Bringing Agency Back into Network Research:

Constrained Agency and Network Action

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December, 2012

We thank Wayne Baker, Dan Brass, Andreea Gorbatai, Mark Mizruchi, Chris Muller, Luciana Silvestri, Maxim Sytch, András Tilcsik, and Pavel Zhelyazkov for valuable feedback on prior drafts. The authors contributed equally. The usual disclaimer applies.

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Abstract: This article enriches the conception of agency that prevails in network research by proposing a framework of constrained agency. Our framework is grounded in the resources and motivations that actors draw on within their structurally constrained context. Structural positions influence the resources available to actors and color the motivations that shape their actions. At the same time resources equip actors to exert agency while motivations propel them to do so. Examining how specific resources are used when particular motivations are operative reveals ideal types of constrained agency. Within the wide range of actions that constrained agency can encompass, we focus on network action. We derive a typology of network actions and illustrate how the form of constrained agency through which a particular network action is taken can affect actors' ensuing structural positions and the nature of the constraints they subsequently face. We conclude by discussing how this conceptualization of constrained agency can help identify new sources of endogenous change in network structure and can serve as a guide for future empirical research.

INTRODUCTION

Social theorists have long debated the relative contributions of human agency and structure to social interactions and network dynamics (Bourdieu, 1986; Giddens, 1984; Sewell, 1992). This debate has typically focused on the extent to which and the conditions under which actors can exercise agency in the face of structural constraints. It has also explored the multiple facets of structural constraint and the mechanisms whereby it can limit agency. Yet empirical research has largely continued to privilege structure over agency; when agency is invoked, the mechanisms by which actors exert agency remain under-theorized (Emirbayer and Mische, 1998). Though it characterizes organizational sociology in general, this pattern is particularly striking in the study of social networks, which has emphasized documenting how actors' social networks shape their behavior and outcomes.

This article offers a richer conception of the interplay between constraint and agency. We strive to make three main contributions to network research. First, we propose a framework that clarifies how structure constrains action and then elucidates the microfoundations of agency in the face of structural constraint. In short, we propose a framework of constrained agency. Our framework begins with the assumption that structural positions influence the resources available to actors and color the motivations that shape their actions. It illuminates the role of resources in equipping actors to exert agency, and that of motivations in propelling them to do so. In other words, resources indicate *how* actors exert agency (e.g., Gulati, 2007), while motivations represent *why* they exert agency. To derive ideal types of constrained agency, we examine how resources are used when particular motivations are operative. Though constrained agency can

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¹ Our framework applies to both individuals and organizations as social actors.

² In considering actors' motivations to exert agency, we are not making a functionalist argument along the lines criticized by Granovetter (1992: 48-51). We focus on the dynamics of agency rather than a static view, and seek to make forward-looking predictions rather than just to explain past outcomes.

encompass a wide range of actions, we focus on one elemental form of action: network action. Second, we derive a typology of network actions and demonstrate how our framework of constrained agency can enrich understanding of the dynamics of each form of action. Finally, we illustrate how the form of constrained agency operative in a particular network action can have consequences for actors' ensuing structural positions and the nature of the constraints they subsequently face. Finally, we discuss how this conceptualization of constrained agency can help identify new sources of endogenous change in network structure and can serve as a guide for empirical research.

THEORETICAL BACKGROUND

Early conceptual work on social networks emphasized the primacy of structure (Wellman, 1983; Wellman and Berkowitz, 1988; White, Boorman, and Breiger, 1976). Consider, for example, Mayhew's (1980: 339) critique of social theories that privilege the individual over social structure: "If one assumes the structure of society in order to examine its impact on the immediate acts, thoughts, and feelings of individuals, one has assumed most of what has to be explained (indeed, about 95 percent of the variation in human society) in order to study a small part of human activity and experience (about 5 percent—and as such, difficult to distinguish from random noise)." Mayhew's conceptual perspective was a direct challenge to an alternative view that highlighted the role of individual action. Homans (1964: 818), for example, argued, "If a serious effort is made to construct theories that even begin to explain social phenomena, it turns out that their general propositions are not about the equilibrium of societies but about the behavior of men." Social theorists have taken different sides in this debate, but empirical network research has usually favored structural determinism.

The structure—agency debate has played out across a variety of research traditions in sociology, notably in institutional theory. Though early research tended to emphasize the role of institutions in shaping organizational choices and outcomes (DiMaggio and Powell, 1983; Meyer and Rowan, 1977), a movement to elevate the role of agency in institutional change has emerged in recent years (Barley and Tolbert, 1997; Battilana, Leca, and Boxenbaum, 2009; Suddaby, Elsbach, Greenwood, Meyer, and Zilber, 2010). A growing body of work has highlighted the role of institutional entrepreneurs as actors who break rules and reject practices associated with a dominant logic (DiMaggio, 1988; Greenwood and Suddaby, 2006). And institutional processes have been shown to give rise to a variety of specific strategic responses, such as acquiescing, compromising, avoiding, defying, and manipulating (Oliver, 1991). Indeed, the shift from "determinant to interactive arguments" is by now a well-documented trend in institutional theory (Scott, 2008: 429).

In the social-networks tradition too, theory development has witnessed a swing from largely structural accounts to those in which individual choice and action feature more prominently. Granovetter's (1985: 487) notion of embeddedness served as a rallying cry to strike a better balance between structural and agentic accounts: "A fruitful analysis of human action requires us to avoid the atomization implicit in the theoretical extremes of under- and oversocialized conceptions. Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy." Unfortunately, few compelling attempts have been made to reconcile the over- and under-socialized perspectives conceptually or empirically.

Coleman's (1990) theory of social action, grounded in methodological individualism, provided an important means to try to find balance—though many have argued that its central

focus on agency in purposive action undertaken by utility-maximizing individuals was overly restrictive (see, for example, Small, 2009). Coleman's conception of individual agency, bounded by such constraints as obligations and expectations, inspired several prominent network theories. Burt's (1982: ix) theory of structural action, for example, asserted that "Actors are purposive under social structural constraint." Indeed, across the expanse of his research, Burt (1982, 1992, 2004, 2005) has sought to explain how structure impinges on people's views of their social worlds and on the capabilities they develop. Structure thus shapes action. Yet, in Burt's framework as in Coleman's, agency is defined as purposive action undertaken by actors seeking to advance their own interests. As Burt (1992: 5) writes: "[P]eople and organizations are not the source of action so much as they are the vehicles for structurally induced action." Thus, even Burt's version of constrained action pays less attention to how actors exert agency than to how structure constrains their actions. (But see Burt, 2010: 224-227, for a more recent critique of theories that "assume away" or "hold constant" agency, and for an articulation of a model of "endogenous agency" in which agency is determined by network context but plays a more prominent role.)

Despite attempts by Coleman, Burt, and others to find the middle ground, Granovetter's (1985) call to strike a better balance between over-socialized and under-socialized conceptions of social action has not been thoroughly fulfilled. With a few notable exceptions, researchers have treated structure as more or less given, and have paid less attention to how actors create, perpetuate, and modify structure through their actions. As a result, network research continues to generate numerous calls to account better for the role of human agency (Emirbayer, 1997; Emirbayer and Goodwin, 1994; Ibarra, Kilduff, and Tsai, 2005). Even studies that employ longitudinal research designs (for a recent review, see Ahuja, Soda, and Zaheer, 2012) have

tended to adopt a limiting set of assumptions and to favor structural accounts. The forces that enable and motivate constrained agency have therefore remained under-specified and poorly theorized.

TOWARD A FRAMEWORK OF CONSTRAINED AGENCY

Our proposed framework draws inspiration from prior conceptual work suggesting that agency and structure are subtly intertwined, in such a way that structure is simultaneously exogenous and endogenous (Bourdieu, 1977; Gulati, 1995; Gulati and Gargiulo, 1999; Padgett and Ansell, 1993). In this tradition, structure shapes agency and the actions that follow, but is subsequently affected by those actions. We begin by considering an actor's position in social structure.³ This position shapes a set of resources that are accessible to actors and makes salient a set of motivations. For example, structural positions impart resources in the form of cultural capital (Bourdieu, 1986). Motivations, which are based in part on actors' understanding of what actions are "possible, legitimate, and interpretable," also derive from structural positions (Fligstein and McAdam, 2012: 11). In this sense, structure serves to constrain agency. Much has been written about how structure shapes behavior, but it is less well understood how agency operates within this constrained context. We propose that the same two key facets of constraint, resources and motivations, also help unpack the dynamic unfolding of agency within social structure. Resources equip actors to exert agency in the face of constraint, and motivations propel them to do so. Thus, resources and motivations that were initially constrained by structure subsequently

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³ Consistent with Barley and Tolbert (1997) and Stevenson and Greenburg (2000), we argue that structure does not exist without action but that some aspects of the social world can be taken to preexist.

⁴ Resources and motivations have served as essential building blocks for theorizing about structure and agency in classical accounts—such as Parsons' (1951) theory of social action, Giddens' (1984) theory of structuration, and Sewell's (1992) theory of structure—and in contemporary work such as Fligstein and McAdam's (2012) theory of social fields. Yet prior theories have not adequately combined these building blocks to construct a unified perspective on constrained agency and network action.

give rise to agency. The motivations that cause resources to be used identify ideal types, or forms, of constrained agency. A wide range of actions can arise through constrained agency. Our arguments pertain to an elemental form of action: network action, or the concrete actions that an actor can take with respect to a given social relation. The form of constrained agency embodied in network action can influence actors' subsequent structural positions and transform the fundamental nature and purpose of their social relations. Thus, constrained agency influences the resources and motivations likely to animate actors' future attempts at agency. In this sense, agency gives rise to subsequent constraint. In short, this conceptualization helps specify *both* how actors exert agency in the face of constraint *and* how their actions create new constraints.

We will first describe two distinct types of resources and two core motivations that are in part determined by actors' structural positions. Resources and motivations each provide a partial window into how actors' structural position and social relations might change when they take network action. The resources used to take network action affect the fundamental purpose and meaning of social relations, while the motivations underpinning network action can shift structural positions. A more complete understanding of these changes emerges when one considers the motivations by which resources are utilized. We next characterize four ideal types of constrained agency—that is, distinct combinations of resources and motivations. We then derive a typology of network actions and illustrate how the constrained-agency framework can enrich our understanding of the dynamics associated with each network action.

Resources

Social theorists have defined resources in a variety of ways, ranging from media that can serve as sources of power (Giddens, 1984) to schema that enable actors to overcome constraint (Sewell,

1992). We define resources, whose nature is in part determined by the structural position an actor occupies, as the means by which they take action in the face of structural constraint. We further distinguish between two kinds of resources: capability-based and symbolic.

By *capability-based resources*, we mean the skills, dispositions, and cognitive orientations that actors possess. These resources provide actors superior insight with which to map and navigate their social environments. For example, prior research has identified such individual-level attributes such as need for cognition (Anderson, 2008), self-monitoring orientation (Mehra, Kilduff, and Brass, 2001; Mehra and Schenkel, 2008; Oh and Kilduff, 2008; Sasovova, Mehra, Borgatti, and Schippers, 2010), *tertius iungens* orientation (Obstfeld, 2005), implicit collaborative self-concept (Srivastava and Banaji, 2011), and accuracy of cognition about informal structure (Krackhardt, 1990) as associated with an actor's ability to migrate into advantaged structural positions. At the organizational level, similarly, such capabilities as the ability to visualize alliance portfolios in relation to the entire industry (Ozcan and Eisenhardt, 2009) and the ability to channel resources from network partners (Gulati, Lavie, and Madhavan, 2011) can propel firms into positions of advantage.

By *symbolic resources*, we refer to cultural objects (Lamont and Small, 2008) such as frames (McLean, 1998) and their associated schemata (Srivastava, 2012b), worldviews (Vaisey and Lizardo, 2010), and narratives (Somers, 1994). These resources enable actors to shape and alter the meaning and purpose of social relations (cf. DiMaggio, 1997; Emirbayer and Goodwin, 1994); thus they importantly determine the content that flows through social ties. Symbolic resources do not merely shape the meaning and purpose of interpersonal relations; they also influence inter-organizational ties—such as through cooperative norms that vary across national

contexts and affect the configuration of alliance networks (Vasudeva, Spencer, and Teegen, forthcoming).

Motivations

Actors deploy resources to achieve a variety of aims. These motivations, which are shaped by actors' structural positions, also propel them to take action in the face of constraint. Two elemental motivations are instrumental action and expressive action (Ibarra, 1992; Lin, 2001; Rossel, 1970).

In instrumental action, actors aim to improve their structural position. At both the interpersonal and inter-organizational levels, two of the most common forms of instrumental action are the search for novel information (e.g., Ahuja, 2000a; Burt, 1992) and the pursuit of influence to manage interdependencies with other actors (e.g., Aiken and Hage, 1968; Brass, 1984; Galaskiewicz, 1982; Gulati and Gargiulo, 1999; Pfeffer and Salancik, 1978).

In expressive action, actors seek to legitimize and consolidate their existing structural position. Two of the most common forms of expressive action are the search for identity confirmation (e.g., Milton and Westphal, 2005; Podolny and Baron, 1997; White, 1992, 2008) and the pursuit of positive affect (e.g., Baker, Cross, and Wooten, 2003; Casciaro and Lobo, 2008). Expressive action is not confined to interpersonal relations. Identity-based (e.g., Brickson, 2005) and affective (Westphal, Boivie, and Han Ming Chng, 2006) motivations can also influence the pattern of inter-organizational ties. We will next consider the differential consequences of using capability-based and symbolic resources when instrumental and expressive motivations are both operative.

IDEAL TYPES OF CONSTRAINED AGENCY

Resources and motivations need to be used together, like binocular lenses, to arrive at a more complete understanding of how network action is likely to change structural positions and the nature of relationships, thus creating new forms of constraint. The nature of the resource used has implications for whether the fundamental purpose and meaning of social relations are likely to remain stable or change. By contrast, the motivations with which resources are deployed determine the likelihood that the actor will experience a change in, or consolidation of, structural position. Together, resources and motivations define four ideal types of constrained agency, summarized in Table 1.

- Insert Table 1 about here -

Maneuvering: Marshaling Capability-Based Resources to Achieve Instrumental Aims

Actors' positions in a social structure endow them with certain capabilities. For example, the

position that software developers occupy within a firm's task network can affect their cognitive

judgments about means—ends relationships in successful product development (Walker, 1985).

By contrast, actors in disadvantaged structural positions will often be motivated to improve their

standing (Pettit, Yong, and Spataro, 2010). Maneuvering is the use of capability-based resources

(i.e., skills, dispositions, and cognitive orientations) for instrumental purposes (i.e., with the

intent to improve an actor's structural position). At the interpersonal level, examples of

Maneuvering include the efforts of high self-monitors to identify and claim new and emerging

brokerage positions (Sasovova et al., 2010), entrepreneurs' use of varying interpersonal "styles"

to influence the type of economic exchange into which they enter (Vissa, 2012), and actors'

awareness of and ability to influence the choices of other actors—particularly those to whom

they are connected indirectly (Brass, 2012). At the inter-organizational level, Maneuvering includes peripheral actors' efforts to form coalitions with other actors and thus exert political influence (Stevenson and Greenburg, 2000) and firms' attempts to apply competitive acumen—the extent to which their assessment of a rival's prioritization of competitors matches the rival's own view—to move to superior market positions (Tsai, Su, and Chen, 2011). Structure impinges on Maneuvering primarily via *insight*—that is, structure can limit actors' understanding and knowledge of how to navigate an advantageous course of action.

Maneuvering often produces a change in structural position, as actors parlay resources they already possess to acquire new information or sources of influence. Because it does not entail the use of symbolic resources, Maneuvering tends not to fundamentally change the purpose or meaning attached to an actor's relationships.

Fortifying: Marshaling Capability-Based Resources to Achieve Expressive Aims

In some cases, actors seek to legitimize and consolidate structural positions that they already occupy. For example, the sequence of foreign-investment networks built and maintained by Hungarian firms during periods of economic transition has sometimes embodied attempts to consolidate positions (Stark and Vedres, 2006). Fortifying is the use of capability-based resources (skills, dispositions, and cognitive orientations) for expressive purposes (with the intent to legitimize and consolidate an actor's existing structural position). Examples of Fortifying include deployment of a novel kind of 'style,' or manner of perpetuating and diffusing stories, to affirm identities and relationships (Godart and White, 2010; White, 1992, 2008); use of emotional intelligence to build and sustain affective relations (see, for example, Lopes et al., 2004); and use of cognitive and motivational attributes to form energizing relationships in

organizational settings (Baker et al., 2003). Structure constrains Fortifying primarily via *action*—that is, structure can limit actors' repertoires for making consolidating or legitimizing moves.

Fortifying typically does not entail a change in structural position, as resources are deployed to legitimize and consolidate existing positions. Nor does it fundamentally alter the purpose or meaning of social relations—though affirmation of identity and sharing of sentiments may lead to a strengthening of the relationship between two actors.

Reorienting: Marshaling Symbolic Resources to Achieve Instrumental Aims

Structural positions do not merely endow actors with particular capabilities; they also help define the set of symbolic resources—such as collective action frames—that are accessible to actors (Chattopadhyay, Glick, and Huber, 2001; Jackson and Dutton, 1988). A third ideal type, Reorienting, entails the use of these symbolic resources for instrumental purposes (with the intent of improving an actor's structural position). Examples of Reorienting include Renaissance-era patronage letters, in which actors invoke and manipulate frames to improve network positions over time (McLean, 1998) and sports talk in the workplace, which unites men across class boundaries and enables them to more effectively coordinate instrumental activity (Erickson, 1996). Structure impinges on Reorienting primarily via *recombination*—that is, by limiting the number and variety of novel combinations of symbolic resources that can be assembled to advance an actor's interests.

Like Maneuvering, Reorienting is intended to produce a change in structural position—typically through the acquisition of new information or influence. Because actors use symbolic rather than capability-based resources, they are also likely to change the purpose or meaning attached to a tie in the course of moving to an advantaged structural position. That is, the most

profound changes in social structure are likely to result from the Reorienting form of constrained agency.

Anchoring: Marshaling Symbolic Resources to Achieve Expressive Aims

As noted, actors sometimes seek to consolidate or legitimize structural positions they already occupy. The fourth ideal type of constrained agency, anchoring, occurs when actors marshal symbolic resources for expressive purposes (with the intent to legitimize and consolidate an existing structural position). Examples of Anchoring include the use of a symbolic resource, shared moral order, to produce a sense of community among members of urban communes (Vaisey, 2007); efforts to employ symbols drawn from different network cultures to construct alternative meanings of love (Yeung, 2005); and the use of narratives to construct and affirm identities (Somers, 1994). Structure constrains Anchoring primarily via *meaning*—that is, by limiting the sense of significance and purpose that can be attached to a given action.

Like Fortifying, this ideal type often results in consolidation of structural position, rather than a change in that position. Here too, because actors use symbolic rather than capability-based resources, they are likely to change the purpose or meaning attached to a tie in the course of moving to an advantaged structural position.

CONSTRAINED AGENCY AND NETWORK ACTION

We turn next to exploring how our framework of constrained agency can help inform our understanding of the dynamics of network action, and therefore serve as a guide for empirical research. By network action, we mean the concrete choices that actors make with respect to a given social tie. We will highlight four primary network actions, which jointly span all stages in

the lifecycle of a social tie: Acquiring, Activating, Altering, and Adjusting. Figure 1 is a schematic representation of these network actions. We will describe each action and then illustrate how our constrained-agency framework can enrich our understanding of the dynamics associated with these network actions:

- Insert Figure 1 about here -

- *Acquiring*. Perhaps the most fundamental network action is acquiring a new tie where one did not previously exist. A variety of factors, such as shared activities and interests (Feld, 1981), resource dependence and cumulative prior ties (Gulati, 1995; Gulati and Gargiulo, 1999), inducements and opportunities (Ahuja, 2000b), the nature of ambient uncertainty (Beckman, Haunschild, and Phillips, 2004), and the visualization of network portfolios (Ozcan and Eisenhardt, 2009), are known to influence new tie formation.
- Activating. When the need arises, actors convert pre-existing dormant or latent ties into active relationships (Hurlbert, Haines, and Beggs, 2000; Levin, Walter, and Murnighan, 2011; Mariotti and Delbridge, 2012; Renzulli and Aldrich, 2005). A variety of factors—such as the level of interpersonal trust (Renzulli and Aldrich, 2005; Smith, 2005), identification strength (McDonald and Westphal, 2003), interpersonal affect (Casciaro and Lobo, 2008), the structure of pre-existing core networks (Hurlbert et al., 2000), and aspects of formal and quasi-formal organizational structure (Srivastava, 2012a)—can all drive a wedge between the resources potentially accessible through networks and those actually tapped in a given situation.
- *Altering*. A third network action, Altering, also involves pre-existing social ties but goes beyond simply activating a dormant or latent tie. It entails changing the content that flows through a tie—for example, task advice, buy-in, strategic information, or social support

(Burt, 1997; Podolny and Baron, 1997). Network structural characteristics and the strength of the ties between actors can influence their ability to change the content that flows through such ties (Shipilov and Li, 2012; Sosa, 2011).

• Adjusting. Finally, a pre-existing tie can be Adjusted. Adjusting occurs when a tie is deactivated—allowed to shift from an active to a dormant or latent state—or purposely severed. A variety of factors are known to influence the dissolution or persistence of a tie. At the individual level, tie decay is inhibited when connections are embedded in stable relationships (Burt, 2001, 2002), and also influenced by tie strength, network density, and actors' sociodemographic traits (Lubbers et al., 2010). At the inter-organizational level, tie dissolution is influenced by uncertainty, including access to critical resources, and a need to manage competition with rivals (Westphal et al., 2006), and forms of embeddedness, such as relational, positional, and structural (Polidoro, Ahuja, and Mitchell, 2011; Cui, Calantone, and Griffith, 2011; Greve, Mitsuhashi, and Baum, forthcoming).

To illustrate how the constrained agency framework informs our understanding of the dynamics of network action, let us consider the network action of Activating—converting a dormant or latent social tie into an active relationship. Activating that occurs in the course of Maneuvering is likely to lead to a change in social structural position as the focal actor acquires new information or influence that makes such a change of position possible. It is unlikely, however, to fundamentally change the nature of the relationship with the activated contact because it relies on pre-existing and probably familiar capabilities. By contrast, when Activating occurs as a manifestation of Fortifying, the focal actor is likely to consolidate rather than shift structural position, but—via the sharing of sentiments or affirmation of identities—also to

strengthen the tie to the activated contact. Activating that occurs in the process of Reorienting is likely to produce the most profound change; the focal actor is likely both to move to a different structural position by virtue of newly acquired information or influence and to experience a fundamental shift in the nature of the relationship to the activated contact. Finally, Activating that occurs in the course of Anchoring is likely to transform the relationship with the activated contact but not to lead to a significant change in structural position. In short, the particular type of constrained agency that is operative when Activation occurs has important implications for the actor's likely future structural position and for the nature and quality of subsequent relationships. Thus it can also influence the resources and motivations that will shape future attempts at exercising agency in the face of constraint.

We have illustrated the utility of the constrained-agency framework using one network action, but this approach can yield comparably rich insight about other network actions. For example, we expect that the implications of the prevailing form of constrained agency would be similar between Activating and Altering, given that both network actions occur in the context of a pre-existing relationship. In the case of Acquiring, where there is no pre-existing relationship, we conjecture that the form of constrained agency operative when a tie is formed leaves an imprint on the relationship that affects the subsequent evolution of the relationship (cf. McEvily, Jaffee, and Tortoriello, 2012). For example, if a tie is initially formed for instrumental reasons (Maneuvering or Reorienting), it may be harder to later activate that tie for expressive purposes (Fortifying or Anchoring). Finally, in the case of Adjusting, the form of constrained agency through which an active relationship becomes dormant or is dissolved might affect the focal actor's ability to activate or rekindle the relationship later. For example, ties dissolved in the course of Maneuvering or Reorienting may be harder to activate or rekindle for expressive

purposes. In other words, understanding the interplay of constrained agency and network action promises to help empirical researchers make sharper predictions about the dynamics of social networks, such as (1) which ties are likely to remain stable or be transformed, (2) which actors are likely to change or maintain their structural position, and (3) how actors' resources and motivations are likely to shift as a result of (1) and (2) and how these shifts can impose new constraints on subsequent action. We therefore believe that empirical network research would be greatly enriched if it assessed not only what network action occurred in a social setting but also the form of constrained agency through which it took place.

CONCLUSION

The goal of this article has been to introduce a richer conception of agency into network research. We propose a framework of constrained agency that is grounded in resources and motivations, two essential building blocks of classical and contemporary theories of social action. Positions in a social structure importantly shape actors' resources and motivations; in turn, resources equip actors to exert agency while motivations propel them to do so. Examining how resources are used when distinct motivations are operative reveals ideal types of constrained agency. The form of constrained agency through which a particular network action is taken can affect actors' ensuing structural positions and the nature of the constraints they subsequently face.

We see at least four fruitful directions for empirical research that seeks to validate and advance this conceptualization of constrained agency. First, we see significant potential in multimethod studies that bring together quantitative analyses of network change (e.g., Snijders, Steglich, and Schweinberger, 2007; Snijders, van de Bunt, and Steglich, 2010) with qualitative

accounts of the cultural and symbolic meaning associated with network change (e.g., McLean, 1998; Mische, 2003). The latter can help pinpoint the form of constrained agency through which network actions occur and thus produce more accurate predictions about how networks are likely to evolve. Second, we suspect that further field research will uncover additional ideal types of constrained agency, as well as hybrid forms. Further conceptual work is needed to more fully explore the factors that lead actors to operate in a given mode of constrained agency, how the various forms of constrained agency relate to one another, and how they differentially influence the dynamics of network action. Third, we have focused on one elemental form of action, network action, but this approach could be extended to such other forms of action as political action and collective action in the context of social movements (Fernandez and McAdam, 1988; McAdam, 1985). Finally, our framework has taken the perspective of a single constrained actor who is exercising agency. Yet network action is not pursued in a vacuum. Future research could profitably examine the interplay of constrained agency across groups of actors. For example, when an actor operates in a given mode of constrained agency, how is the propensity of other actors to operate in that or other modes affected? In short, we believe that this conceptualization of constrained agency represents an important first step in unlocking new sources of endogenous change in network structure.

References

- Ahuja, G. (2000a), "Collaboration networks, Sstructural holes, and innovation: A longitudinal study", *Administrative Science Quarterly*, Vol. 45 No. 3, pp. 425-455.
- Ahuja, G. (2000b), "The duality of collaboration: Inducements and opportunities in the formation of interfirm linkages", *Strategic Management Journal*, Vol. 21 No. 3, pp. 317-343.
- Ahuja, G., Soda, G., and Zaheer, A. (2012), "The genesis and dynamics of organizational networks", *Organization Science*, Vol. 23 No. 2, pp. 434-448.
- Aiken, M., and Hage, J. (1968), "Organizational interdependence and intra-organizational structure", *American Sociological Review*, Vol. 33 No. 6, pp. 912-930.
- Anderson, M. H. (2008), "Social networks and the cognitive motivation to realize network opportunities: A study of managers' information gathering behaviors", *Journal of Organizational Behavior*, Vol. 29 No. 1, pp. 51-78.
- Baker, W. E., Cross, R., and Wooten, M. (2003), "Positive organizational network analysis and energizing relationships", in K. S. Cameron, J. E. Dutton and R. E. Quinn (Eds.), *Positive Organizational Scholarship: Foundations of a New Discipline*, Berrett-Koehler, San Francisco, CA, pp. 328-342.
- Barley, S. R., and Tolbert, P. S. (1997), "Institutionalization and structuration: Studying the links between action and institution", *Organization Studies*, Vol. 18, 93-117. Retrieved from
- Battilana, J., Leca, B., and Boxenbaum, E. (2009), "How actors change institutions: Towards a theory of institutional entrepreneurship", *Academy of Management Annals*, Vol. 3 No. 1, pp. 65-107. doi: 10.1080/19416520903053598
- Beckman, C. M., Haunschild, P. R., and Phillips, D. J. (2004), "Friends or strangers? Firmspecific uncertainty, market uncertainty, and network partner selection", *Organization Science*, Vol. 15 No. 3, pp. 259-275.
- Bourdieu, P. (1977), *Outline of a Theory of Practice*, Cambridge University Press, Cambridge, UK.
- Bourdieu, P. (1986), *Distinction: A Social Critique of the Judgment of Taste*, translated by Nice, R., Routledge and Kegan Paul, London.
- Brass, D. J. (1984), "Being in the right place: A structural analysis of individual influence in organizations", *Administrative Science Quarterly*, Vol. 29 No. 4, pp. 518-539.
- Brass, D. J. (2012), "A social network perspective on organizational psychology", in S. W. J. Kozlowski (Ed.), *The Oxford Handbook of Organizational Psychology*, Oxford University Press, Oxford, UK.
- Brickson, S. L. (2005), "Organizational identity orientation: Forging a link between organizational identity and organizations' relations with stakeholders", *Administrative Science Quarterly*, Vol. 50 No. 4, pp. 576-609. doi: 10.2189/asqu.50.4.576
- Burt, R. S. (1982), Toward a Structural Theory of Action: Network Models of Social Structure, Perception, and Action, Academic Press, New York.
- Burt, R. S. (1992), *Structural Holes: The Social Structure of Competition*, Harvard University Press, Cambridge, MA.
- Burt, R. S. (1997), "A note on social capital and tie content", *Social Networks*, Vol. 19 No. 4, pp. 355-373.
- Burt, R. S. (2001), "Attachment, decay, and social network", *Journal of Organizational Behavior*, Vol. 22 No. 6, pp. 619-643.
- Burt, R. S. (2002), "Bridge decay", *Social Networks*, Vol. 24, pp. 333-363.

- Burt, R. S. (2004), "Structural holes and good ideas", *American Journal of Sociology*, Vol. 110 No. 2, pp. 349-399.
- Burt, R. S. (2005), *Brokerage and Closure: An Introduction to Social Capital*, Oxford University Press, New York.
- Burt, R. S. (2010), *Neighbor Networks: Competitive Advantage Local and Personal*, Oxford University Press, New York.
- Casciaro, T., and Lobo, M. S. (2008), "When competence is irrelevant: The role of interpersonal affect in task-related ties", *Administrative Science Quarterly*, Vol. 53 No. 4, pp. 655-684.
- Chattopadhyay, P., Glick, W. H., and Huber, G. P. (2001), "Organizational actions in response to threats and opportunities", *Academy of Management Journal*, Vol. 44 No. 5, pp. 937-955.
- Coleman, J. S. (1990), *Foundations of Social Theory*, Harvard University Press, Cambridge, MA.
- Cui, A. S., Calantone, R. J., and Griffith, D. A. (2011), "Strategic change and termination of interfirm partnerships", *Strategic Management Journal*, Vol. 32 No. 4, pp. 402-423. doi: 10.1002/smj.881
- DiMaggio, P. J. (1988), "Interest and agency in institutional theory", in L. G. Zucker (Ed.), *Institutional Patterns and Organizations: Culture and Environment*, Ballinger, Cambridge, MA.
- DiMaggio, P. J. (1997), "Culture and cognition", *Annual Review of Sociology*, Vol. 23, pp. 263-288.
- DiMaggio, P. J., and Powell, W. W. (1983), "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48, pp. 147-160.
- Emirbayer, M. (1997), "Manifesto for a relational sociology", *American Journal of Sociology*, Vol. 103 No. 2, pp. 281-317.
- Emirbayer, M., and Goodwin, J. (1994), "Network analysis, culture, and the problem of agency", *American Journal of Sociology*, Vol. 99, pp. 1411-1454.
- Emirbayer, M., and Mische, A. (1998), "What is agency?", *American Journal of Sociology*, Vol. 103 No. 4, pp. 962-1023.
- Erickson, B. H. (1996), "Culture, class, and connections", *American Journal of Sociology*, Vol. 102, pp. 217-251.
- Feld, S. L. (1981), "The focused organization of social ties", *American Journal of Sociology*, Vol. 86 No. 5, pp. 1015-1035.
- Fernandez, R. M., and McAdam, D. (1988), "Social networks and social movements: Multiorganizational fields and recruitment to Mississippi Freedom Summer", *Sociological Forum*, Vol. 3 No. 3, pp. 357-382.
- Fligstein, N., and McAdam, D. (2012), A Theory of Fields, Oxford University Press, New York.
- Galaskiewicz, J. (1982), "Modes of resource allocation: Corporate contributions to nonprofit organizations", in P. V. Marsden and N. Lin (Eds.), *Social Structure and Network Analysis*, Sage, Beverly Hills, CA, pp. 235-253.
- Giddens, A. (1984), *The Constitution of Society: Outline of the Theory of Structuration*, Polity Press, Cambridge, UK.
- Godart, F. C., and White, H. C. (2010), "Switchings under uncertainty: The coming and becoming of meanings", *Poetics*, Vol. 38 No. 6, pp. 567-586.
- Granovetter, M. (1985), "Economic action and social structure: The problem of embeddedness", *American Journal of Sociology*, Vol. 91 No. 3, pp. 481-510.

- Granovetter, M. S. (1992), "Problems of explanation in economic sociology", in N. Nohria and R. G. Eccles (Eds.), *Networks and Organizations*, Harvard Business School Press, Boston, MA, pp. 25-56.
- Greenwood, R., and Suddaby, R. (2006), "Institutional entrepreneurship in mature fields: The Big Five accounting firms", *Academy of Management Journal*, Vol. 49 No. 1, pp. 27-48. doi: 10.5465/amj.2006.20785498
- Greve, H. R., Mitsuhashi, H., and Baum, J. A. C. (forthcoming), "Greener pastures: Outside options and strategic alliance withdrawal", *Organization Science*.
- Gulati, R. (1995), "Social structure and alliance formation patterns: A longitudinal analysis", *Administrative Science Quarterly*, Vol. 40 No. 4, pp. 619-652.
- Gulati, R. (2007), Managing Network Resources: Alliances, Affiliations, and Other Relational Assets, Oxford University Press, Oxford, UK.
- Gulati, R., and Gargiulo, M. (1999), "Where do interorganizational networks come from?", *American Journal of Sociology*, Vol. 104 No. 5, pp. 1439-1493.
- Gulati, R., Lavie, D., and Madhavan, R. (2011), "How do networks matter? The performance effects of interorganizational networks", *Research in Organizational Behavior*, Vol. 31, pp. 207-224.
- Homans, G. (1964), "Bringing men back in", *American Sociological Review*, Vol. 29, pp. 809-818.
- Hurlbert, J. S., Haines, V. A., and Beggs, J. J. (2000), "Core networks and tie activation: What kinds of routine networks allocate resources in nonroutine situations?", *American Sociological Review*, Vol. 65 No. 4, pp. 598-618.
- Ibarra, H. (1992), "Homophily and differential returns: Sex-differences in network structure and access in an advertising firm", *Administrative Science Quarterly*, Vol. 37 No. 3, pp. 422-447.
- Ibarra, H., Kilduff, M., and Tsai, W. (2005), "Zooming in and out: Connecting individuals and collectivities at the frontiers of organizational network research", *Organization Science*, Vol. 16 No. 4, pp. 359-371.
- Jackson, S. E., and Dutton, J. E. (1988), "Discerning threats and opportunities", *Administrative Science Quarterly*, Vol. 33 No. 3, pp. 370-387.
- Krackhardt, D. (1990), "Assessing the political landscape: Structure, cognition, and power in organizations", *Administrative Science Quarterly*, Vol. 35 No. 2, pp. 342-369.
- Lamont, M., and Small, M. L. (2008), "How culture matters for the understanding of poverty: Enriching our understanding", in Lin, A., and Harris, D. (Eds.), *The Colors of Poverty: Why Racial and Ethnic Disparities Persist*. Russell Sage Foundation, New York, pp. 76-102.
- Levin, D. Z., Walter, J., and Murnighan, J. K. (2011), "Dormant ties: The value of reconnecting", *Organization Science*, Vol. 22 No. 4, pp. 923-939.
- Lin, N. (2001), *Social Capital: A Theory of Social Structure and Action*. Cambridge University Press, Cambridge, UK.
- Lopes, P. N., Brackett, M. A., Nezlek, J. B., Schütz, A., Sellin, I., and Salovey, P. (2004), "Emotional intelligence and social interaction", *Personality and Social Psychology Bulletin*, Vol. 30 No. 8, pp. 1018-1034.
- Lubbers, M. J., Molina, J. L., Lerner, J., Brandes, U., Avila, J., and McCarty, C. (2010), "Longitudinal analysis of personal networks: The case of Argentinean migrants in Spain", *Social Networks*, Vol. 32, pp. 91-104.

- Mariotti, F., and Delbridge, R. (2012), "Overcoming network overload and redundancy in interorganizational networks: The role of potential and latent ties", *Organization Science*, Vol. 23 No. 2, pp. 511-528.
- Mayhew, B. H. (1980), "Structuralism versus individualism: 1. Shadowboxing in the dark", *Social Forces*, Vol. 59 No. 2, pp. 335-375.
- McAdam, D. (1985), *Political Process and the Development of Black Insurgency:* 1930-1970, University of Chicago Press, Chicago.
- McDonald, M. L., and Westphal, J. D. (2003), "Getting by with the advice of their friends: CEOs' advice networks and firms' strategic responses to poor performance", *Administrative Science Quarterly*, Vol. 48 No. 1, pp. 1-32.
- McEvily, B., Jaffee, J., and Tortoriello, M. (2012), "Not all bridging ties are equal: Network imprinting and firm growth in the Nashville legal industry, 1933–1978", *Organization Science*, Vol. 23 No. 2, pp. 547-563.
- McLean, P. D. (1998), "A frame analysis of favor seeking in the Renaissance: Agency, networks, and political culture", *American Journal of Sociology*, Vol. 104 No. 1, pp. 51-91.
- Mehra, A., Kilduff, M., and Brass, D. J. (2001), "The social networks of high and low self-monitors: Implications for workplace performance", *Administrative Science Quarterly*, Vol. 46 No. 1, pp. 121-146.
- Mehra, A., and Schenkel, M. T. (2008), "The price chameleons pay: Self-monitoring, boundary spanning and role conflict in the workplace", *British Journal of Management*, Vol. 19 No. 2, pp. 138-144.
- Meyer, J. W., and Rowan, B. R. (1977), "Institutionalized organizations: Formal structure as myth and ceremony", *American Journal of Sociology*, Vol. 83, pp. 340-363.
- Milton, L. P., and Westphal, J. D. (2005), "Identity confirmation networks and cooperation in work groups", *Academy of Management Journal*, Vol. 48 No. 2, pp. 191-212.
- Mische, A. (2003), "Cross-talk in movements: Rethinking the culture-network link", in M. Diani and D. McAdam (Eds.), *Social Movements and Networks: Relational Approaches to Collective Action*, Oxford University Press, New York.
- Obstfeld, D. (2005), "Social networks, the Tertius lungens and orientation involvement in innovation", *Administrative Science Quarterly*, Vol. 50 No. 1, pp. 100-130.
- Oh, H., and Kilduff, M. (2008), "The ripple effect of personality on social structure: Selfmonitoring origins of network brokerage", *Journal of Applied Psychology*, Vol. 93 No. 5, pp. 1155-1164.
- Oliver, C. (1991), "Strategic responses to institutional processes", *Academy of Management Review*, Vol. 16, pp.145-179.
- Ozcan, P., and Eisenhardt, K. M. (2009), "Origin of alliance portfolios: Entrepreneurs, network strategies, and firm performance", *Academy of Management Journal*, Vol. 52 No. 2, pp. 246-279.
- Padgett, J. F., and Ansell, C. K. (1993), "Robust action and the rise of the Medici, 1400-1434", *American Journal of Sociology*, Vol. 98 No. 6, pp. 1259-1319.
- Parsons, T. (1951), The Social System. Routledge, London, UK.
- Pettit, N. C., Yong, K., and Spataro, S. E. (2010), "Holding your place: Reactions to the prospect of status gains and losses", *Journal of Experimental Social Psychology*, Vol. 46 No. 2, pp. 395-401.
- Pfeffer, J., and Salancik, G. R. (1978), *The External Control of Organizations*, Harper and Row, New York.

- Podolny, J. M., and Baron, J. N. (1997), "Resources and relationships: Social networks and mobility in the workplace", *American Sociological Review*, Vol. 62, pp. 673-693.
- Polidoro, J., Francisco, Ahuja, G., and Mitchell, W. (2011), "When the social structure overshadows competitive incentives: The effects of network embeddedness of joint venture dissolution", *Academy of Management Journal*, Vol. 54 No. 1, pp. 203-223.
- Renzulli, L. A., and Aldrich, H. (2005), "Who can you turn to? Tie activation within core business discussion networks", *Social Forces*, Vol. 84 No. 1, pp. 323-341.
- Rossel, R. D. (1970), "Instrumental and expressive leadership in complex organizations", *Administrative Science Quarterly*, Vol. 15 No. 3, pp. 306-316. doi: 10.2307/2391620
- Sasovova, Z., Mehra, A., Borgatti, S. P., and Schippers, M. C. (2010), "Network churn: The effects of self-monitoring personality on brokerage dynamics", *Administrative Science Quarterly*, Vol. 55, pp. 639-670.
- Scott, R. W. (2008), "Approaching adulthood: The maturing of institutional theory", *Theory and Society*, Vol. 37, pp. 427-442.
- Sewell, W. H. J. (1992), "A theory of structure: Duality, agency, and transformation", *American Journal of Sociology*, Vol. 98, pp. 1-29.
- Shipilov, A. V. and Li, S. X. (2012), "The missing link: The effect of customers on the formation of relationships among producers in the multiplex triads", *Organization Science*, Vol. 23, pp. 472-491.
- Small, M. L. (2009), *Unanticipated Gains: Origins of Network Inequality in Everyday Life*, Oxford University Press, New York, NY.
- Smith, S. S. (2005), "'Don't put my name on it': Social capital activation and job-finding assistance among the black urban poor", *American Journal of Sociology*, Vol. 111 No. 1, pp. 1-57.
- Snijders, T. A. B., Steglich, C., and Schweinberger, M. (2007), "Modeling the coevolution of networks and behavior", in K. van Montfot, J. Oud and A. Satorra (Eds.), *Longitudinal Models in the Behavioral and Related Sciences*: Routledge.
- Snijders, T. A. B., van de Bunt, G. G., and Steglich, C. E. G. (2010), "Introduction to stochastic actor-based models for network dynamics", *Social Networks*, Vol. 32 No. 1, pp. 44-60. doi: 10.1016/j.socnet.2009.02.004
- Somers, M. (1994), "The narrative constitution of identity: A relational and network approach", *Theory and Society*, Vol. 23 No. 5, pp. 605-649.
- Sosa, M. E. (2011), "Where do creative interactions come from? The role of tie content and social networks", *Organization Science*, Vol. 22 No. 1, pp. 1-21. doi: 10.1287/orsc.1090.0519
- Srivastava, S. B. (2012a), *Organizational Restructuring and Social Capital Activation*. University of California–Berkeley Working Paper. Berkeley, CA.
- Srivastava, S. B. (2012b), *Picturing Uncertainty: Frames, Schemata, and Social Capital Activation in Organizations*, University of California–Berkeley Working Paper. Berkeley, CA.
- Srivastava, S. B., and Banaji, M. R. (2011), "Culture, cognition, and collaborative networks in organizations", *American Sociological Review*, Vol. 76 No. 2, pp. 207-233.
- Stark, D., and Vedres, B. (2006), "Social times of network spaces: Network sequences and foreign investment in Hungary", *American Journal of Sociology*, Vol. 111 No. 5, pp. 1367-1411.

- Stevenson, W. B., and Greenburg, D. (2000), "Agency and social networks: Strategies of action in a social structure of position, opposition, and opportunity", *Administrative Science Quarterly*, Vol. 45 No. 4, pp. 651-678.
- Suddaby, R., Elsbach, K. D., Greenwood, R., Meyer, J. W., and Zilber, T. B. (2010), "Organizations and their institutional environments—Bringing meaning, values, and culture back in: Introduction to the Special Research Forum", *Academy of Management Journal*, Vol. 53 No. 6, pp. 1234-1240.
- Tsai, W., Su, K.-h., and Chen, M.-J. (2011), "Seeing through the eyes of a rival: Competitor acumen based on rival-centric perceptions", *Academy of Management Journal*, Vol. 54 No. 4, pp. 761-778.
- Vaisey, S. (2007), "Structure, culture, and community: The search for belonging in 50 urban communes", *American Sociological Review*, Vol. 72 No. 6, pp. 851-873.
- Vaisey, S., and Lizardo, O. (2010), "Can cultural worldviews influence network composition", *Social Forces*, Vol. 88 No. 4, pp. 1595-1618.
- Vasudeva, G., Spencer, J. W., and Teegen, H. J. (forthcoming), "Bringing the institutional context back in: A cross-national comparison of alliance partner selection and knowledge acquisition", *Organization Science*.
- Vissa, B. (2012), "Agency in action: Entrepreneurs' networking style and initiation of economic exchange", *Organization Science*, Vol. 23, pp. 492-510.
- Walker, G. (1985), "Network position and cognition in a computer software firm", *Administrative Science Quarterly*, Vol. 30 No. 1, pp. 103-130.
- Wellman, B. (1983), "Network analysis: Some basic principles", *Sociological Theory*, Vol. 1, 155-200.
- Wellman, B., and Berkowitz, S. D. (1988), *Social Structures: A Network Approach*. Cambridge University Press, New York.
- Westphal, J. D., Boivie, S., and Han Ming Chng, D. (2006), "The strategic impetus for social network ties: Reconstituting broken CEO friendship ties", *Strategic Management Journal*, Vol. 27, pp. 425-455.
- White, H. C. (1992), *Identity and Control: A Structural Theory of Social Action*, Princeton University Press, Princeton, NJ.
- White, H. C. (2008), *Identity and Control: How Social Formations Emerge*, Princeton University Press, Princeton, NJ.
- White, H. C., Boorman, S. A., and Breiger, R. L. (1976), "Social structure from multiple networks. I. Block models of roles and positions", *American Journal of Sociology*, Vol. 81 No. 4, pp. 730-780.
- Yeung, K.-T. (2005), "What does love mean? Exploring network culture in two network settings", *Social Forces*, Vol. 84 No. 1, pp. 391-420.

Table 1. Forms of Constrained Agency

	Instrumental action	Expressive action
Capability-based resources	Maneuvering: Using capabilities (skills, dispositions, and cognitive orientations) to acquire information or influence Constraint operates primarily through <i>insight</i> .	Fortifying: Using capabilities (skills, dispositions, and cognitive orientations) to share sentiments and support or affirm identities Constraint operates primarily through <i>action</i> .
Symbolic resources	Reorienting: Shifting meaning structures to acquire information or influence Constraint operates primarily through <i>recombination</i> .	Anchoring: Shifting meaning structures to share sentiments and support or affirm identities Constraint operates primarily through <i>meaning</i> .

Figure 1. Network Actions and the Lifecycle of a Social Tie

