

# SOCIOLOGY, STRUCTURATION, AND UNDERSTANDING BUSINESS NETWORKS

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## ABSTRACT

**Purpose of the paper and literature addressed:** The purpose of this paper is to examine how one of the most cited theories in sociology, Structuration Theory, may help inform our understanding of business networks and how they function. Structuration theory deals with the creation and maintenance of ideas and structures as well as with change and continuity processes. It defines a social system as any set of practices, patterns of interaction and social relationships which are relatively enduring.

**Research Method:** Conceptual paper.

**Main Contribution:** We define structuration theory, and highlight its main contribution to sociological study and the investigation of issues relating to the relationship between structure and agency in social theory. In order to identify how a structurationist approach may inform our understand of business networks, we examine how the propositions put forward relating to Actors, Resources, and Actions (the ARA model) might be understood using the structurationist perspective.

**Keywords:** Structuration, Social Theory, Agency, Networks

## INTRODUCTION

The purpose of this paper will be to examine how one of the most cited theories in sociology, Structuration Theory, may help inform our understanding of business networks and how they function. Structuration theory deals with the creation and maintenance of ideas and structures as well as with change and continuity processes (Staber and Sydow, 2002). It defines a social system as any set of practices, patterns of interaction and social relationships which are relatively enduring (Parker, 2000). As noted by Meindl, Stubbart, and Porac (1994), there are few theoretical frameworks for linking structure and process together in a meaningful and useful way. One theoretical framework that does precisely this is that of structuration theory (Giddens, 1984).

In the social sciences, the relationship between agency and structure is among the most pervasive and difficult of issues in social theory (Pozzobon, 2004). Structuration theory focuses on the ways in which social systems are produced and reproduced in social interaction, views humans as role-taking and norm fulfilling beings who act according to their images of what reality is, and considers all institutions and social practices as structures (Nonaka and Toyama, 2003). It views social systems as re-creative and self-organising systems and implies a major shift in paradigms from the Newtonian paradigm to the approaches of complexity (Fuchs, 2003). “There is a shift from predictability to nonpredictability; from order and stability to instability, chaos, and dynamics; from certainty and determination to risk, ambiguity, and uncertainty; from the control and steering to the self-organization of systems; from linearity to complexity and multidimensional causality; from reductionism to emergentism; from being to becoming; and from fragmentation to interdisciplinarity.” (Fuchs, 2003:134). This is a marked departure from the Marxist view of reifying objectivism in which social theory viewed historical change as the effect of the objective self-moving powers of systems, in which the relations between system elements explained everything and individual agency was refuted (Parker, 2000).

Therefore, social systems - be they societies, cultures, institutions or organisations - do not exist outside of actions but are sets of transformation relations. Thus, society is considered a social system where structural principles serve to produce a clustering of institutions across time and space, and create an association between the social system and a specific locale or territory (Fuchs, 2003) in which the regionalization of activity takes place (Hardcastle, Usher and Holmes, 2005). Thus structurationists recover the notion of human agency from the Marxist social system ‘machine’ but do not view the creation of social structures as wholly subjective. In addition, they recognise the constraining powers of social structures, without succumbing to outright objectivism. In particular, the contribution made by Giddens through his theory of structuration is the methodological detail he provides in terms of social organisations (Parker, 2000). Looking beyond just networks of interactions, he introduces practices, rules, and resources as important features of the dialectic of structures and actions in contemporary sociology (Fuchs, 2003).

Part of the structurationist approach is that organizational actions have marketplace consequences that may be experienced at both micro and macro levels. Thus markets are viewed, not as the arena of exchange, but as a process of social construction that marketers and consumers engage in (Penaloza and Venkatesh, 2006) and therefore knowledge and beliefs are both contingent and contextual (Bagguley, 2003). The underlying basis for causality shifts from reductionism (where reference to the whole is through the study of its parts) and determinism (where results are mechanistically and rigidly tied to prior events) to emergence and mutual causality by self-organizing systems. This allows us to embrace complexity in that the new, and the whole is considered more than the ‘old’ and the ‘parts’ of a system. Thus through interactions the components of a system result in new properties which cannot be fully predicted and cannot be found in the qualities of the components individually (Fuchs, 2003).

## **WHAT IS STRUCTURATION THEORY?**

Structuration theory is a general theory (i.e. it refers to theoretical ideas removed from any specific social setting) and is intentionally both broad and integrative in nature. The broader scope of general theories means they are often used to explain a larger number of

phenomena, while the integrative nature of general theory means they serve to unify less general theories (Brodie, Saren and Pels, 2009). It differs from the more common mid-range theory (which is closer to the social data and seeks to provide a theoretical bridge between empirical findings and general theory) or grounded theory (which is usually developed from a specific study or context: Chiasson, and Saunders, 2005). Structuration theory is not new to the social behavior literature having been used in various contexts from interfirm networks, innovation processes, global virtual teams, organizational transformations, dyadic relations to interactive marketing communication (cf. Bryant and Jary, 2001). These uses have ranged from the reconstituting of entire research disciplines (such as accounting) or specialisms (such as the sociology of technology) to the reconstituting of an interdisciplinary field (Bryant and Jary, 2001).

Giddens (1984) defines structuration as a process in which: (1) The availability of resources, which may be either authoritative (relating to power relationships) or economic, and; (2) The rules governing access to resources that are embedded within a particular social system (such as an organization, a network of organisations, or an industry) interact. As a result, structure is not a fixed form or relational pattern, but a feature of social systems. It is this construction and reconstruction of structure by the interaction of knowledgeable actors that is called 'structuration'.

Structuration theory asserts that individuals are active agents - knowledgeable individuals - with the capacity to transform their setting through action (Giddens, 1984). The theory recognizes the strong influence of external structures such as groups, organizations or networks on behavior, and as pointed out by Huff, Huff, and Barr (2000) provides a means of integrating an interpretative, cognitive perspective through a structural process. Placing individuals within a social context suggests that individual actions will be constrained by those contexts, and may have unintended consequences as a result (Giddens: 1984). While structure gives form and shape to social life; "social systems *are* not structures but they *have* structures; they have structural properties that actors draw on in their social interaction" (Staber and Sydow, 2002, p 412). Language, for example, is a structure which enables and constrains our understanding and interpretation of the situations in which we act. Similarly, agency is not something simply contained within the individual as an intension to act, but is more closely associated with the flow of individuals' actions and interactions. Staber and Sydow (2002) explain that according to structuration theory, structures never determine action; rather individuals are engaged in structures that they transform in the process of their actions.

This inseparable link between structure and the configuration and interaction of those within the structure (individuals, groups, networks - referred to as agency) is known in structuration theory as the duality of structure (Giddens, 1984) or analytical dualism (Archer, 1995, 2000; Mouzelis, 1991). It is a distinguishing feature of the structurationist approach. Agents and structures are not two independent phenomena, but are intertwined such that the structural properties of social systems are recursively organized by the agency of the actors within these social systems through their continuous flow of reflexively monitored conduct (Boland, 1996). Giddens often downplays the extent of reflexivity in the instant of agency, and draws heavily on the notion of 'taken for granted' *routines* of practice as the most common outcome of individual action. However, criticism of Giddens' work includes the notion that this relationship is not a duality (i.e. inseparable) but is in fact a dualism (a separation). In particular, Archer (1995) argues that structure and agency are not identical in this sense, and that there is and should be an analytical separation of the two in order to

understand the various relations between structure and agency and to understand why specific situations are the way they are. What Archer termed *morphogenesis* is the study of the production and transformation of such relations. In this respect Archer ontologically supports the necessary relationship between structure and agency (what she terms ‘no people, no society’) but recognises that analytically they must be distinguished in order to establish what the relationship between them is and how it works (Parker, 2000). Her scheme of ‘structural conditioning – social interaction – structural elaboration’ separates these analytically but not philosophically as it recognises that all three are in fact continuous (Archer, 2000).

## SPACE, TIME, AND STRUCTURATION

Space and time are important features of the structuration process as they provide the context, or situated character of interactions (Hardcastle, Usher and Holmes, 2005). “The very essence of Giddens’ approach is that it is a time-bound process of interaction between agent and structure” (Callahan, 2004:1445). While time may be seen on the one hand as irreversible (termed by Giddens as life-span time), it may also be seen a reversible in the sense that normally routinised practices that are habitual and taken for granted can be stopped or changed and cause what Giddens termed a *critical situation* in which a sense of insecurity is created which impacts on institutional time and ontological security (Hardcastle, Usher and Holmes, 2005). Reversible time refers not only to the continuous but also repetitive character of social life in which structures are manifested, diffused, and potentially challenged through repeated actions (Heracleous and Barrett, 2001). “Actors are situated and positioned in space-time and have social identities that carry with them certain prerogatives and obligations.....The positioning of actors within certain social frameworks and with respect to rules allows the routinization of actions” (Fuchs, 2003:141).

Thus organisations or institutions are seen as the duality (or dualism) of agency and structure which results in practices which ‘stretch’ over time-space distances in the reproduction of social systems (Giddens, 1984). Institutions persist not only because of the adherence to routines across space and time, but also because those operating within them consent to create and re-create those routines. However, this presents a dilemma in relation to structuration and the concept of history for which Giddens has been criticised. According to Giddens history does not have agency, and cannot pull or direct events in the present to influence outcomes in the future. Only actors have purposiveness and can activate and maintain structures. Giddens attributes this to the fact that all agents, no matter what their social position, have an irreducible power of agency, that their actions are situated in the (largely) unintended consequences of past action, and that through reflexivity they may change the knowledge that they use to guide their action (Parker, 2000:60). This process of linking agency and structure to the development of social systems is what Giddens (1984) termed *distanciation*. Thus when actors use structures they enable certain social interactions and relations and constrain others. They therefore ‘stretch’ situations through the use of rules and resources and dissolve the restraints of time and space (Parker, 2000). Thus for Giddens, history is in the now and in each moment anything is equally possible.

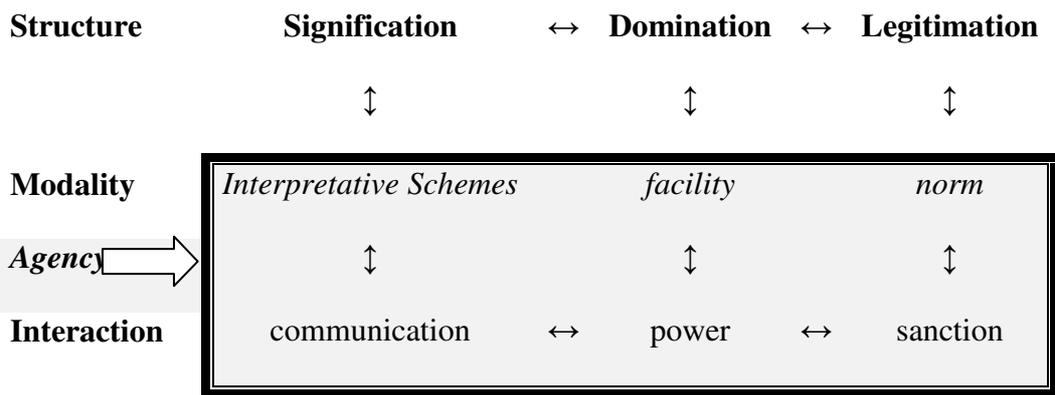
This places a great deal on the shoulders of knowledgeable actors reflexively exercising agency in the moment. In his account of distanciation Giddens acknowledges the durability, autonomous temporality, and causality of social systems; something his conceptualisation of structuration as a duality was intended to deny (Parker, 2000). This is something which Archer (1995) is quick to seize, as she stresses that systems are emergent

outcomes of periods of social interactions by agents and that once they pass a developmental threshold they may indeed exercise their own causal powers independently of the agency which initially produced them. Their temporality is “more enduring than the present and less than the whole of historical time” (Parker, 2000:107). For example, once established beyond the initial actions of a few believers the Christian faith (as a social system) is able to influence and *condition* future action, however it may not determine future action. For Archer (1995), the notion of time is reflected in the morphogenic analytic process, in which a temporal sequence frames the field of investigation. First there is the conditioning by all pre-existing conditions, second there is the present social interaction in which agents pursue their goals by exercising their powers, and finally there are the outcomes of this episode of interaction which may be reflected in changes to both structures and agents. “Given time, systems can be both cause and caused, as can agency. Analytical dualism depends on temporality.” (Parker, 2000:75).

### THE THREE DIMENSIONS OF STRUCTURE: DOMINATION, SIGNIFICATION, AND LEGITIMATION

In order to understand the structuration process, by which structures are created and maintained, we need to explore the role of signification, domination and legitimation as dimensions of structuration. This is summarised in figure 1. This structuration framework shows how structure is linked to the agency of actors through their types of interaction (communication, power, and sanction) and the ways in which they may draw upon rules and resources (modality). In order to understand how the dimensions of structure (domination, signification, and legitimation) are related to the structuration process, we discuss how structural properties, knowledgeable individuals, and social practices together enact structuration.

**Figure 1**  
**The Structuration Framework**



(Giddens, 1984)

### STRUCTURAL PROPERTIES

Structure, as both an outcome and a resource for action, is a dynamic property of social practices and are produced and reproduced by interactions. Structures, therefore, are not fixed or rigid frameworks in that individuals bring different interpretations and normative understandings to the process which may enable or constrain cooperation and the exercise of

power. Structure, in the structurationist perspective of Giddens, consists of rules and resources. Actors use appropriate rules and resources to give form to situations of action by interweaving interpretive meaning, normative sanctioning, and power. Rules and resources do not do anything, but exert their effect through being known and used by actors exercising their agency within a situated context (Parker, 2000). According to Archer (1995), structures are the outcomes of past agency and may emerge over time to become relatively autonomous and durable conditions of action, which is how actors come to know and use them.

**Rules** may be either interpretive (which govern the way actors interpret the world, i.e. the cognitive aspect of social structure, termed signification) or normative (which regulate the legitimisation of actions) and may have the properties of intensive vs. shallow, tacit vs. discursive, informal vs. formal, weakly vs. strongly sanctioned (Fuchs, 2003).

**Resources** on the other hand may be either authoritative (related to people and power dependency) or allocative (related to objects; tangible or economic). It is these resources that are used by actors in a social system to exert power over other people and objects. While allocative resources relate to capabilities which generate command over objects, goods, or material phenomena, authoritative resources involve the organisation of social time-space and the production and reproduction of relations between human beings in mutual association, and the organisation of chances for self-development and self-expression (Fuchs, 2003).

**Power** is therefore what we do with the authoritative or allocative resources (Callahan, 2004) and accompanies action, thus implying that both the actor and structures are integral aspects in power analysis and are mutually dependent (Hardcastle, Usher and Holmes, 2005). For example, the Chief Financial Officer of a company would be considered to have high allocative resources, while the line manager of an individual would be considered to have authoritative resources in relation to that individual. However, what we do with this power may be a result of the reflexive self monitored of action. The line manager may decide to use rewards rather than coercion, and the Chief Financial Officer may decide to devolve some responsibility for allocative resources to others. Structuration theory views power as allowing things to 'get done', and so may not necessarily be a negative force. Power can be seen in a positive way, as non-competitive and shared by many people (Chiasson and Saunders, 2005). Power in structuration theory is understood not as a commodity or as being exploitative, but as a productive resource which has to be seen within an overall context and which leads to a dielectric of control as power balances change (Hardcastle, Usher and Holmes, 2005).

Bourdieu in particular saw structure and agency as related by power. While structure confers agency on agents by distributing power to them, agents use their power to defend and increase their resources (Parker, 2000). These resources could be economic, political, social, and or cultural/symbolic (Bourdieu, 1990 ). However, if power is differentially distributed and of various kinds then we have the issue of attributing relatively autonomous causality to the properties (i.e. rules and resources) of social systems and to some extent contradict the notion that social system change is the contingent and unintended outcome of agency (Parker, 2000:63). This stratified view of power as struggle fails to account for the emergence of non-hierarchical occupational specialisation that is so often seen in instances of technical innovation (Parker, 2000). Thus, power as a means of uniting structure and agency imposes severe limitations. To ascribe the development of practices such as science and law, or value and belief systems such as religion, to the dynamics of power alone fails to explain why they

exist. Structures "... are products of the commitments of agents far wider than to their interest in improving their standing in the distribution of power." (Parker, 2000:51).

The way in which knowledgeable actors utilize power in interactions through the ability to allocate material and human resources is a process which Giddens (1984) terms the creation, reinforcement or change of structures of *domination*. Domination is defined by the way in which control over resources is available to actors, and by the way in which they use facilities to mobilize available resources (Staber and Sydow, 2002). Thus, in structuration theory power is an aspect of structure which is subject to the process of domination by actors exercising agency. Systems of domination enable actors to affect each others' conduct via the exercise of power through the application of facilities such as rules and resources (Giddens, 1984).

However, power might also accrue to individuals because of their positions in hierarchies or their membership of collectivities, and thus there may be some variability of agency (Mouselis, 1991). Researchers such as Burt (1992) have argued that network linkages may reflect power dependencies in a network in that they enable and constrain the flexibility, autonomy, and consequently the effectiveness of organizational members. Therefore features of a network such as connection strength, direction, and time frame will shape the interdependence among network members and thus their relative power and ability to exercise agency. This failure to account for power as a feature of position and connection – to allow for a collective basis of agency- can make Giddens conceptualisation of power very limited and less useful in understanding the workings of social structures than it might be (Parker, 2000). As Archer (2000:468) points out, roles are not simply the result of other agents' subjective expectations, but involve the actor in "...structures and their situational conditioning."

### KNOWLEDGEABLE INDIVIDUALS

According to Giddens (1984), individuals are socially competent and have the capacity to reflect on their situation and the ability to change their situation. However, as he views actors as 'objects to themselves' and the self as the 'agent characterised by the agent', Giddens maintains that actors have their own experience but cannot make sense of it privately, but must do so in the context of rules and the subjective judgements of others (Parker, 2000). Thus Giddens proposed that actors ground their sense of self in the direct, concrete experience of face-to-face interaction which he terms *methodological interactionism* (Giddens, 1984). On the contrary, Archer (2007:36) maintains that individual differences exercised as personal properties and powers should make a difference to their actions "...on the basis that our personal identities are defined by our 'constellation of ultimate concerns' and that our quests for social identities are deliberative attempts to secure positions (occupational, familial, institutional, voluntary) in social contexts with allow these concerns to be realised." No doubt, both constructions of the self play a role in developing and guiding individual knowledgeability and action.

In relation to knowledgeability and action, Pozzebon (2004:253) notes: "The concepts of the duality of structure and competent agents are inter-related. In fact, the structurationist way of interpreting the interplay between structure and action requires competent and reflexive actors." Reflexive individuals take action in order to modify and redefine structures in ways that will offer different possibilities for future actions. According to structuration

theory, individuals draw from pre-existing structures bounded by pre-existing rules. Knowledgeability refers to the knowledge individuals have of the circumstances of their actions and the rules they follow (Berends, Boersma, and Weggeman, 2003). Structuration does not imply that individuals are slaves of existing structures; individuals have the power to 'act otherwise' and thus the interaction of knowledgeable individuals often instigates change. In this respect human behaviour is seen as intentional and purposive.

However, being knowledgeable individuals does not imply that the motives, conditions and the consequences of their actions are readily understood (Berends, Boersma, and Weggeman, 2003). There may be unacknowledged preconditions and unintended consequences of action, which form the bounds of knowledgeability (Giddens, 1984) and which play an important role in the production and reproduction of structure. Giddens refers to this type of reproduction as homeostatic loops (Fuchs, 2003) where aspects of human behaviour do not flow from conscious choice but stem from a subconscious level. In addition, feedback in what Giddens refers to as causal loops (Fuchs, 2003) may influence system reproduction through reflexive self-regulation. By differentiating between these two types of social reproduction, Giddens allows us to include both circular causality and feedback loops as important tools for describing social systems (Fuchs, 2003).

Through reflexive monitoring, individuals consciously track and assess actions and their consequences in both themselves and others (Callahan, 2004). Thus, while some knowledge may be *discursive* and propositional (i.e. explicit knowledge: Nonaka and Toyama, 2003) much of it is carried in what Giddens termed *practical consciousness*, in which actors hold beliefs about their context and the conditions of their actions which they are unable to express discursively (i.e. tacit knowledge: Nonaka and Toyama, 2003). However, one criticism of Giddens work is that he uses an over-rationalised concept of the individual. The self-controlled individual is one without historical development, and lacks a framework for understanding how the emotional dimensions of social conduct operate (Bagguley, 2003). By linking practical consciousness with the creation and maintenance of routines Giddens seeks to explain how much of the activity of knowledgeable individuals is in fact the result of them being caught up in interactions rather than a deliberate and conscious flow of pre-meditated actions (Parker, 2000). This flow of regularised and routine actions to create and maintain structures is what Giddens (1984) termed *instantiation*. However, it is a highly compressed notion of temporality (Archer, 1995) which does not allow for reflectiveness and rational deliberation in human action (Parker, 2000).

Here we see the work of Bourdieu (1990) as enhancing our understanding of agency and history. Bourdieu defines practice as the application of embodied understanding from which rules, recipes, formal procedures and judgements are developed (Parker, 2000). Bourdieu (1990) speaks of the 'urgency of practice', in which episodes of practice – what we do in the here and now - are historically unique and arise from using the capacity (or skill) to undertake activity as an instance of pursuing a particular practice. It is these episodes of practice that relate moments of time and levels of history. They may be seen as multi-layered, with the immediacy of those moments of practice in the 'here and now', the longer term level of projects with their extended sense of 'what one is doing' and the extended production and transformation of those practices and institutions spanning time-frames which go beyond individuals and projects and which frame the activity of individuals all nested and related to each other (Parker, 2000:42). However, we still have the problem that by relating structure and agency so tightly, in the moment of practice, we reduce the complexity of

action to a kind of universal, logical and timeless identity and fail to find a place for non-logical and contingent relations (Parker, 2000).

In making sense of the communications and actions of oneself and others, knowledgeable individuals draw upon *interpretative schemes* that help them produce and reproduce structures of meanings. These interpretative schemes act as memory traces, or psychological frames, which orientate agents' conduct and provide the cognitive structuring necessary for constructing workable cognitive representations of the world (Heracleous and Barrett, 2001). This process of producing and reproducing structures of meanings is termed by Giddens (1984) in structuration theory as the rules of *signification*. Signification processes are the rules that help us understand 'how we do it in this organization' and the *communication* of those rules to others (Staber and Sydow, 2002). Rules of signification create symbolic interpretative schemes that facilitate communication during interactions and include how and what language is used, and how other signs (e.g. clothing, symbols, tools, etc.) are expected to be used to communicate. Signification is about how things appear to be (Callahan, 2004). Thus, systems of signification allow agents to communicate with each other through the application of interpretative schemes (Giddens, 1984).

## SOCIAL PRACTICES

Structuration theory defines practices as the recurring and regularized actions of individuals situated within a social system that create and recreate that system (Berends, Boersma, and Weggeman, 2003). Where actors are co-present in their interaction they engage in what Giddens terms social integration, and where this social integration is maintained across time-space then system integration may result (Fuchs, 2003). Thus, in structuration terms practices have a dual nature. On the one hand, practices are routinised activities that remain part of and enable and constrain the social system. On the other hand, knowledgeable individuals with their own perceptions and experiences carry out these practices. As Archer (2000:468) states, "...how it [social worlds] goes on is profoundly conditioned by the vested interests a given structure has distributed prior to current action sequences."

As knowledgeable individuals sanction these routines, rules and practices they do so by drawing on norms or standards of morality, and thus maintain or modify social structures through what Giddens (1984) termed the rules of *legitimation*. Legitimation is defined as the rules and norms that help us know that 'what we should do and how to do it in this organization' (Staber and Sydow, 2002), is fundamentally about how things should be, and creates an atmosphere in which things seem correct and appropriate (Callahan, 2004). These values and beliefs are in effect structures of legitimation that underlie agents' interpretations and actions (Heracleous and Barrett, 2001). *Sanctions* are the outcome of following, or not following, the rules of legitimation. Thus, we see that knowledgeable individuals influence social practices through their collective sharing and interpretation of knowledge and their perceptions of organizational purpose and action. However, these same knowledgeable individuals draw upon the rules and resources of the organization's wider social practices, shared behaviors, and norms to establish a common culture. Thus, systems of legitimation permit the sanctioning of interaction through the application of norms (Giddens, 1984). We can see a summary of the structuration framework in table 1, in which structure, modality and interaction are linked.

**TABLE 1**  
**STRUCTURATION PROCESSES – THE STRUCTURATION FRAMEWORK**

|  | <b>Structure:</b>  | <b>Modality:</b><br>the modes in which actors can draw upon rules and resources  | <b>Interaction:</b>  |
|--|--|--|----------------------|
| <b>The Communication of Meaning</b>        | <b>Signification</b> processes are the <i>rules</i> that help us understand ‘how we do it in this organization’ and the communication of those rules to others (Staber and Sydow, 2002).                     | <b>Interpretative Schemes</b> are the modes of typification incorporated within actors’ stocks of knowledge, applied reflexively in the sustaining of communication. | <b>communication</b> |
| <b>The Exercise of Power</b>               | <b>Domination</b> is defined by the way in which control over <i>resources</i> is available to actors, and by the way in which they use facilities to mobilize available resources (Staber and Sydow, 2002). | <b>Facility</b> – Command over people (authoritative) and object (allocative) resources.   | <b>power</b>         |
| <b>The evaluative judgement of conduct</b> | <b>Legitimation</b> is the <i>rules</i> and norms that help us know that ‘this is how we should do it in this organization’ (Staber and Sydow, 2002).  | <b>Norms</b> – the normative expectations of actors.   | <b>sanction</b>      |

Taken from Bryant, C. G. A. and Jary, D (2001)

## HOW STRUCTURATION MAY INFORM OUR UNDERSTANDING OF BUSINESS NETWORKS

Features of prior research in the IMP tradition bear striking similarities to the structurationist stance. The Interaction model views exchange as embedded in social, technical and economic interfaces. Interactions at the level of the dyad (the relationship itself) are both stable and dynamic, and involve exchange, co-operation and adaptation to create and maintain interdependencies and connectedness. Later work extended the interaction approach to examine the context of dyadic relationships within wider business networks. Networks as emergent phenomenon were key, and the inter-connected layers of a network became the focus, in particular Actors, Resources, and Actions (the ARA model). In order to identify how a structurationist approach may inform our understand of business networks, we now examine how the propositions put forward relating to Actors, Resources, and Actions (Hakansson et al. 2009) might be understood using the structurationist perspective.

### BUSINESS NETWORKS AS SOCIAL SYSTEMS

The issue of how to conceptualise the individual/society relation is one that has been dominated by two main viewpoints, each of which mirrors the subjectivist vs. objectivist stances already discussed (Parker, 2000). Firstly, from a subjectivist point of view methodological individualists will deny that the existence of social systems are something real and empirically testable, and that only that which can be directly observed (i.e.

individuals and their actions) are real. Alternatively, from an objectivist point of view methodological holists would argue that social entities may be reified (i.e. they may be considered as if they had living existence and abilities, and given the attributes of agency and volition).

From this debate arose social realism, in which social systems are recognised as being real but in which reification of their properties is avoided. Archer (1995) is a strong supporter of this approach, in which she defends the reality of social systems by stressing that individuals and social systems are both distinct and different from each other, but at the same time are interdependent. Her approach seeks "...to develop a humane and non-mechanical account of social systems, which will help people understand where best to direct their efforts to take control of their lives." (Parker, 2000:70). In contrast to the polarisation of action and structure that is sometimes seen as a feature of Giddens structuration approach, Archer views system as relating to action in a way that is emergent, relatively autonomous, in which systems pre-exist agents, and are causally efficacious (Archer, 1995). This relieves some of the pressure Giddens places on the knowledgeable actor to create history in the moment, as systems may take on some of this historical creation without being seen to exert agency themselves.

Turning to our assertion that networks are social systems, Sydow and Windeler (1998) have argued that much of the literature on inter-firm relationships and networks either explains the emergence of networks as an organisational form, or emphasises the behaviour of different actors within networks. Therefore, treating one theme (i.e. structure) is usually at the expense of dealing with the other (i.e. action: Dittrich, Jaspers, van der Valk and Wynstra, 2006). However, if we take Archers' realist stance and consider a network as a system that may exist in a way that is not synonymous with the agency of the actors in the network, that has form and existence that may pre-exist the activities of the actors within it, and which may influence causation (but not through exerting agency) then we can begin to understand how networks may indeed exist and be understood as self-organising systems. According to structuration theory, organisations (or business networks) do not have agency (Giddens, 1984), but are viewed instead as the regularized practices of the individuals who are associated with them. In other words, an organisation (or business network of organisations) cannot 'know' or 'do' but is a social system in which knowing and doing takes place.

However, organisations do differ from other social systems in the degree to which there is an emphasis on the reflexive regulation of system reproduction (Berends et al., 2003). In an organisational context, reflexivity is understood as the interplay between the organization and its environment (Staber and Sydow, 2002). That is, the organization is constructed in the process of interpreting and acting on environments. Organisations do not interpret and act in the same sense that individuals do, they cannot exercise self-consciousness and agency. However, as we stated earlier once they are established they may exercise their own causal powers independently of the agency which initially produced them – being more enduring than the present and less than the whole of historical time. They do this through the social processes they support which then become part of the regularised routines (in Giddens' terminology) of action in the organisation, and in the way in which these social processes then condition future action (in Archer's terminology).

Thus, if the social processes of coordination, decision making and representation can be recognised – and one does not reify these social processes - it is possible to speak of the

goals, intentions and strategies of a network without assigning to that network the properties of agency or insisting that such things stem only from the collective agency of the actors in the network (Parker, 2000:87). For example, a central debate in the organisational learning literature is how the concept of learning (often associated with knowledge, cognition and mental activities) can best be applied to organizations (and business networks: Berends, Boersma, and Weggeman, 2003). While individuals play an important role in organizational learning as the agents or instruments of learning, there is little evidence to suggest that organizational learning processes are similar to individual learning processes. Building theories of organizational learning solely from theories of individual learning creates difficulties when trying to capture the social nature of organizational learning (Berends, Boersma, and Weggeman, 2003). Therefore, we can argue that networks are able to learn, not as conscious and purposeful actors exercising agency but because they act as the repositories of social practices that condition the actions of the actors within them. By the same token, they are able to learn because these social practices are responsive to the changes enacted by knowledgeable actors and therefore can change and alter according to the agency of the individuals in the network.

This being the case, the *relation itself* between agency and structure is analytically distinguishable from what it is related to (Parker, 2000) and can be seen to "...do real work connecting the logically distinct identities of structure and agency, and what that work is has to be established." Viewing inter-firm relationships as self-organising systems means that causes and effects cannot be mapped linearly as they have a complex and circular causality. In such systems similar causes can have different effects and different causes can have similar effects, and small changes of causes can have large effects and vice versa (Fuchs, 2003). By making the relation itself analytically distinguishable we can begin to ask questions about the relationship between agency and structure that address such issues as 'what', 'how', 'who', 'where', and 'when'.

We now explore this relation between agency and structure, the structuration process, by examining the structural features of business networks, the social practices in networks, and knowledgeable actors and their relationship to networks. In doing so we draw upon propositions made in relation to the ARA model (Hakansson et al., 2009) and examine how they might be framed in a structurationist perspective.

## STRUCTURAL FEATURES OF BUSINESS NETWORKS

In structuration theory, a structure may be thought of as anything which is conceptualised as composed of relations between parts (Parker, 2000). Structural analysis thus breaks down an object into the relations between components, and "...tries to understand complex realities by trying our different ideas about the nature of their important components and the relations between them." (Parker, 2000:6). In defining resources, Hakansson et al. (2009) state that they are frequently the *subject* of discussion in the interaction between individual actors, but may also be the *objects* that are changed and activated by their interaction with other resources. They propose the following in relation to resources;

1. The value of a resource is dependent on its connections to other resources.
2. A resource changes and develops characteristics over time.
3. A resource is embedded in a multidimensional context.
4. All changes of a resource create tensions.
5. Interaction intensity influences the effects of a change in a resource.
6. Interaction breadth influences the number of resources that are affected by a resource.

In the structurationist lexicon, resources may be either authoritative or allocative. While this distinction is not made in the ARA model, the application of rules to authoritative and/or allocative resources may be highly relevant in understanding their propositions regarding how resources relate. Remembering that rules (either interpretive or normative) may be intensive vs. shallow, tacit vs. discursive, informal vs. formal, or weakly vs. strongly sanctioned we can see that when applied to resources they may have differing effects. For example, if interpretive rules (the way in which actors interpret the world) in relation to authoritative resources are strongly sanctioned, intensive, discursive and formal then the tensions that result from changes (proposition 4) made in how authoritative resources are used through structures of domination are likely to be much greater than if such interpretive rules are weakly sanctioned, shallow, tacit and informal. Similarly, if normative rules (which regulate the legitimation of action) are strongly sanctioned, intensive, discursive and formal when applied to an allocative resource then its connections to other resources (proposition 1), and its embeddedness in a multidimensional context (proposition 3) may be considered far more significant than if such normative rules were weakly sanctioned, shallow, tacit and informal.

In relation to time-space, organisations (or business networks) are seen as a way of concentrating allocative and authoritative resources, and thus a way of 'storing' power (Fuchs, 2003). Therefore, the time-space dimension of business network interactions acts in part as a locus for the transformation relations that drive structuration processes (reflected in propositions 1 and 2). Agents using their structural positions and/or roles to influence interaction intensity and breadth (propositions 5 and 6), could well be seen as enacting domination structures in order to extend and redistribute their power over either allocative and/or authoritative resources through the organisation of social time-space and the production and reproduction of resource relations.

## KNOWLEDGEABLE INDIVIDUALS AND BUSINESS NETWORKS

Structuration recognises that the position of actors in the larger social group is important, and that in the "...concrete embodied, interest-laden disposition which flows from being formed in a position, individuals become historical actors." (Parker, 2000:44). Thus, subjectivism's view that agency flows from the creative, rational, calculating, self-directing and self-interested individual is rejected, as is the objectivist view of structural mechanisms that function more or less autonomously. Instead, powers of individual agency accrue from being positioned and socialised within historical structures of competing interests, and structures are historically maintained because agents know how to act practically in ever-changing situations (Parker, 2000).

In addition to the position of actors in a social setting, the role that an actor plays allows them to 'make a difference' (Archer, 1995). Unlike positions, roles can be chosen and the way in which roles are enacted and expectations satisfied is framed by social agency but not determined by it (Parker, 2000). Thus according to Archer (1995) knowledgeable actors may be seen as agents acting within social systems in which they assume roles. These roles are related to the knowledgeable individual through their assessment of the costs and benefits of assuming such roles, and therefore they may assume and enact a role and make it central to their social self, or not. Occupancy of a role does not necessarily imply that it is in sync with their personal identity (Parker, 2000).

Hakansson et al. (2009) propose several dimensions relating to business actors that they see as important in relation to understanding actors from an interaction perspective. Their propositions are:

1. The role of a company, what it can achieve and, thus, its economic value is determined by how it relates to specific other companies, both directly in its immediate context and indirectly with those that are more distant and also by how it is seen by these others to match their operations, ambitions, beliefs behaviours and problems.
2. The identity and attributes of an actor are the outcomes of the way that it is viewed by each of its counterparts. An actor's identity is always multifaceted because any actor is involved in multiple interactions. The identity attributed to it in each interaction is but one facet of what an actor represents in the web of actors to which it is connected. The varying perceived identities of an actor explain the behaviours of different companies towards it and are factors in its evolution.
3. An actor's attributes and identity in each of its business relationships is continuously changing. Actors do not evolve autonomously; they co-evolve with specific others. Each actor is unique and each has unique requirements for success. Success for a business actor is time dependent, relationship specific and determined by the way that the actor co-evolves with others.
4. Every actor is uniquely associated and forms bonds with a limited number of others. These bonds enable an actor but, at the same time, limit what the actor can achieve.
5. The actions and reaction of business actors in interaction are based on partial knowledge and on interpretation of the counterpart actors on which actors construct their expectations.
6. The ways that actors interact and become mutually and selectively associated with each other has substantial consequences for those actors, for the actor web and also for the relevant resource constellations and activity patterns.

In structuration theory, ordinary life is possible because actors experience ontological security based on the routinization of actions and the actors' reflexive monitoring of those actions (Fuchs, 2003). The routinization of actions takes place because actors are positioned within social frameworks and with respect to rules. Such positioning and rules help actors to feel secure in their evaluative judgement of conduct because they arise through the structuration process of legitimation (the rules and norms that help actors to know how things should be done). In other words, the ontological security of an actor is in part related to the normative expectation of other actors, and the sanctioning of actions in relation to such norms. Hakansson et al.'s (2009) propositions 2 and 3 highlight this relationship between actor identity and attributes, the normative expectations of others in the network, and the evolutionary nature of the structuration process. Structures of legitimation help us to see how these processes result in certain social practices and structural features rather than others. By linking the practical consciousness of the actor with the creation and maintenance of routines of action in structuration theory we understand that often activity may be the result of regularised and routine action rather than a conscious flow of pre-meditated action. However, we also know that if interactions interrupt these routines then a critical situation may result in which a sense of insecurity is created which impacts on institutional time and ontological security. In Giddens' terminology time becomes reversible and what is normal and taken for granted can be stopped, challenged, and changed.

Hakansson et al.'s (2009) proposition 5 highlights the relationship between the interpretive schemes of actors and the structuration process of signification. Remembering that signification processes are the rules that help us understand 'how we do it in this organization' and the communication of those rules to others, we can see how interactions between actors in networks would involve their interpretive schemes. These psychological frames orientate the conduct of actors and help them to cognitively structure their representations of the world. Thus we can see that structures are not fixed or rigid because individuals in interaction bring with them different interpretations and normative understandings which may enable or constrain cooperation and the exercise of power. Actors may exercise agency, and are not slaves to existing structures because they may choose to 'act otherwise' and challenge structural norms and constraints. The interaction of knowledgeable individuals often instigates change precisely because they are able to act with intention and purpose. However, change may also be the result of unacknowledged preconditions and unintended consequences of action. Therefore the results of interactions between actors can never be wholly predictable.

Hakansson et al.'s (2009) propositions 1 and 4 highlight the relationship between actors and the structural features of the network (its rules and resources), and in particular the structuration processes of domination. Through the process of distanciation actors use structural features (rules and resources) and engage in structures of domination to stretch situations and dissolve the restraints of time and space. Proposition 1 relates to the institutional reflexivity of the organisation within the business network. Institutional reflexivity guides social system creation and recreation through the regular use of knowledge about the allocation of authoritative and allocative resources as embedded in social practices (McPhee, 2004). Proposition 4 relates more specifically to the individual actor. When actors use structures they enable certain social interactions and relations and constrain others. In addition, power may accrue to individuals because of their positions in hierarchies or their membership of collectivities. Thus network linkages may reflect power dependencies in a network. Additionally, there may be some variability of agency between individuals, and

power as a feature of position and connection allows for a collective basis of individual agency.

Proposition 6 reflects a global statement of the structuration process as a whole, and the inter-relationship of both structure and agency. It places individuals within a social context and suggests that individual actions will be constrained by those contexts.

### SOCIAL PRACTICES IN BUSINESS NETWORKS

Giddens sees modernity as a constant dismantling and rebuilding of social institutions through incessant social change, and modern societies as post-traditionalist. Thus actions are not guided by uniformly accepted core values or absolute moral guidelines, but are the result of individual reflexivity (Bagguley, 2003). At the institutional level, Giddens sees three elements as key in explaining the modern age: "...the *separation of space and time* (through mobility and the uniform scaling of time), the *disembedding* of institutions (through the replacement of traditional routine and personal trust by expert systems and abstract tokens such as money), and *institutional reflexivity*, the regular use of knowledge about social life as a resource for guiding and even constituting the social order" (McPhee, 2004:362). As we have already noted, Archer (1995) sees structures as the outcomes of past agency, and that they may emerge over time to become relatively autonomous and durable conditions of action, in other words they become established social practices.

Institutional reflexivity is characterised by three features; surveillance (the collection, coding and retrieval of information and the direct supervision of activities), knowledgeably designed locales (places which act as 'power containers' where administrative staff and recorded information are gathered to plan and coordinate operations and supervision), and time-space organising devices (such as timetables, schedules, and plans: MCPhee, 2004). However, organisations are not seen simply as information processing machines which solve problems, but are actively engaged in dynamic processes of problem creation and definition, and are able to apply knowledge and develop new knowledge through the action of problem solving (Nonaka and Toyama, 2003).

Remembering that in structuration theory practices are the recurring and regularized actions of individuals situated within a social system that create and recreate that system, we can see such practices as important features of a social system. They have a dual nature, as both the routine activities that enable and constrain the social system, and as the results of knowledgeable individuals with their own perceptions and experiences who then carry out these practices. Hakansson et al. (2009) state that it is the interaction between activities (their configuration and their activity patterns) that brings life to a business network and which characterises the actors that perform them. They propose the following in relation to activities;

1. The execution and outcome of any activity is dependent on other activities.
2. Adjustments between activities improve their joint performance.
3. Adjustments between activities create interdependencies.
4. A single activity is an integral part of several activity configurations.
5. A two activities become adjusted to each other, the better they function together in the larger activity pattern in which they are involved.

As we noted earlier, Giddens characterised social integration by the co-presence of actors in their integration activities, and where such social integration was maintained across space and time then system integration may result. These five propositions relating to business network activities express key features of this system integration, and allude to its bases in social integration practices. They also allude to the tension inherent in activities as means of adjustment in systems, and as dependent on other actor and system characteristics, in particular reflexivity.

Because the extent of actor reflexivity in the instant of agency may be limited, and the role of routines of practice (which stem from the practical consciousness of the actor) may be seen as the most common outcome of individual action, the role of social practices in governing how activities in business networks are manifested is key to their understanding. Propositions 1 and 4 highlight the embeddedness of activities within overall structuration processes. Propositions 2, 3 and 5 highlight the intended consequences of adjustments between activities. All of these propositions imply that structuration processes, and the social practices that help maintain them, can help define key aspects of activity interactions – the what, where, who, and how questions of interaction. Structures of domination will control the availability of resources needed to undertake activities and the way in which actors may mobilise such resources. The rules and norms of legitimation will determine how activities *should* happen, and structures of signification will influence how we interpret and understand these activities, their interrelationships, and how we communicate that understanding to others.

## CONCLUSION

The purpose of this paper was to examine how one of the most cited theories in sociology, Structuration Theory, may help inform our understanding of business networks and how they function. We defined structuration theory, and highlighted its main contribution to sociological study and the investigation of issues in relation to the relationship between structure and agency in social theory. We then went on to explore the structuration framework and discussed how structure is linked to the agency of actors through their types of interaction (communication, power, and sanction) and the ways in which they may draw upon rules and resources (modality). In order to understand how the dimensions of structure (domination, signification, and legitimation) were related to the structuration process, we discussed how structural properties, knowledgeable individuals, and social practices together enact structuration. Finally we examined how structuration might inform our understanding of business networks. In particular we reviewed the main propositions of the ARA (activities, resources, and actors) model and how these could be understood from a structurationist perspective.

Our intention was to examine how structuration theory might guide future research into common aspects of network formation and management. Giddens (1984) suggests four ways in which this could be undertaken:

**1) Hermeneutic elucidation of frames of meaning:**

Answering 'why' questions that stem from the mutual unintelligibility of divergent frames of meaning. It serves to elucidate the nature of agents' knowledgeable and their reasons for action. It involves investigating the nature of knowledgeable, the reasons for action (linking practice to theory), and understanding how power manifests itself through meaning.

**2) Investigation of context and form of practical consciousness:**

Investigating what agents already know and observing what managers do vs. what they say they do. Understanding how time-space embeddedness enables or constrains practical consciousness. Investigating how social practices become established and maintained in business networks.

**3) Identification of bounds of knowledgeable:**

Asking how the unintended consequences of individual actions impact wider social practices within a network of relationships.

**4) Specifying institutional orders:**

Analysing the conditions of social and system integration. For example, investigating how are the rules and resources embedded in a business network influenced by social practices and the actions of individuals? In turn, how do the structural features of a business network influence the individuals within it?

Taken either individually or collectively, these forms of research and the structurationist approach in general provides a useful framework to guide more holistic and theoretically anchored research in the areas of business networks. They remind us that business networks persist not only because of the adherence to routines across space and time, but also because those operating within them consent to create and re-create those routines.

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