Social Science
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Economic diversity

Speaker:

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1: Introduction

We make a number of decisions every day. While one may view our decisions as the reflections of independent discretion, previous studies taking the network perspective found that, whether consciously or subconsciously, our decisions, choice, behavior, and cognition are all highly influenced by social networks in which we are embedded. It is critical to understand how social networks present both opportunities and constraints to our lives and how the structures of networks as well as positions in networks influence the outcomes of economic activities.

Social network analysis aims at advancing our understanding of how relationships, rather than individual attributes, of actors influence their behavior, preference, choice, and economic outcomes. Because organizations are social entities that make decisions, social network analysis has been extensively applied to study the behavior of individuals in organizations, groups of individuals, units in organizations, and organizations. A strong emphasis on structures of networks leads scholars to believe that what it matters is the structures of connections in networks, not actors in networks. So, actors, whether individuals or organizations, are presumed to exhibit similar patterns of actions and cognitions as long as they share the similar network structures and positions.

In the field of organization science, social network analysis has been used to predict (1) the economic consequences of structures of networks (e.g., career mobility, the rates of innovation, firm performance, etc.) and (2) the antecedents of tie formation and termination between individuals (e.g., embeddedness, homophily, preferential attachment, etc.).

2: Social Networks and Economic Diversity

It is Granovetter (1973) who first suggested the linkage between social networks and economic diversity. His model of strength of weak ties contends that weak ties present individuals more access to diverse resources and information through networks than do strong ties. In networks of weak ties in which actors rarely know each other, they have greater chance to obtain non-redundant resources and knowledge by participating in networks. Having more sheer connections (e.g., more friends) does not automatically guarantee actors' enhanced reachability to diverse resources and information. Weak ties present opportunities for actors to combine and pool diverse resources necessary for innovation and change.

An implicit assumption (i.e., strong ties between alters with which ego is strongly connected) has been subject to criticism. As a response, Burt (1992) has developed an argument of structural holes to explain structural characteristics of networks that assure actors' access to diverse resources and information. Structural holes refer to the absence of a link between two contacts who are both linked to an actor. Burt views networks rich in structural holes to be efficient in which non-redundant resources and information can circulate with the minimum investment in the development and maintenance of connections.

Empirical studies have demonstrated that diverse resources and information to which individuals have access through structural holes increase their chance of promotion, career mobility, salary, and career satisfaction (Burt, 1992, 1997; Seibert et al., 2001; Podolny and Baron, 1997). Also, organizations having networks rich in structural holes can also reap the benefits of diverse resources: firms develop more new technologies and make more revenues when having more structural holes in networks (Baum et al., 2000; Goerenzen, 2007; Zaheer & Bell, 2005).

While previous studies have reached a consensus about the positive effects of structural holes on diversity, it has been still debated how this obtained diversity causes economic outcomes such as career mobility and firm performance. Rowley et al. (2000) found that structural holes benefit only firms in dynamically-changing technological fields, whereas strong ties are advantageous for firms in stable environments that decrease competitive intensity. At the individual level, Burt (1992) found that structural holes do not improve women's career mobility. It is strong ties with powerful individuals that are beneficial as they help women break barriers to entry into established "old-boys" networks in corporations. It is thus highly contingent upon contexts how diversity that accrues with structural holes generates economic outcomes.

3: The Establishment of Ties with Strangers

One of my research interests is network dynamics: what drives change of interorganizational networks and how organizations make and terminate ties with other organizations. Previous studies suggest organizational tendencies to form partnerships with previously-connected partners (i.e., repeated ties) because of the great uncertainty about potential partners' reliability and technological competence. Search for partner is heuristic like other decisions in organizations: "most human decision-making, whether individual or organizational, is concerned with the discovery and selection of satisfactory alternatives; only in exceptional cases is it concerned with the discovery and selection of optimal alternatives" (March & Simon, 1958: 162).

Managers, searching for new partners, "consider first those potential exchange partners about whom they have the greatest knowledge and then choose the best partner from this restricted set" (Podolny, 1994: 459). What is less know is about how organizations choose new partners and form new ties with strangers when the initial search fails to generate the set of satisfactory alternatives and what mechanisms enable organizations in this situation to reduce uncertainty. An investigation of such mechanisms is important because ties with strangers often cut across local clusters in networks and lead organizations to more diverse resources and information in environments that they have never encountered through current network connections.

I contend that the processes of search for network partners consist of two steps: (1) organizations first search for partners from the set of previously-connected partners, and (2) if this search fails, organizations then expand its scope of search to find partners from the extensive set of potential ones in a population with which they have no prior direct relations. My model concerns the second round of search, arguing that this search is also heuristics: organizations tend to choose partners with particular network, social, and market structure attributes from the set of strangers, so there is a specific, rather than random, pattern of partner characteristics to be chosen even in this second round of search.

By using the data of supplier networks in the Japanese automobile industry from 1979 to 2001, I demonstrate that assemblers' choice of partners from the set of strangers is a function of preferential attachment, triadic closure, homophily, and multi-market contact.