more conventionally, inter-organisational networks and collaborations have gained increasing attention over the last decade, with one central theoretical foundation being the resource-based view of the firm (Barney, 2001), developed into

the knowledge-based view (Kogut & Sander, 1992). Building on the resource based view of the firm, the dynamic-capabilities approach attempts to answer the question of how an organization can adapt its pool of resources to stay competitive (Teece, Pisano, & Shuen, 1997). A practical translation of such theoretical development was the interest in the 80s not only in core competencies but also in outsourcing and alliances – forms of networking – as ways of developing organizations in a globalizing environment (Prahalad & Hamel, 1990). It was, in particular, the development of value chain approaches (Porter, 1985) linking core firms with external partners, which made these networks global. Through these inter-organizational networks organizations gained access to external resources and competences that could be combined with their internal capabilities (Acedo, Barroso, & Galan, 2006; Dyer & Nobeoka, 2000; Foss, 1999; Hagedoorn, Roijakkers, & Van Kranenburg, 2006; Kogut, 2000), captured in the concept of strategic network capabilities. External networks for accessing resources to develop new competencies, expanding capabilities, making them dynamic capabilities in terms of strategies, became a central focus of analysis (Borys & Jemison, 1989; Dyer & Nobeoka, 2000; Hagedoorn et al., 2006; Kogut, 2000).

The shift to a focus on networks blurred the market and hierarchy distinctions that transaction cost economics had sculpted. Seminal research exploring the paradox of embeddedness in the apparel industry by Uzzi (1997) led to an appreciation of the balance between arm's length (i.e., market-like links) and embedded ties, where embedded ties foster knowledge transfer (Dyer & Nobeoka, 2000). The paradoxical and often ambiguous power relationships within inter-organizational networks (Tsai, 2002) that are a blend of cooperation and competition became seen, in a neologism, as coopetition. The work on embeddedness, knowledge networks and coopetition remained firm-centric approaches: latterly, these have been challenged by emergent

forms of networks, such as in the field of open-source software or, more recently, in some manifestations of the sharing economy. Innovative forms of governance (Demil & Lecocq, 2006) and value appropriation characterize such models.

Third, networks have also been studied as an intermediary level of structure between fields and actors – individual or collective. In this perspective, networks can be understood as the structures holding institutional fields together (Meyer & Rowan, 1983), influencing their evolution (Powell & DiMaggio, 1983). Networks are powerful carriers of new social norms, values and practices that contribute to innovative institutionalization. Numerous studies have shown the contribution of networks to the institutionalization of fields through the diffusion of practices (see Fligstein, 1985; Mizruchi, 1992; Westphal & Zajac, 1997) where the diffusion of practices depends on the sociometric position of an actor in the field (Burns & Wholey, 1993) and the proximity between actors (Davis, 1991). Networks are tools that shape contexts through the practices of network entrepreneurs. By creating and generating new flows networks create and maintain contextual situations favourable to their objectives (for example, Leblebici, Salancik, Copay & King, 1991). Despite their agency, networks are still often considered as inert and invariant diffusion channels (Owen-Smith & Powell, 2008) rather than as devices for translation (Czarniawska & Sevón, 2005).

A few studies from a neo-institutional perspective adopt a co-evolution perspective in which it is accepted that "networks shape institutions but institutions sculpt networks and direct their growth" (Owen-Smith & Powell, 2008, p. 605). Powell & DiMaggio (1983) discussed how network development was crucial in structuring a field. Such process is not straightforward. While networks are inherently dynamic, their connections are not always positive – they can become a liability, due to shifts in the

environment; conversely, they can show unexpected relevance, leading to innovation and transformations, be it organizational, inter-organizational or social, as events shape their relevance and acuity. Transformation initially encouraged by an actor or actors through networks can become a threat, creating resistance and counter-resistance.

Organization Studies has contributed greatly to our understanding of a network society. Informed by Castells and other research, it may now be a truism to say that we live in a network society, one composed of increasingly networked organizations. With advances in technologies, networks are constantly changing and co-evolving, presenting agential properties that make them significant social actants. Networks, therefore, are not simply structural, as some organization theorists might suggest; they do have agentic qualities. Communication networks, including digital mass self-communication networks, are core to the networked economy. These channels present a paradox: they are increasingly plural in their messages, customers and products but increasingly concentrated in their ownership. During 2014, according to Keen (2015), the world's internet users – all three billion of them – sent 204m emails, uploaded 72m hours of YouTube video, undertook 4m Google searches, shared 2.46m pieces of Facebook content, published 277,000 tweets, posted 216,000 new photos on Instagram and spent $83,000 on Amazon every minute, every day. These networks are doing many things. The image of the power of flow might be more complex than sometimes depicted.

At present there are widely disparate forecasts about the future promise of a networked economy. On the one hand, there is the prospect of intensified monopoly capitalism as Internet based digital business normalizes around monopoly capital models; on the other hand, in their affordances, such as the sharing economy, those

less inclined to focus on ownership and control of the means of production might see a post-capitalist future of interdependent entrepreneurs.

Communication flows in ways that have been revolutionized since the development of digital technologies, creating the global network society in its interactions and exchanges with, as well as its marginalization of, already existing societal sites, cultures, organizations and institutions of various types. These power relations have a structural architecture, however, expressed in terms of spatial and temporal orderings that are focused on the extraction and appropriation of value conceived in terms of various logics that are themselves an expression of power. The network economy lends itself to monopolies as a global platform for free-market late capitalism as a frictionless, borderless economy. A 2013 survey by the US Institute for Local Self-Reliance found that, on average, a regular bricks-and-mortar store creates jobs for 47 employees to generate $10m in turnover; Amazon achieves the same with 14 employees. Amazon destroyed roughly 27,000 US jobs in 2012 (Keen, 2015). The Internet concentrates wealth on the one hand and on the other empowers and promotes a democracy of prejudice and ignorance. While it may also foster a commonwealth of knowledge, as it transcends the boundedness of international relations, the discrimination required to make essential judgments remains tied up in professional codes rather than the democracy of the commons.

Nonetheless, some observers see the future as post-capitalist. In the early 21st century, Mason (2015) suggests, this future is being achieved through the mass commercialisation of everyday life and desires by applications such as Facebook. For Mason, abundant information is currently both too valuable and too cheap for an economic model based on private property to endure, creating a tension between knowledge (which is limitless) and ownership (which is limited), representing the

basic contradiction of capitalism. Mason's unifying idea is "networks versus hierarchies", such that the central challenge of contemporary politics is to discover new ways to reconcile networks with hierarchies through the institutions of representative democracy.

Questions of value appropriation were intrinsic for Castells (1996), who concludes that the network society is one in which capitalism "shapes social relationships over the entire planet." (p. 502). Hence the power of flow doesn't necessary lead to the end of domination but extends it greatly. Indeed, networks are evolving and dynamic structures and the flow of the structure is as important as the flow conducted by these structures. In what has become an increasingly information-based economy, there may be substance to Castell's claim that "the power of flows takes precedence over the flows of power" (Castells, 1996, p. 500). Organizations often fail in network transformations because they tend to stick to the illusion that networks are instrumental webs that provide reliable and stable access to resources and manageable and predictable innovations. They thus neglect the power of networks and their transformative force as social actants. From political resistance in totalitarian states to communities of consumers, networks can play a role in shifting the flows of power.

While these debates paint the big picture associated with power and network dynamics, we still know very little about how power relations play out in networks or their outcomes in terms of social change and innovation. The question of the management of network dynamics, while crucial, remains under-researched. There may be valid reasons for this lack of knowledge: network transformation is a complex phenomenon and its measurement and analysis – let alone the challenges of collecting longitudinal network data – pose many problems, both technical and conceptual (for a review, see Doreian & Stokman, 2005). By starting to address this complex

intersection between power and network dynamics, the special issue seeks to advance understanding of the organizational and societal implications of social networks in action. In pursuing this goal, we were mindful of Salancik's (1995) observation that the tie—arguably the fundamental unit of network analysis—is too often treated as a given when, instead, one should inquire why certain ties come into existence and others disappear, and why certain network structures emerge rather than others. When networks are observed at one point in time, it is easy to miss the underlying organizing that may be going on.

In selecting papers for this special issue, we were persuaded by arguments that our understanding of networks and their transformative power benefit from greater attention to culture and discourse, which provide meaning and direction to network participants and are indispensable agentic resources, as actors seek to maintain and/or change the networks in which they are embedded (e.g., Emirbayer & Goodwin, 1994; Kilduff & Tsai, 2003; Mische, 2011). The special issue brings together six thoughtful and provocative papers that help advance our ability to conceptualize, measure, manage and advise network emergence and evolution within and across organizational boundaries, and seek to contribute to a growing understanding of the impact of such networks on organizations and society. One set of papers (D'Andreta, Marabelli, Newell, Scarbrough, & Swan, 2016; Corbo, Corrado, & Ferriani, 2016; Levanti, Dagnino, & Mocciaro Li Destri, 2016) debates the articulation between the organized and emergent dynamics of networks and its impact on knowledge exchanges and innovation. The second set of papers seeks to inform our understanding of the manifestations of power in network dynamics (Qureshi, Kistruck, & Bhatt, 2016; Parker, Halgin, & Borgatti; Maclean & Harvey, 2016). For each section, we provide a tentative research agenda to help further extend the line of work.

Orchestrating Networks for Innovation

Innovation research has long established that networks, because they provide access to resources necessary for the concretization of new ideas, are central to innovation (Perry-Smith & Shalley, 2003). For the purpose of innovation, such resources vary from knowledge and information to social influence or support (Adler & Kwon, 2002). Hence the networking behaviour of firms has an impact on their innovative capabilities (Pittaway, Robertson, Munir, Denyer, & Neely, 2004) since it supports, among other things, the pooling of complementary skills (Hagedoorn & Duysters 2002) and access to external knowledge (Powell, Koput, & Smith-Doerr, 1996). In that sense, a key role of networks is to act as channels for knowledge transfer within and between organizations.

The debate on the "ideal" network structure to foster innovation (Rost, 2011) echoes the general debate on network closure and compares the merits of "bridging social capital" (Burt, 1992) and "bonding social capital" (Putman, 2000). In a contingent approach to social capital the contribution of both bridging and bonding social capital is combined and recognized as innovative (Burt, 2005; Hansen, 1999; Hansen, Podolny and Pfeffer, 2001). Such networks should incorporate strong and weak ties, where strong ties allow exchanging of complex, proprietary and strategic knowledge (Wright, Van Wijk & Bouty, 1995; Hansen, 1999), while weak ties allow access to new information and opportunities favourable to exploration (Hansen et al., 2001).

Much of the research to date on networks and innovation has been static— the network is considered as a set channel for collaborative knowledge exchanges and the balance of the network is not considered dynamically (Owen-Smith & Powell, 2004). However, as underlined in the contribution to this special issue, a key relationship of networks to innovation relies on network dynamics and the complex interaction

between, on the one hand, managing the creative chaos necessary to the emergence of new knowledge and innovation (Nonaka, 1994) and, on the other, the management of the actors in the network. As underlined by Levanti et al. (2016), the majority of extant research still adopts the dichotomy between emergent networks and orchestrated networks (Provan & Kenis, 2008). The first three contributions to this special issue help consider networks and innovation as orchestrated emergence, a dynamic process where we can start to envision on-going adaptation of the network to innovative needs in a specific context as the norm of innovation in a network economy.

D'Andreta et al. (2016) set the scene with a rich case-based analysis of two collaborative networks in the health services in UK. The focus of the paper is the dynamic interactions between dominant frames about the purpose of the network and network structure and the impact of this interaction on collaboration and innovation within the network. One of the interesting aspects of this paper is the description of the co-evolution of cognitive frames and structure, neither of these being fully orchestrated or fully emergent. To provide this insightful account, the authors use a rich mixed-method design, integrating interview narratives, secondary documents, cognitive mapping, correspondence and social network analysis. The study contrasts two different networks dynamics: a rather centralized structure framed as research rigour of the case "Blue," and the more decentralized structure framed around implementation. Each emerging pattern is associated with differentiated collaborative dynamics and innovation output. Beyond the idiosyncrasies of the two cases contributing to our understanding of orchestrated emergence, cognitive framing is not naively understood as an exercise of domination by management but rather is seen as the combination of such exercise with the practices of the network. The paper also helps explain how orchestrated emergence can lead to very distinct types of

innovation (convergent versus divergent innovation). From the perspective of network theory, one of the crucial insights this paper offers is that informal network structure and the dominant discursive frames that are used to endow the network with strategic purpose and meaning are mutually constitutive. To understand why certain networks are more successful than others at delivering innovation, we must look beyond its structural characteristics to understand how well-placed actors seek to align (or misalign) network structure with the dominant discourses that help frame the network's purpose and strategy.

Embracing the agentic turn in institutional theory (Fligstein, 2001), Corbo et al. (2016) describe how the generative rules underlying the structuration of the global airline industry were affected by the unexpected, exogenous shock of the 9/11 terrorist attacks. Corbo et al.'s (2016) analysis draws on rich longitudinal data on alliances formed before and after September 11, 2001. Given their interest in the relationship between structure and agency, Corbo et al. (2016) draw on stochastic actor-based models of network dynamics (see Snjiders, 2011, for a review). In this modelling approach, where actors initiate changes in ties, the model accounts for dependence between ties as well as dependence across time. By examining the dynamics of tie formation and dissolution, Corbo et al. (2016) seek to uncover the logics of attachment that helped guide airlines in their decisions regarding with whom to partner. The question of orchestration and emergence, in the sense that while actors make choices leading to the emergence and reconfiguration of networks, such choices are also influenced by network structure and network patterns that are outside the control of individual actors, are central. The centrality is manifest in the commonalities observed in the approach to social network writing before the exogenous shock and re-writing after the shock. The authors observed a shift from a conservative logic leading to further stratification of the field towards a logic

combining an intensification of conservatism through triadic closure with outreach to peripheral members. There was an active mobilisation of agentic capabilities by the actors in the field where network rewiring was used to try and temper the negative effect of the exogenous shock. Through this new strategic approach, actors were able to transform their collaborative patterns, leading to a less stratified and more inclusive field.

Levanti et al. (2016) theorize this question of orchestrated emergence by focusing on the effect in time of "intentional governance". To do so, they use the models of network structure dynamics elaborated in complex network studies. Studies conducted at the intersection between network research and complexity science propose a multilevel interpretive framework that clarifies the role and scope of intentional agency at different structural levels of inter-organizational networks. A key contribution is the distinction of the role and scope of governance – the intentional organizing of emergence – in relation to formal and informal networks' dynamics. Such a distinction results in an improvement of the efficiency and speed of network knowledge processes and thus of network outcomes by appropriate dynamic governance affording an appropriate mix between formal and informal networks. The paper also provides the first elements of a whole network governance theory, one that integrates complex models of network evolution beyond the more classical small-world models.

Implications for Research

We see several implications for research arising from this first set of three papers. First, they point to the need for better accounts of the dynamic interplay between network structures on the one hand and the rules and resources embodied in cultural narratives and dominant discourses on the other. Narratives, as White (1992) has

noted, are crucial to an understanding of networks and their transformation because they are what make network action interpretable. Networks can be recalcitrant tools. The orchestration of networks, if it is to be effective, has to be mindful of prevailing cultural beliefs and expectations that provide actors with vocabularies of motive and frameworks for reasoning. Rather than treating discourse and culture as polluting influences a fruitful direction for future network research would be to find ways of building them more directly into network theorizing (cf. DiMaggio, 2011).

Second, there appear to be a range of possible generative logics that govern the transformation of networks and help unleash their innovative power. However, these generative logics are not totally impervious to the control of agents. Agents, at least under certain conditions, can reengineer the logics underlying networks and set a new course for network development and transformation. Uncovering the principles that govern whether such transformations succeed or fail should be a priority for future research.

Third, according to configurational approaches (Oliver & Ebers, 1998; Meyer, Tsui, & Hinings, 1993), it is highly likely that small modifications of some of these variables, not just major shocks, could modify the evolution of a given network. The testing of various mediation approaches as well as further exploration of the micro-dynamics of network reconfiguration is called for. Of special interest is a better understanding of whether and when small changes in micro-evolutionary dynamics can result in radical or incremental reconfigurations of a network.

Fourth, studies of network dynamics and network balance should better account for the multiplexity of network structure. While the question of network closure has been widely debated, there is still a lot of work to be done if we start to mesh questions relative to bonding and bridging ties, strong and weak ties, formal and informal ties,

arm's length and embedded ties and the nuances existing within any network structure. Understanding how a network structure evolves not only in terms of the dynamics of one type of ties but in terms of the dynamics of tie transformation, where weak ties become strong, distrust becomes trust, etc., is a challenging but essential task for network research. Taken together, these four items constitute an ambitious research agenda, one that holds the promise of helping us better address fundamental questions about the durability and resilience of network structures.

Power in network dynamics: domination and social change

In his description of the network economy, Castells (1996) shows the disconnection between the globalized meta-network of capitalism and most actors around the world and their activities. Castells recognizes the importance of the structural positions of the switchers, those that have the ultimate power to connect or disconnect the component of the meta-network, in consideration of whom the Foucauldian image of power has never been more vivid. In the meta-network, structure is unstable and in constant flow, in which power is not a commodity possessed by an elite but rather an "intentionality without subject" (Hoy, 1989: 148), inhering in relational networks and nodal points in these as they canalize social, organizational and other relations. Power is thus a "network of relations constantly in tension, in activity, rather than a privilege that one possesses" (Foucault, 1979: 26-27). Domination is thus reproduced and innovated through on-going interactions in micro-exercises of power.

While Castells predicts that the observable result of such dynamics will result in the continued domination of capitalism, others see the capabilities of resistance as benefiting from the network economies' accelerating questioning of structural positions. The argument that, because they are social structures, networks also have their own agential potential (Keck & Sikkink, 1998, Kahler, 2009) can be connected

to the emergence of "advocacy networks", networks that regroup stakeholders of a given issue around a set of shared values and beliefs (Stein, 2009). Advocacy networks push for change by developing a discourse that challenges current views on a local or international issue (Keck & Sikkink, 1998) and are characterized by collective agency (Bandura, 2000). A key question – which might be exactly where Castells (1996) and Mason (2015) diverge – is thus that of the new order that could emerge from the meta-social disorder described by Castells.

In such a context, organization studies can again contribute greatly to our understanding of where the network economy is heading by providing insight into the decentralized and uncoordinated micro-exercises of power that shape the networks of the network economy. This is precisely what the second group of papers of this special issue do by informing our understanding of the manifestations of power in network dynamics.

A vivid account of the micro-exercise of power on network dynamics is that presented by Parker et al. (2016) who show how performance feedback affects the redeployment and utilization of individual networks. Using impressive whole-network panel data on the information seeking ties among the members of the IT department of a global consulting firm, this study found that whereas positive performance feedback led people to form new ties and increase the utilization of existing ties, negative performance feedback led individuals to focus on a small number of frequently accessed contacts. The study suggests that individuals exert agency in shaping their workplace networks. But these agentic efforts can be counterproductive. Without guidance on how to manage their networks in order to recover from poor performance evaluation, most people make changes to their networks that are only likely to detract from future performance. Instead of reshaping their networks in ways that might

enhance their future power and influence in the workplace, left to their own devices individuals may reshape them in ways that leave them weaker and more vulnerable.

Maclean & Harvey (2016) explore the complexities of the flow of power in the highly dynamic context of a campaign in the charitable field ("Give it Back George: Drop the Charity Tax"), which sought to block a proposed tax change in the United Kingdom's 2012 budget. What may have appeared to be spontaneous conjoining of individuals and organizations was in fact a campaign orchestrated by rich philanthropists who wished to overturn a proposed cap on tax relief on charitable donations, announced by the British Chancellor, George Osborne. While this campaign, and the network it set into motion could be initially conceived as a perfect illustration of successful resistance by an advocacy network, the campaign involved subtle power games, as dominant actors pursued their goals by activating latent ties, connecting people, forging new connections. The network tactics employed by dominant actors were designed, moreover, to be purposefully opaque. To succeed, the dominant actors who set the network in motion had to be sensitive to the cultural context and political climate they were operating in — it was a period of economic recession and austerity and, unless properly framed, their actions could easily have been seen as self-interested attempts by an elite to maintain a system that favoured their predilections. The construction and use of the network behind the Give it Back George campaign required skilful orchestration by powerful actors who accomplished much behind the scenes. The network neither emerged nor performed spontaneously, however. It was the result of a status-preserving effort by elites who engaged in the kind of agentic behaviour that Padgett and Ansell—in their magisterial network study of the rise of Cosmo de Medici in Italy in the early part of the 15th century—have called "robust action": locking in others, but not yourself, in sequences of strategic play that thereby become predictable (Padgett & Ansell, 1993, p. 1264).

Maybe a more optimistic perspective on the possibilities of social change offered by network dynamics is presented in the paper by Qureshi et al. (2016). The authors study the development of social entrepreneurship in China, where it is widely regarded as suspect and lacking in legitimacy. The data come from a diary study and interviews with social entrepreneurs and their contacts. Whereas past work has focused on the structure and content of networks, this study suggests that the order in which ties are activated has a strong impact on the likelihood of individuals breaking with the norms and expectations of their social context (which tend to discourage social entrepreneurship). The paper provides a fascinating account of the manner in which the selective mobilization of network structure is implicated in norm-breaking organizational activity. The authors found that if social entrepreneurs mobilize their heterophilic ties before their homophilic ties, they are more likely to engage in norm-breaking behaviours. The study offers valuable insight into the fragility of both agency and embeddedness and raises the question of how actors can escape structural domination and constraint.

Implications for Research

The second set of papers in this special issue contributes to the exploration of how the power of flow and the flow of power are meshed in the network economy. In doing so, they open a series of avenues for future research.

A first fundamental question is that of the manifestation of agency not only as the capability to use networks for individual or collective benefit but also to create and modify network structures, i.e. the power of the switchers. While Parker et al. (2016) and Maclean & Harvey (2016) show how domination can be preserved through management practices and the veiled intervention of actors belonging to the elite, it would be interesting in future to study manifestations of resistance as well as

dominant power. Actually, most contexts would encompass manifestations of both resistance and dominant power: the power of the switcher is likely to be highly contested in a fluid network economy. Hence, further studies should be able to explore how different logics and discourses become manifest in the shaping and dynamic use of networks, thus resulting in stability or change. Pursuing these efforts will contribute greatly to our understanding of the future of the network economy.

The network economy has been characterized in terms of its fluidity as a key feature, creating dynamics in which agential capabilities are more contestable than ever. The conditions of agency cannot be reduced to the position of power in a network – for instance, as a field broker or member of an elite, preferably in a heterogeneous field. Qureshi et al. (2016) perfectly illustrate this point when they demonstrate that the dynamic use of a network is a strong determinant that an agency can lead to social change. There is much to learn about how agency emerges not only from a position in a network but also can be revealed by the microanalysis of the network foundation of agency. Which networks, which network dynamics, in which contexts will strengthen individual agency and resistance and which will reinforce conformity and domination? This is an important question that will inform the fluidity of power in a networked economy. It also has practical implications for how we use our networks.

Conclusion

The network tradition in organizational research has at times attributed to structure a concreteness and solidity that is both immutable and determinate. Structural language is well suited to explaining how social life comes to be patterned and the consequences of this patterning but is less well equipped to explain how these patterns might change and evolve. As Salancik (1995) noted in his trenchant critique of organizational network research, when structures are treated as fixed and unchanging,

chance and design errors can be mistaken for theoretically relevant phenomena. It is only by turning our attention to the processes that account for the appearance and disappearance of ties and the larger networks in which they are embedded that we can begin to understand how collective action is organized and with what consequences. The articles that make up this special issue take the dynamic and transformative abilities of networks seriously. They also point to the value of adopting a more pragmatic approach to the study of networks, one that blends structural analysis with theoretical perspectives that are both more attentive to agency and to the symbols, meanings, and values that make up cultural discourses in which networks are themselves embedded. Given our increasingly networked society, the ability to conceptualize, measure, and manage network emergence and evolution should be a top priority for organizational research.

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