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Social Capital Exchanges in Voluntary Associations and Work Organizations: A Network Perspective

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Abstract

Organizations have been an important setting in which social capital exchanges occur, but little work has been done to distinguish two predominant species of organizations in the social network literature: voluntary associations and formal work organizations. Addressing this lacuna, this article comparatively examines how the two organizational species differ in (1) how two prominent types of social capital exchanges operate (restricted and generalized exchange), as well as (2) the analytical approaches and methodological tools for studying SCEs (boundary-specification, sampling, network designs, tie-recording methods) and their adherent implications for network structure (networking conditions and homophily). This article concludes by identifying methodological and theoretical challenges for studying social capital exchanges in organizations (conceptualizing organizations as units, underappreciating meaning-making and methodological triangulation, and examining contagion in organizational networks in an age of digitalization) and developing recommendations for overcoming them.

Keywords: social exchange, social networks, organizational culture/climate, social construction

Introduction

There is by now a well-established literature on how organizations have been an important setting for the study of social capital exchanges (SCEs) in social networks, which comprise of "an investment in social relations with an expected return" measured by "resources embedded in a social structure that are accessed and/or mobilized in purposive actions," and activated to obtain support and upward mobility between ties in networks (Lin 2001a, p.29; Burt, 2004, 2009[1995]; Granovetter, 1973, 1995).

Distinct from other settings for networking, organizations are bounded social units with official rosters of members, institutionalized criteria for membership and interest that members collectively participate in, and implicated in formalized extracurricular and money-making activities. What this means is the networking mechanisms uncovered in organizations offer an important lens into how inequality and upward mobility happen. Social network studies of these mechanisms, furthermore, have been commonly preoccupied with how social capital is exchanged and how this differs based on social characteristics, like gender, to effect inequality in prospects of upward mobility (Burt, 2005, 2009[1992]; DiMaggio & Garip, 2012; Lin, 2001b; Lin & Erickson, 2008). The significance of organizations as sites for SCEs is also evinced by how ties embedded in organizations endure better than nonembedded ones (Burt, Opper, & Holm, 2022; McFarland et al, 2014).

But despite the richness of organizations as a site for the study of SCEs, a litmus test of broader social patterns ongoing in networks, much interdisciplinary social network scholarship has neglected to take stock of these differences across *varying types* of organizations. Organizations are not a unitary, indistinguishable category. They can be disaggregated into different species, which, as Erickson (2004) alludes, carries theoretical implications for the types

of networks that form, how they form within them, and by extension, the methodological approaches that network scholars adopt to study them.

Addressing this lacuna, this article scopes the social network literature on social capital in organizational settings to distinguish patterns of SCEs across two predominant organizational species: voluntary associations and formal work organizations. Following Cheung and Chan (2010), this article focuses on the conceptualization of social capital as an exchange, which is defined as the basic investment and reciprocation of help between ties and is also its most salient form/use in organizations (p.207). To this effect, this article produces a sociological account and network perspective of how social capital is exchanged differently among members within voluntary associations compared to work organizations, as well as the methodological and analytical tools used to study varieties of SCEs across voluntary associations and work organizations.

This article theorizes the processes and conditions under which two predominant types of SCE (restricted and generalized exchange) take place in the two organizational species of voluntary associations and work organizations. This article further examines the various methodological tools and analytical approaches in social network studies of SCEs between the two organizational species, parsing out differences in sampling, network boundary-specification approaches, network designs, and tie-recording methods. Also discussed are their implications for tie-formation and the types of resources exchanged.

This article theorizes methodological and theoretical challenges and develops recommendations for overcoming them, namely, the conceptualization of organizations as units, the underappreciation of meaning-making and methodological triangulation, and forms of contagion in organizational networks in an age of digitalization.

Types of Social Capital Exchanges in Organizations

This section examines how voluntary associations and work organizations can both be seedbeds for two types of SCEs: restricted and generalized exchange. This article demonstrates that the qualifying distinction – where and when each organizational species participates in which type of SCE – depends on how we characterize the organizations.

A brief elaboration of social capital is first in order. Like the term capital implies, social capital refers to the myriad advantages of social networks based on one's position in them (Burt, 2005, p.4). These advantages arise in instrumental forms of help for upward mobility, such as referrals for jobs, job information, small favors, and expressive forms of help for maintaining ties, including emotional support (Au, 2019; Bearman, 1997; Erickson, 1996, 2009; Granovetter, 1973, 1995; Lin, 2001a, p.20; White, 2018).

The boons of social capital are vast and well-documented in an observable rift in life outcomes between those with social capital and those without. Desmond (2012) conducts an ethnography of the urban poor to identify social capital as an indispensable method of survival for underclass communities, where having contacts available and willing to help with small favors and monetary needs can make the difference between life and death. Burt and colleagues (Burt et al, 2022; Burt & Soda, 2021) find that firm CEOs and employees who are better able to motivate their collegial networks to share information and cooperate have superior firm performance and career trajectories than those who are not.

People from all walks of life perform better in every sense when the composition of their networks better supports them. A rich body of literature has since disaggregated the formula for an ideal composition across a battery of network characteristics, such as how impervious to

change they are (closure), how easily information can flow through them (transitivity), how well people within the network know each other (density), and so on (Au, 2019; Burt, 2005; Fischer, 2005; Friedkin et al, 2019; Lin & Erickson, 2008; Rivera, Soderstrom, & Uzzi, 2010). This article focuses on social capital exchange (SCEs) as the conduit through which the resources of social capital flow, its outcomes determined, and actors distinguished.

There exist two structural forms through social capital can be exchanged: restricted and generalized. Restricted SCEs refer to direct reciprocity (when A gives to B, A receives from B), wherein accountability comes from observation of each other's behaviors (Coleman, 1988). For this reason, competition is a social influence mechanism by which ties are formed, information exchanged, and attitudes created hold true here that do not at a communal level, like Burt's (2004, 2005) demonstration of workers in the same firm making manipulative networking choices through structural holes – acting as the interlocutor between disconnected alters to control the direction of their collaboration – to get ahead of others.

Generalized SCEs, by contrast, refer to indirect reciprocity (when A gives to B, A receives from C). In her study of exchanges of supportive information and resources among women experiencing job loss, Uehara (1990) shows that generalized exchange fosters social exchanges through an openly accommodative, pooling of resources, and which is strongest in smaller subgroups within a bounded organization (see also Kadushin, 2004). Mancoske et al (2018) advance the conceptual and empirical links between communities and individual outcomes in their study of community responses to shipyard workers facing job losses, finding that communities are just as adversely affected by individual job loss, and are thus incentivized to offer social support for members facing such circumstances.

Unlike restricted exchange where networking is driven by competition, generalized exchange works in a community through cooperative norms that pressure members to form ties with fellow members and do whatever it takes to sustain them (Au, 2019; Bearman, 1997; Putnam, 2020). What results is pressure toward mutuality in relations, wherein individuals give to and gain from fellow members of a community and sanction deviant actors when they fail to (Burt, Opper, & Holm, 2022).

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Table 1 schematically illustrates the ways that we can characterize voluntary associations and work organizations, linked to the type of SCEs that occurs within them: the two organizational species can be both bounded social *units* in and of themselves and *contexts* where individuals interact in patterned ways.

As bounded institutional units, the two organizational species have much in common, participating in *restricted exchange* with other units. Voluntary associations work to broker ties with other organizations. The norms that typically hold together a voluntary association give it boundaries that make it a consolidated unit. For instance, Enns, Malinick, and Matthews (2008) examine the networks of a tight-knit, rural Canadian community and discover that the number of voluntary activities in civic associations *within* the community predicts fewer weak ties to people *outside* the community. This means that strong norms of exchange and generalized reciprocity can open a rift between bonding and bridging forms of social capital, when one actively depreciates the other, which consolidates the voluntary association's boundaries – boundaries that make it a unit.

In this manner, voluntary associations, like childcare centers where mothers gather regularly and inadvertently share resources (Small, 2009), can be motivated to form and sustain

organizational ties to the state, non-profit organizations, and other types of voluntary associations, in order to gain access to their resources (financial, small services, information, etc.) to be shared amongst their own constituency.

Formal work organizations also act as bounded units that participate in restricted exchange. Firms in a market offer one empirical example for this characterization, where each firm is characterized by an identity, interfirm ties, market uncertainties to be addressed at an organizational level, and takes up informational cues to compare, contrast, assess other firms, all of which make up the markets that we see (Podolny, 2001; White, 2008, 2018).

Work organizations also benefit at an aggregate-level from restricted exchanges within them. Acting as a bridge across disconnected areas in human capital between sectors and teams in the company, workers who bridge structural holes read organizational needs and quickly satisfy them by siphoning the appropriate people to the job (see Granovetter 1995; Kmec, McDonald, & Trimble, 2010). The result is a cumulative, positive effect on the organization's performance, saving money from overhead, as a unit participating in restricted exchanges of its own in the market (Burt & Soda, 2021; Wu, 2018).

However, when characterized as *contexts* relationally made up of interlocking networks linking actors in various roles (Mohr & White, 2008), voluntary associations and work organizations diverge much more widely than as units. Imagining these organizational species as contexts is where their network structures enter into view. Here, we can strip open the social structure behind norms of exchange and patterns of interaction among actors within the organization. For instance, a significant cornerstone of social network scholarship has been to demonstrate how interpersonal processes are patterned by the larger structural unit that embeds individual ties, which then shape their adherent network structures (Piselli, 2007).

The powerful cooperative norms that exist to prescribe solidarity and foster generalized exchange in voluntary associations, not commonly found in work organizations, can mediate and be mediated by network closure. Network closure increases the density of a network, when its members intermingle and reduce path distances between one another, permitting norms that promote accountability, cooperation, and conformity (Burt, Opper, & Holm, 2022; Enns, Malinick, & Matthews 2008; Rivera, Soderstrom, & Uzzi, 2010).

Cooperative norms in voluntary associations are also what give rise to second-hand social capital activation in the organizational setting they represent (Small 2009), where associational members activate social capital and provide resources to others in their time of need even when not solicited (Fischer, 2005). The generalized exchange of a voluntary association's organizational setting responsible for this second-hand social capital activation resonates with the classic mechanism of nonsearching, whereby alters provide job information to egos without its solicitation (Granovetter, 1995), but differs where it leaves less room for inequality when this activation occurs at a communal-level (for generalized exchange) than nonsearching at a dyadic-level (for restricted exchange).

Kmec, McDonald, and Trimble (2010), for instance, find when people take the initiative to recommend a friend to what they believe is a better job for them, referrers often recommend male alters managerial, more authoritative jobs, but siphon female alters into stereotypical service roles assumed of women; or, when women *are* siphoned into male-dominated jobs, they receive lower job rewards (in authority and wages) than their male counterparts. In a voluntary association, outside a dyad, this inequality is much less likely to happen, where the co-presence of others allows for more dialogical, open collaboration when members decide how to use information.

The same cooperative norms that permit the function of generalized SCEs in voluntary associations also shape how its members participate in restricted SCEs. Voluntary associations are a focus around which people voluntarily gather on the basis of a shared interest, with the result of attracting a greater diversity of occupations, positions, roles as people from all walks of life come to join (Small, 2009).

For this reason, voluntary association participation is a far more powerful source of network capital (access to ties with diversified others), which, in turn, yields greater social capital. Here, people gain access to different, more novel sources of information (De Vaan et al, 2015), more diversified types of social support, even more social capital itself when knowing more alters has a greater chance of generating introductions to more contacts (Erickson, 2009), and a strengthened sense of mastery and networking social skills to perform well in voluntary associational activities (Glanville & Story, 2018).

In a large-scale study of older adults in Chicago, Ali et al (2018) observe that elders with more diverse networks have lower mortality and higher cognitive function compared to those with less diverse networks. They attribute this effect to the superior stimulation that diverse contacts produce, bringing in different kinds of information, types of resources, and participation in variegated genres of social activity that more stably provide for elders' needs.

Similarly, work organizations leverage network capital to create innovation, albeit with a different mechanism, such as when organizations create working conditions that bring together people from different parts of the organizational network into collaborative projects. Producers selected into the mixed network position pairings characterized by large status differences typically generate more innovation (see McFarland et al 2014).

Recent social network scholarship in cultural production has since contributed to this thrust by demonstrating how central, influential actors and marginal, uninfluential actors are most innovative and successful when made to collaborate in an organization. De Vaan et al (2015), for instance, discover that structural folding in teams, the intersection between senior (core) and junior (periphery) memberships, is what creates the best-received video game designs. It is the cognitive distance embodied in the different repertoires of knowledge that producers with varying statuses possess that mobilizes a productive tension of rules, codes, and roles key to creating the most distinctive designs.

Similarly, Cattani and Ferriani (2008) also observe how the most creative Hollywood performances are created by teams with members characterized by more intermediary positions or a mix of core and *periphery* members. Core members bring the recognition inhered in their status, but periphery members bring novel information acquired from their more likely being exposed to different sources of stimulation by standing on the fringes of the network (Bastos et al, 2018).

But what distinguishes the use of diversity and its innovative outcomes within work organizations is its propensity to generate restricted, not generalized SCEs because of their emphasis on competition, not cooperation. Although cooperation *can* exist within subunits inside a single organization like teams, the pursuit of cooperation is subordinated to instrumental desires for individual gain (Blanka, 2019; Gagné, 2018). That is, although companies may differ in the values they push onto their employees, they nevertheless belong to a general class of institutions where competition is the value around which all social relations are ordered in a fundamentally hierarchical social setting (Mohr & White, 2008; White et al, 2007).

This is similar to how hierarchies may differ in different scientific labs, but the hierarchies themselves are a symptom of general status-layering in the larger scientific community (Bejan, 2019). Burt (2021) shows that even the overall profile of firms within entrepreneurial networks, those with many structural holes, is only made possible by competition among a large number of disparate workers who provide more checks and balances to oversee the quality of work being done individually. Similarly, creative producers are not keen to collaborate with just anyone within the same sector of their work organization, but only with those they have already worked with in the past (Comunian & England, 2019; Uzzi & Spiro 2005). This relational sorting mechanism, motivated by desire for personal gain in reputation and lacking the generalized communal trust that voluntary associations are more likely to have, thus fractures the organization into a series of overlapping, but fundamentally distinctive collaborative networks; each one a pathway of restricted exchange meant to improve each actor's prospects for upward mobility in a competitive work environment.

The Study of Social Capital Exchanges in Organizations

Where the first section reviews the forms of SCEs and conditions under which they occur across voluntary associations and work organizations, this section compares the predominant analytical approaches and methodological tools for studying such exchanges across these two organizational species and discusses their implications for the networking conditions and types of resources through which social capital is ultimately exchanged.

Analytical Approaches and Methodological Tools

This section discusses the fundamental analytical approaches and methodological tools for studying the interlocking networks that underpin SCEs in voluntary associations and work organizations in terms of approaches to boundary-specification, sampling strategies, network designs, and tie-recording methods.

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Network boundary-specification—The voluntary nature of participation in voluntary associations on the basis of a shared interest, like a focus (Feld, 1981) has implications for their network boundaries and designs. For one, it means that, although some organizational hierarchies can exist in voluntary associations as with leadership roles and the sort, the social credentials an individual possesses within a voluntary association are more insulated from those outside it. For instance, in her study of a Toronto-based community organization with its own currency, Erickson (2009) demonstrates that local social credentials are not linked to general status outside the organization (captured in income, job, and education), but to participation within the organization itself.

The relative insulation that voluntary associations have indicate the preference for an *event-based approach* to specifying their boundaries, one based on participation in a class of social activities as observed in Table 2 (Marsden, 2005), defining a network to be those members who participate in key events. This is especially the case since official membership lists may not be complete or even capture/distinguish active, and therefore relevant, from inactive members of a network, particularly since participation levels can vary greatly among members of voluntary associations that do not mandate active participation.

By contrast, work organizations differ in the characterization of their network boundaries and designs in important ways due to the hierarchy they engender. A highly structured

organizational hierarchy prompts a more *positional approach* to delineating the boundaries of a work organization based on the characteristics of formal, institutionalized positions, coming to define members of a network to be those actors who occupy a formally defined position in an organization.

Sampling strategies—The chief methodological benefit of studying organizations is the list of constituent members typically available in them, for both voluntary associations and work organizations, whereupon virtually every type of non-probability sampling and, depending on the size, probability sampling strategy applies. Smaller-sized organizations reduce the utility of probability sampling since members more likely know all other members. Furthermore, it is often that an organization selected for study has already been purposively "sampled" in the sense that it is used as a case study (Lin & Erickson, 2008).

However, voluntary associations differ by entailing a particularly greater risk of having incomplete, outdated, or inaccurate lists of constituent members. The extent to which members participate, for instance, marginal or extensive, is not reflected in such a list. Some solutions have been proposed by way of implementing a snowball design, where respondents are sampled randomly and asked questions about the nature of others' participation, continuously repeated to produce multiple samples based on indegrees to update the profile of the association's members (Au, 2022a). This is akin to a "fixed list" type of sampling, where we begin with a list of actors in a network and continually add actors to it based on new linkages we uncover (Doreian, Batagelj, & Ferligoj, 2020).

Network designs—Voluntary associations better lend themselves to egocentric network designs due to their likelihood of having incomplete member lists and potentially for the informal nature of their association, compared to work organizations engaged in money-making

activities. Much like personal networks, egocentric network designs for voluntary associations start from one focal actor to scope the alters to which he/she is linked, offering a cross-sectional snapshot of social dynamics in a network (Albert et al, 2021; Friedkin et al, 2019).

By contrast, work organizations are more versatile in the types of network designs they allow. Although egocentric network designs have been common in the study of work organizations, their bureaucratized structure also makes them more likely to have a complete list of its members, lending itself to the use of a one-mode, *whole network* design – one set of actors linked by one set of relationships observed at (at least) one occasion (Marsden, 2005; Wasserman & Faust, 1994). The complete network design improves our visibility of how an actor's location in a network structure shapes their behaviors (Valente, 2007), as well as *how many* actors are involved in this influence and *which* actors matter in this process, such as those who act as network bridges (those who broker structural holes) to transport things (information and values) between subgroups (Centola & Macy, 2007).

Methods for recording ties—Two of the most popular methods for recording ties to scope out networks have been the position generator and the name generator. Both generators can and have been applied to voluntary associations and work organizations but differ in interpreting the types of SCEs they are adept at accessing. The position generator works by (1) using a sample of structural units assigned a prestige score and ordered based on whatever is valued in a society (i.e. certain occupations, positions, and work units); (2) asking participants to indicate if they know anyone in each position, name contacts if so, clarify relationship, and characteristics about the contact; (3) calculating the average number of and prestige of positions accessed (Erickson 2004; Kmetty & Tardos 2022).

The results are fruitful for uncovering how an ego's position is related to the type of positions they access. Working on the assumption that network positions are precursors to *restricted* SCEs, the position generator is best suited to capturing this type of exchange given the range of access it provides to different positions in a hierarchy, the diversity of this access to different positions, and the upper reachability (the prestige of the highest position accessed) of ties they can access (Lin, Fu, & Hsung, 2001). As such, the position generator makes for a useful tool to study stratification in the distribution of resources per restricted SCE, particularly in hierarchical work organizations (Burt, 2009[1992]) or organizations with an informal hierarchy of roles (Enns, Malinick, & Matthews, 2008).

By contrast, the name generator works by (1) asking questions about an ego's alters in certain contexts, which may be about roles, content, closeness, proximity, or periods of time; (2) generating a list of alters from the ego's responses (Hampton, 2022). The results are used to explore how an ego's characteristics are related to the type of positions they access. A name generator, therefore, uncovers network characteristics (i.e. range, diversity, heterogeneity of status measures, upper reachability) as indicators of both restricted SCE through relative access and constraints to alters as well as generalized SCE through density and sparseness of relationships captured. Given its propensity to record ties with greater closeness and proximity, characteristics typical of personal networks, it is more commonly applied for voluntary associations.

Implications for Networking Conditions and Types of Resources Exchanged

Reflecting on the methodological differences in the study of networks between voluntary associations and work organizations, this section discusses their interconnections with the

predominant types of networking conditions that network scholars have implicitly assumed of the two, demonstrating how homophily is used by members of the two organizational species to decide whom to network with. This, in turn, matters for the study of SCEs in organizations because it generates implications about how ties are formed (as conduits for exchange) and the types of resources to be exchanged among ties.

Networking conditions—The two different network boundary-specification approaches implicate different networking conditions. Relying on event participation to characterize networks in voluntary associations generates a theorization of *networking conditions that are elective*, when an actor is given the freedom to *choose* the settings where they form their ties (McFarland et al, 2014). There are no institutionalized roles that participants must occupy and so there are no role-sets that restrict who they can interact with. Thus, the lack of organizational differentiation within voluntary associations, if they are large, increases the chances of clustering and segregation.

Clustering does not necessarily work against the generalized exchange depicted in the previous section – it simply means that subgroups can form within voluntary associations as people are uncertain of who to interact with and assortatively mix into clusters (Melamed et al, 2018; Rivera, Soderstrom, & Uzzi, 2010). What this shows is the *criterion for networking* (what characteristics association members look for in deciding who to *network with* and build these clusters) is explained by value homophily. Indeed, the shared interest upon which a voluntary association is founded speaks to similarity based on internal beliefs (Harrigan & Yap, 2017).

By contrast, a positional approach to specifying the boundaries of a network in work organizations means there is less room for clustering and segregation in the network since

exclusion becomes more visible. Thus, *networking conditions are selective*, whereby the setting an actor builds connections in is not decided by them (McFarland et al, 2014).

It follows that work organizations are comparatively more likely to foster ties and networks that are inherited based on position, as when an actor gets promoted and suddenly has access to a whole new set of alters by virtue of their change in circumstance, rather than their person (Amis et al, 2018). What results is a tendency to produce and replicate a different type of homophily: status homophily. Here, status is a gatekeeper to upward mobility, where actors and layers of the organization's hierarchy witness segregation based on sociodemographic dimensions, such as race, ethnicity, sex, age, and so on. A strong research tradition on inequality in networks illuminates how women, for instance, possess less legitimacy than their male counterparts in firms, suffering from worse returns in social capital in organizational settings and having to rely on networking with men to perform job tasks (Brady, 2018; Bishu & Headley, 2020; Erickson, 2004).

It is emphasized that the two types of homophily are not exclusive to each type of organizational species. Value and status homophily can be found in both species, but differ in how they each affect networking processes within the two species. In voluntary associations, status homophily can shape networking, but through informing the values assigned to these characteristics, like how subordinate roles, influence, and characteristics are assumed of women (Erickson, 2006; Kmec, McDonald, & Trimble, 2010).

Thus, status homophily matters, but for informing value homophily when demographic characteristics inform discriminatory profiling in barring entry into the association for the ultimate purpose of reinforcing *closure* that existing members believe is essential to preserving group solidarity and identity (Erickson, 2004; Evans, 2018; Schwabenland, 2016). Conversely,

value homophily can exist in work organizations, but to reinforce *stratification*, rather than closure as with voluntary associations.

Higher-placed workers command access to more social and cultural resources that help upward mobility in organizations by exerting a positive cooperative influence on colleagues at and above their own position, but which keep the cumulative advantage to those of higher classes with superior education and financial resources to access these cultural resources (Basov, 2020; Erickson, 1996; Van Hauvelen, 2020).

Types of resources exchanged—The networking conditions that voluntary associations and work organizations differently embody carry implications for the social dynamics that each organizational species tells us about, which, in turn, shapes *the types of resources* more likely to flow within each species. First, networks in voluntary associations tell us about social dynamics beyond organizational boundaries, whereas those of work organizations speak to social dynamics within the organization. In voluntary associations, participation typically operates over the life course, which provides a unique vista for observing the co-evolution of groups, memberships, and ties throughout (Ruiter & De Graaf, 2009).

Characterized by elective networking conditions and lack of institutionalized hierarchy based on external status, it means that tie-formation in voluntary associations is motivated by balance (pressure towards mutuality) and, because it is similar to personal networks, more powerfully shape network ecologies beyond organizational boundaries, since the ties that people make within the organization are more likely to originate in different social positions (McFarland et al 2014). Against this backdrop, tie-formation in work organizations, defined by selective networking conditions and a competitive, institutionalized hierarchy, is motivated by dominance.

Thus, tie-formation is motivated by prospects to enhance one's position, informing network ecologies within organizational boundaries.

The types of resources more likely to flow within each type of organization follow from these differences. Work organizations, as a corollary of their hierarchical structure, are more likely to generate social exchanges that capitalize on positional resources, such as the prestige of an actor's occupational position (Lin 2001b), and resource-based content, like diversity of information and more leverage in brokering ties between disconnected others and controlling their content (Burt 2009[1992]).

By contrast, voluntary associations are more likely to generate flows of personal resources, like cultural knowledge and different types of social support, as well as identity-based content, value-based trust, and support necessary for socioemotional benefits (Hampton, 2022; Huang, Chengalur-Smith, Pinsonneault, 2019; Plickert, Cote, & Wellman 2007). Thus, the conceptual separation of these contexts importantly glimpses the possible institutional arrangements that explain how the same network configuration (i.e. structural holes) can be disaggregated into different outcomes of social action, depending on the organization species and adherent network characteristics that embed them. Similarly, it permits distinction between different types of segregation by disaggregating the process into contexts of selectivity (where the network setting and internal ordering are selected for us, typically by hierarchy) and electivity (where the network setting and internal ordering are self-selected).

Recent longitudinal research in this area has further demonstrated that the distinction between positional and personal resources is not so much a binary as a threshold, where one can cross into the other given enough time. Ruiter and De Graaf (2009) demonstrate that through the life course, becoming a member of voluntary associations with high-status co-members and co-

members in supervisory positions has a positive effect on one's own income, in part because of the informal cultural resources (skills and values) that are learned in their presence.

Two Case Studies: An Illustration

To illuminate the connections set forth between the type of SCEs and the methodological designs for SCEs in work organizations and voluntary associations, I discuss two informative case studies.

The first is Godart and Mears (2009), who conducted a network study of fashion directors responsible for selecting models for 2007 Spring/Summer Fashion Week shows in New York, a restricted organizational context within a specific field (fashion). In it, they found that directors networked dyadically with other directors to offer and receive informational tips, performing a kind of restricted SCE. Importantly, they discovered that because work was the social context in which these exchanges were embedded, directors' networking enacted a kind of status homophily.

This was part and parcel with Godart and Mears' recording the ties and actors based on their positions. Given the positional boundaries inherent in the specific field they studied, their methodological design cast light on the whole-network of fashion directors and models associated with the 24 fashion shows that took place. Furthermore, the different positions that directors occupied in the hierarchy of the fashion field ensured that networking conditions, much like working, were selective – prisms through which distinctions were cast to sort directors and models into different parts of the core-periphery network.

Godart and Mears contributed by showing the status homophily with which such work organizations operated: directors only chose models based on who they thought other directors

were choosing. In other words, the stratification of SCEs was homologous with the stratification of positions, which is how the network hierarchy replicates itself.

The second is Mario Small's (2009) well-regarded *Unanticipated Gains*, an ethnography of mothers enrolled in a daycare center, essentially a voluntary association. Small (2009) innovatively creates the concept of storage as a social mechanism for organizations to broker SCEs. Essentially a form of generalized SCEs, the daycare center brokered ties and resources through storage by stockpiling a repertoire of knowledge about available resources (e.g. other organizations that had partnerships with the center, events going on, tips for motherhood and childrearing, information about government programs available), such as having all mothers contribute this information and collating it all onto a public commons available to all members. This allowed for nonsearching as a form of collaboration as well as generalized SCE, when members could share information and access help from a communal pool of resources, built on a communal model of trust.

Small (2009) writes in great detail about the challenges of studying such an organization, for mothers were not obligated to participate even if they were listed on the client roster and subsequently varied significantly in the degree of their participation in the daycare center. This prescribed recourse to an event-based approach to boundary-specification, namely, those who regularly participated in the daily events held by the center. Furthermore, because the common quality that mediated participation in the daycare center was motherhood, networking conditions were elective and not status-based, and Small turned to record ties on the basis of personal biographies, the results of which he used to build inferences about egocentric networks and identify value homophily. Mothers wanted to network with one another and with others at the daycare based on their similar struggles.

An important result of these two studies is that the nature of how much people exchange social capital and gain from it depend on institutional conditions that they often do not control, but which are effected on the everyday level even when they might not be aware of it.

New Directions for Studying Social Capital Exchanges in Organizations

Organizations are a seedbed for variant forms of SCEs. The first section theorized how and under what conditions two prominent types of SCEs (restricted exchange and generalized exchange) work in voluntary associations and work organizations. Building on this premise, the second section examined the methodological tools and approaches used to study networks of exchange in organizations and their adherent implications for networking conditions (how ties form) and the types of resources exchanged.

This article lays out three theoretical and methodological challenges to studying SCEs within the two organizational species that arise out of the previous two sections and develops recommendations for overcoming them.

(1) *Networking mechanisms between organizations as units.* Organizations are typically conceived as units only when evaluating the ties between them, treating them as contexts when we speak of their connection to individuals, but not how *individuals* build ties with organizations *as units* and the network characteristics that influence the nature of this tie-formation, like tie strength and diversity. It is known, for instance, that individuals can benefit from involvement in voluntary associations, but can suffer when involvement grows to sap too much of their times or resources.

If organizations are theorized as actors on the same order as individuals, we can better understand how different network characteristics mediate this trade-off within organizations of a

certain type or sector. Just as there are informational benefits to be had from a diversity of weak ties to alters, but a higher bandwidth of informational flow, trust, and emotional content from stronger ties to alters (Aral & Alstyne, 2011), there is room to better map out the social capital returns (in the type and quantity of social resources) that individuals obtain from the strength and diversity of their involvement with different numbers and types of organizations.

(2) *Meaning-making and methodological triangulation*. There is an inherent challenge with the methods for recording ties to build networks: the failure of both position and name generators to circumvent problems of recall, where respondents do not report the most accurate alters to questions, but the closest ones with whom they have strongest ties and so are easiest to remember. Segueing with the problem of having incomplete or inaccurate lists in organizations, this challenge can be overcome using methodological triangulation with different network designs. Snowball designs, despite being understudied, have much to offer in this regard. Snowball designs mimic and can even replicate the networking pathways through which an ego typically seeks out alters in the first place.

Egocentric networks and whole networks overlap, where the former is nested in the latter – for every individual in a whole network, there exists an egocentric network spanning outward connecting them in distinct ways to different sets of alters. If sampled densely enough, for instance, egocentric networks can form a whole network. Snowball designs have largely been ignored, yet they fit into this scheme by identifying pathways deemed important by an ego.

Drawing inspiration from the sociology of culture, the choices that people make are the output of cognitive schemas they hold, fashioned out of subconsciously and consciously decided values (Pugh, 2013). Similarly, how – or who – an actor identifies in response to snowball procedures can potentially uncover meanings that recursively shape network decisions and

mechanisms, particularly in organizations where they could better understand its institutional style and values. And although using all three designs will not likely be possible in any network study, we should be urged to use as many as we can to triangulate more detailed claims about characteristics of a specific organization and its connection to larger typologies of organizations.

(3) *Contagion in organizational networks in an age of digitalization*. In view of the different methodological approaches for measuring types of resources exchanged between members of an organization, a classic argument about the importance of SCEs for better organizational performance conceptualizes *information* and *practices* as resources, such that individuals are incentivized to attract diverse and novel sources of information and organizations incentivized to mimic successful players in the market (Burt, 2004; DiMaggio & Powell, 1983; Granovetter, 1995; Min & San Miguel, 2018; Van den Bulte & Lilien, 2001).

Although we know how complex contagion works between individuals, such as how contagion flows better among strong ties characterized by greater trust, exchange of more sensitive content, less uncertainty, and more frequent communication, we know little about how these arguments extend to an organizational level as digitalization ramps up worldwide. It is worth studying, for instance, whether institutional isomorphism is abetted or stalled by new social spaces created by digitalization that blurs statuses and work hierarchies, as they do among individuals (Tian, 2021). In a similar vein, it is worth examining whether the hitherto asymmetric dispersion of information is being flattened and whether, as a result, once-held advantages in information access are being eroded by the ubiquity of digital platforms (Au, 2020).

In light of research that shows individuals have larger network sizes on digital platforms, furthermore, it is worth exploring how the landscape has changed for organizations and in connection to contagion. Examples could include how the generalized exchange common to

voluntary associations motivates conformity (isomorphism) through tie width and tie strength online the way they do offline; or how the restricted exchange more common to work organizations facilitates complex contagion because the dyadic nature of its exchanges creates more frequent communication and possibly trust is another area for future inquiry. In a similar vein, differentiating flows of complex contagion across varying types of structural units within the organization (i.e., cliques, blocks of structural equivalence, etc.) is worth investigating.

Conclusion

Social capital is one of the most important resources for upward mobility and has been linked to inequality at multiple levels. This article contributes to the organizational and sociological study of social capital by schematically theorizing the structural idiosyncrasies and methodological approaches that distinguish the forms through which it is exchanged within work organizations and voluntary associations, two of the most prominent institutional settings in which these exchanges take place.

It is shown that these voluntary associations give rise to generalized exchanges and restricted exchanges, whereas work organizations lend for restricted exchanges. These structural qualities, it is further demonstrated, prescribe different methodological frameworks with which to study them, conceptualized across boundary-specification, sampling, network designs, tie-recording methods, networking conditions, and homophily. Building on this schematic outline, this article articulates three novel directions for future research: conceptualizing organizations as units, methodological triangulation, and contagion in the wake of digitalization.

In the wake of empirical evidence showing that digital platforms shape the content of their interactions (Au, 2022b; Tian, 2021), the subject of the present article gains salience with

the understanding that so too do institutional conditions hold powerful influence over the social (capital) exchanges within their boundaries – particularly as the range of institutions, from governments to private companies, exhibit structural transformations the rapidly advancing tide of digitalization.

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Tables

Table 1. Schematic outline of the types of social capital exchanges that correspond to different characterizations of organizational species

		Type of Organization	
		Voluntary Associations	***Work Organizations***
Characterization	***Units***	Restricted exchange	Restricted exchange
	Contexts	Generalized exchange Restricted exchange	Restricted exchange

Table 2. Network designs compared between voluntary associations and work organizations

		Type of Organization	
		Voluntary Associations	***Work Organizations***
Designs	***Boundary-specification***	Event-based	Positional
	Sampling	Potentially incomplete list of members	Full list of members
	Network designs	Egocentric	Whole-network
	Tie-recording methods	Name generator	Position generator
	Networking conditions	Elective	Selective
	Homophily	Value (for closure) Status (giving meaning to values)	Value (for stratification) Status (for gatekeeping)