



The constitution of networks

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ARTICLE INFO

Article history:

Received 1 August 2007

Received in revised form 1 May 2008

Accepted 1 September 2008

Available online 11 June 2009

Keywords:

Interaction

Networks

Rules

Frames

Actors

ABSTRACT

The idea of a *constitution of networks* may be a useful addition to our ways of understanding what happens within the business landscape. We describe a constitution of networks as a system of values, norms, rules and other conventions that are shared by actors in business networks. Whether by intention or not, the constitution of networks provides a framework within which interaction among actors takes place. We argue that companies invest in the selection and replication of interaction practices that evolve over time as customs or common use. This involves interaction aimed at developing or accessing resources for future use in the relationships between actors. In this way, the constitution of networks circumscribes the actors' appreciations and expectations about how they and others should conduct business.

This study is based on empirical research conducted between 2002 and 2005 in business networks of consumer goods in the United Kingdom. Significant actors include multinational consumer goods companies, large grocery retailers, consumers and public authorities.

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1. Why we need to study the constitution of networks

This empirical study is about the constitution of networks. We use the term 'constitution' to encapsulate a higher-order of multiple conventions that are customary, expected and often self-enforcing within particular business networks (Buchanan, 1975, 1978, 1988; Lewis, 1967; Young, 1993). A higher-order of conventions imply a shared system of values, norms and rules that transcends any single organization or dyadic relationship. Therefore, we also use the term 'network' as a metaphor to describe the structure of exchange relationships and interdependencies within which a process of interaction among actors takes place (Anderson, Håkansson, & Johanson, 1994; Ford & Håkansson, 2006; Gadde, Huemer, & Håkansson, 2003; Håkansson & Ford, 2002; Ritter, 2000).

Imagine a 'network' context for production and distribution of business products or services in which no customary rules and expected principles guided the actors' behavior. In this situation, raw material suppliers, component manufacturers, equipment suppliers, logistics companies, wholesalers, consultants and service contractors would buy and sell goods and services without reliance on any shared system of conventions: there would be no contracts; no invoices; no credit, no rules of negotiation; no statutory regulations; no rules regarding fair trade; no quality controls; no industry standards; no

courts; no trade associations and arbitrations; no predefined patterns of advertising and promotions; no brand reputations; no warranties; no specified interface for logistics; no accounting standards; no property rights and no overt or covert collusion between companies. Consequently, no actor would conform to a particular pattern of behavior in a network like this and no one would expect others to conform to some previously learned pattern. No one would *want* to conform, given that no one else conforms (Lewis, 1967; Young, 1993). In short, this imaginary network would have no *constitution*.

What would be the problem for actors who participated in a network like this? The problem would not simply be the existence of anarchy, but rather the inherent difficulty for actors of *interacting* with each other; thereby, the possibility of business taking place between actors would be severely constrained (Casson, 1982; Choi, 1993; Loasby, 2000). The resources that actors need for their operations are not usually available in a concentrated form. Instead, they are widely dispersed and owned by other actors (Denrell, Fang, & Winter, 2003). In the amorphous topology of a network without a constitution that we have described, appropriate resources may not be identified by potential buying or selling businesses. Hence, companies would face prohibitive costs in terms of the time and effort needed to access other actors, to negotiate the terms for interaction, to conclude and manifest deals and to oversee and enforce agreements. Furthermore, the existence of information asymmetries among actors would impose huge uncertainties and incremental barriers to the conclusion of informed and voluntary exchange (Akerlof, 1970; Maskin & Tirole, 1999; Tirole, 1986, 1999). In the absence of a shared system of conventions among actors, information asymmetry and symmetric ignorance of business opportunities would prevent actors from deal-

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making and building up the business relationships and mutually advantageous interdependence on which their businesses depend (Ford & Håkansson, 2006).

The existence of shared systems of conventions has been evident in trade from the earliest times. For example, markets in each medieval city in England were created, organized and managed within a network of actors that included the King who provided a franchise; the police who provided security; the judiciary and parliament that resolved disputes and provided a legal framework; producers, merchants, carriers, vendors and their customers who bought and sold to each other on a regular basis (Coase, 1988). Thus, interactions were structured within a constitution. A constitution ensures behavioral regularities which sustain themselves as they serve the interests of the actors involved. More formally, a constitution supplies actors with the rules of the game or the humanly devised constraints that shape human interaction, whether political, social, or economic (Lewis, 1967; North, 1990).

Extant research has provided significant insight into the nature of these terms (Buchanan, 1988; Casson, 1982; Helgesson & Kjellberg, 2005; Loasby, 2000; Sabel, 1993, 1997; Slater, 2002). However, previous research raises questions about the real-life form of the constitution of networks and the dialectic relation between the constitutional make-up of business networks and interactions among actors. A significant part of extant research is conceptual and does not provide empirical insights on how a multiplicity of values, norms and rules is manifested in business networks. Previous research emphasizes that actors develop factual, physical and social conventions to facilitate complex interactions and thus create significant outcomes in the form of network assets (Cornes & Sandler, 1986; Johanson & Mattsson, 1985). But we know very little about how these network assets are created and used by related actors.

Our objective in this study is to examine the idea of the constitution of networks through the interactions of participants and some of the apparent outcomes within an economically important network. In particular, the present study attempts to provide a preliminary approach to the following research question:

How are the interactions of business actors affected by and how do they affect the constitution of networks?

The paper is based on empirical research conducted between 2002 and 2005 in the network context for production and distribution of consumer goods in the United Kingdom. Significant actors in this business network include multinational consumer goods companies, large grocery retailers, public authorities and consumers. The paper provides information on aspects of the constitution of this network and discusses its relevance. The empirical research suggests that actors invest in the selection and replication of interaction practices that evolve over time as customs or common use. Investing in these practices is a time-consuming task: it involves interaction to develop or access resources for future use in relationships between participants. It may also involve investment in developing and implementing wider social and political practices and the pressures to enforce them (McCammon, 1964; Palamountain, 1955).

Examining the constitution of networks through the lens of actors' interactions brings three important benefits: Firstly, examining interactions can help us to understand the extent to which there is some overall commonality within a constitution of networks and also the extent of diversity of views and practice that are shown (Kriesberg, 1955; Wittreich, 1962). Secondly, the idea of constitution of networks can help us understand something of the structure of networks as interconnected exchange relationships and interdependencies. Thirdly, analyzing interaction can help in understanding the process of business networks and particularly the re-ordering and re-confirming of interaction patterns.

2. Intellectual origins and previous research

The idea of a business network centers not on the action of single actors in an anonymous environment, but on a process of *interaction* between individually significant and interdependent actors (Easton & Håkansson, 1996; Gnyawali & Madhavan, 2001; Håkansson & Ford, 2002). The uneven distribution of resources and skills among actors creates the need to rely on the resources and skills of others. These interdependencies lead to continuing and frequently complex exchange relationships between networks of actors. Exchange relationships form an underlying ontology in marketing theory (Alderson, 1957, 1965; Bagozzi, 1975, 1978; Håkansson, 1982; Houston & Gassenheimer, 1987; Hunt, 1976, 1983). Companies, for example, enter exchange relationships when they perceive that value can be created and captured according to their specific interests and aims. Early marketing theory was much concerned with how exchange relationships contribute to the make-up of the business landscape (for example, Alderson, 1957; Ridgeway, 1957; Stigler, 1951; Vaile, Grether, & Cox, 1952). This landscape does not simply consist of the exchange relationships between specific companies; it is also based on conventions, ranging from cultural customs to laws which constrain and enable exchange (Khalil, 1995; Kjellberg, 2001). Similarly, interaction among actors is a complex process that does not occur in a vacuum. Interactions are also based on a set of explicit or implicit rules and principles that guide actors' business behavior.

Schelling (1960) observed that actors achieve much better interaction and coordination of their efforts when they are able to rely upon focal points. He defined focal points as a set of mutually perceived expectations, shared appreciations or preoccupations, obsessions and sensitivities. In a series of experimental studies, Schelling (1960) asked individuals to imagine a situation in which they were unable to communicate but wanted to meet each other in New York. The majority of respondents chose Grand Central Station because this place at that time provided a "focal point for each person's expectation of what the other expects him to expect to be expected to do" (Schelling, 1960, p. 57). Mehta, Starmer, and Sudgen (1994) repeated Schelling's (1960) experimental investigation in a more formal setting with incentives in which they confirmed that actors are more successful at coordination if they rely on a set of prominent and salient points.

Focal points emphasize the fact that in a continuing interaction process, the *precedent* becomes extremely important. The idea of precedent means that if a particular problem of practice X is settled in case C, then the rationale in case C would be applied by later actors to practice X. In other words, case C sets a precedent in relation to practice X. Actors attempt to co-ordinate their practices to their mutual benefit by drawing on *focal points* which are 'prominent' and 'salient' ways of mutually perceived expectations (Schelling, 1960; Sudgen, 1995). They often articulate these prominent and salient ways as rules: 'implicit or explicit rules of expected behavior that embody actors' preferences' (Nee, 1998, p. 87). There is a subtle, though important, difference between duty-imposing rules and power-conferring rules (Hart, 1961). The latter confer power on individuals to vary their initial position and enable them to modify or re-negotiate some of their own duties. Contractual arrangements, for example, may also confer discretion on parties to make the best use of their capacities and exercise their powers under specified criteria. A traditional distinction since Roman times has been between *ius strictum* (i.e. mandatory rules) and *ius dispositivum* (i.e. yielding rules); this differentiation corresponds to the contemporary distinction between *mandatory* and *default* rules (Ayres & Gertner, 1989; Riley, 2000). In another way, Esser (1956) differentiates between 'Rule' (Norm) and 'Principle' (Grundsatz). The continuous replication of existing practices by companies leads to the development of principles which operate as 'optimization commands' over time (Dworkin, 1967) and the characteristic norms of conduct will owe

something to the predilections of the interacting companies. Rules and principles may therefore, limit the types of relationships in which the companies are able to participate (Håkansson & Ford, 2002). They increase the 'predictability' of group members' behavior and give expression to a group's 'central values' (Feldman, 1984, p. 47).

Constitutional theories occupy a 'conditional platform of understanding' (Loughlin, 2005, p. 186) because they build on actors' central values; they try to draw upon bases of agreement that exist among actors and apply those 'agreed-upon principles to resolve more controversial issues' (Strauss, 1999, p. 581). For example, constitutions may specify the nature of the rights that individual actors may possess, acquire or transfer. Therefore, the legitimacy of constitutions is based upon the evolution of consent among related actors over time (Barnett, 1986, 2003). Companies, for example, may agree with each other on a number of issues such as information sharing, work sharing, domain consensus, lobbying, price fixing, competitive behavior, reciprocity and co-operation etc. and their agreements are continuously redefined or re-adjusted over time.

The expression of central values as a higher-order constitution infers formality. Thus, it is common for the constitutions of networks to include externally imposed, but accepted laws or legal agreements made by members e.g. standards or agreed norms of trading in the members of a trade association (Amstutz, 2005; Sabel, 1993, 1997). But this formality does not imply that constitutions are the opposite of an informal substance of practice. The formality of constitutions is an abstraction that aims to preserve what is important in the substance of practice over time. Stinchcombe (2001) uses the example of gasoline and lubricating oil which is not the opposite of crude oil but refined versions of it; "formality when it works is not the opposite of informal substance but the refined version or versions of it" (Stinchcombe, 2001, p. 3). Therefore, Stinchcombe (2001) advances three criteria to assess how formality works in practice. Firstly, the formality must be 'cognitively adequate' to grasp the reality it represents. Secondly, formality has to be communicated to involved actors. Thirdly, formality must be able to change as reality changes. In this sense, the formality of constitutions serves to represent and govern the actors' practice. It guides the way actors relate to each other and it is constantly reshaped and reconfirmed by the practice of the involved actors.

3. A model for the study of constitutions of networks

We now propose a theoretical model for the study of constitutions of networks consisting of three conceptual dimensions. This considers the constitution of networks as a high order of multiple conventions which are determined by three elementary forces: a) multilateral interaction, b) focal frames and c) recursive time.

3.1. Multilateral interaction

One of the primary characteristics of interaction is that it is relative (Ford & Håkansson, 2006). In other words, actors interact and deploy their individual resources and abilities differently in different relationships. The value of actors' resources varies depending on where and how they are deployed. It is through multilateral interaction that individual resources are activated (Slater, 2002). Hence, multilateral interaction among individually significant actors introduces complexity into the make-up of business networks and creates the need for actors to enhance transparency and governability. In economic terms, the current value of one particular interaction can be articulated as the net present value of all expected future benefits and sacrifices. This sum of the future stream of benefits and sacrifices must be discounted by the opportunity cost, which is the cost of not investing in other exchange opportunities of similar systematic risk in other relationships (Modigliani & Miller, 1958). Interaction among actors may also include non-economic 'give-and-take' processes

(Easton & Araujo, 1992); they may be task-specific as well as non task-specific. A typical pattern of interaction among companies nowadays will comprise several give-and-take processes at head-quarter as well as at regional levels, plus a plethora of related information exchanges, often with third parties such as trade associations, courts, professional communities and public bodies. Consider, for instance, the multilateral interactions between two companies in the area of distribution management that involves several stock-keeping units, services, delivery, replenishment, price, timing as well as communication and information systems for order processing, implementation and billing (Buzzell & Ortmeyer, 1995). Each investment in the facilitation of such complex, multilateral interaction generates significant externalities in the form of network assets. These network assets encompass the factual, physical and social conventions that surround exchanges; they are, in other words, goods that can be used by other related actors in the conclusion of new exchanges (Cornes & Sandler, 1986; Johanson & Mattsson, 1985; Romer, 1990).

3.2. Focal frames

Actors do not merely exchange with each other; they also construct the forms in which future interactions may happen (Cooper, 1992). In this sense, focal frames are refined versions of the sedimented experience of previous exchanges. While experience is backward-looking, focal frames are forward-looking. Focal frames are active and collective forms of rules and principles that guide the direction of change within relationships; they transform interaction among actors into "continual, joint formulations of common ends" (Sabel, 1994, p. 138). They are not developed in a single relationship in isolation, but are built upon each actor's wider view of the interactions in which it and others are engaged (Ford, Gadde, Håkansson, & Snehota, 2003).¹ Focal frames serve as an abstraction that preserves the substance of interaction among actors (Stinchcombe, 2001). A contract, for example, is a *formalized* manifestation of an interaction to which two parties have agreed (Buckley, 2005; Steyn, 1997). The parties to a contract aim to achieve future outcomes; they anticipate and 'presentiate' future results which are abstracted into a focal frame. Atiyah (1986) uses the term 'futurity' to describe this focal frame as a process of discounting future results to the present. Furthermore, a range of technologies of thought such as legislation, plans, drafts, numbers and formulas may also result in focal frames and thereby, render a field of practice knowable calculable and administrable (Miller & Rose, 1990).

3.3. Recursive time

Business is not a collection of isolated, non-related transactions. Instead, interaction between companies is both multi-faceted and takes place over time as a recurrent pattern of episodes within continuously evolving relationships. Recurrent episodes are affected by the perceptions of the participants of their previous interactions and by their expectations of the future. Relationships between actors may become long-term (Ford, 1978). But even in this case, 'relationship time' does not appear as a linear process but as recursive practice. Habits and institutionalized forms of inter-firm interactions are manifestations of recursive time. Examples include periodic business or task reviews and annual negotiations between suppliers and customers. An important aspect of recursive time is that the time perspectives of different actors are often not aligned. Each actor may have a quite different view of the actual or desirable evolution or

¹ Elsewhere we have referred to these views as 'network pictures' (Ford et al., 2003).

Table 1
The constitution of networks – consumer goods networks in the United Kingdom.

Manifestations	Interaction involving manufacturers–retailers	Interaction involving manufacturers–consumers	Interaction involving retailers–consumers	Interaction involving multiple actors–public authorities
Property rights/licenses/patents/regulations	Annual trade negotiations Umbrella agreements Trade allowances			Official registration within public bodies such as trade associations, e.g. licenses, patents, EAN-code, taxes. Consumer protection regulations
Sourcing of raw material		Packaging information regarding ingredients, weight, and health warnings	Restrictions on the sale of tobacco and alcohol and drug products	Food and health specifications
Operations	Rolling forecast and plans Production of standardized packaging sizes and shipping cases	Assortment Product items	Opening hours Assortment	Location of the production/outlets Environmental standards
Annual trade negotiations	Annual negotiations (during Sept.–Dec.) Umbrella agreements Listing of products Trade allowances		Product items	Labor law, health and safety Contract and competition law
Supply management	Electronic data interchange Continuous stock replenishment Vendor managed inventory	Information to consumers regarding expiring dates	Merchandising of products Replenishment Club membership	Practice in good faith Statute law/public policy Fair trade standards
Category management	Category as a businesses unit Organizational structure that facilitates manufacturer–retailer interaction	Consumer insight (consumer buying behavior in general)	Shopper insight (consumer buying behavior at the point-of-sale)	Joint trade and industry body Market research agencies Trade associations/chambers
Efficient consumer response	Efficiency gains in: – Assortments – Promotions – Replenishment – Introductions	Consumer insight (consumer buying behavior in general)	Shopper insight (consumer buying behavior at the point-of-sale)	Joint trade and industry body Market research agencies (e.g. AC Nielsen, GfK) Trade associations Chambers of Commerce
Invoicing	30 days delay of payment by the retailers	Internet Sales	Discounts to consumers Offers Credit cards Debit cards	Taxes Fees
Manufacturer brands	Listing of brands Promotional support at the point-of-sale Merchandising activities at the point-of-sale Brand visibility	Focus groups with consumers advertising of brands through promotions customer service Advertising of brands through TV, radio, out-of home, PR promotions Customer service	Point-of-sale promotion Consumer promotion	Property rights Registrations Competition law Advertising restrictions Ethics and communication standards
Retailer brands	Sourcing Production Promotional support at the point-of-sale Merchandising activities Brand visibility		Promotional support at the point-of-sale Merchandising activities at the point-of-sale Brand visibility	Property rights Registrations Competition law Advertising restrictions Ethics and communication standards
Pre-estimates	Cost pre-estimates Pre-estimates of timing and volumes Investment valuations Contingency plans			
Re-negotiation	Annual re-negotiation Quarterly business reviews Periodic reviews	On-going interaction (brand offering/ consumer off-takes)	On-going interaction (outlet offering/consumer off-takes)	Umbrella agreements annually re-negotiated Periodic renewal of licenses
Guarantee/liability	Manufacturer' guarantees to deliver quality of products and obligation to remedy deficiencies in products or other services Liability to services obtained from subcontractors	Manufacturer' guarantees to consumers Services to consumers	Retailers' guaranty to deliver quality of products and obligation to remedy deficiencies in products or other services.	Tort law Contract law
Legal venue/legislation	Subject to contract United Kingdom	The Unfair Terms in Consumer Contracts Regulations 1999 give courts the power to regulate unfair terms in standard consumer contacts. United Kingdom	The Unfair Terms in Consumer Contracts Regulations 1999 give courts the power to regulate unfair terms in standard consumer contacts. United Kingdom	All contracts which involve consumers, employment of labor or financial and credit services are regulated by statutes (UK-Legislation) United Kingdom

Table 1 (continued)

Manifestations	Interaction involving manufacturers–retailers	Interaction involving manufacturers–consumers	Interaction involving retailers–consumers	Interaction involving multiple actors–public authorities
Fair dealings	Contract law Legislation	Legislation/fair dealing	Legislation/fair dealing	Contract law Legislation
Non-legal rules	Contracting in good faith (Good faith is in UK a non-legal requirement) Imposition of non-legal sanctions (exclusion, reputation) Domain consensus (regarding channels/territories/assortments/margins) Price fixing for products such as tobacco Co-operation based on reciprocity Escalation procedures in case of conflict	Corporate reputation Corporate responsibility Self-restrictions (e.g. activities directed to children)	Corporate reputation Corporate responsibility Self-restriction (e.g. activities directed to children)	Standards defined by the International Chamber of Commerce (ICC) Association of manufacturers/grocery retailers Professional Institutes International Standards Organizations (ISO) Quality standards Consumer protection Agencies/organizations Dispute resolution Mediation/arbitration

progress of their exchange relationship, despite extensive interactions between them (Mannix, Tinsley, & Bazerman, 1995).

4. Empirical study

The study was an initial attempt to examine how the ways in which companies negotiate and make deals with each other contribute to and are affected by what we have described as the constitution of networks in which they operate. The empirical study took place in a network that comprised suppliers of raw materials, multinational grocery manufacturing companies, chains of grocery retailers and consumers (for an overview see, Villas-Boas & Zhao, 2005). This business network was chosen for investigation because it includes a significant part of the British economy generating an annual turnover of £100 billion. Between 2002 and 2005 we conducted 68 in-depth interviews and 12 company workshops with 84 senior managers. The data collection employed the case-study methodology (Easton, 1995; Eisenhardt, 1989; Halinen & Törnoos, 2005; Ragin & Becker, 1992; Tsoukas, 1989) and emphasized information on contemporary rules and principles, legislation, customs and role behavior as well as specific manifestations of inter-firm agreements. The critical examination, evaluation, categorization and recombination of empirical data encountered four major challenges: the problem of network boundaries, the problem of complexity, the problem of time and the problem of comparison (Easton, 1995; Halinen & Törnoos, 2005). Network boundaries are not fixed but are determined for each observer by their particular focus of interest and knowledge. Thus, any research delimitation of a network is arbitrary because actors are interconnected throughout multiple 'networks'. But nevertheless, in order to make sense of the constitution of networks we needed to move beyond the examination of dyadic relationships into those manifestations of practices that exist across a number of actors. For this reason we focused on the interaction between multiples of a) manufacturers and retailers, b) manufacturers and consumers, c) retailers and consumers and c) actors and public authorities and analyzed the effect of their interactions on the development of constitutions of networks. Over the period 2002–2005, we concentrated our attention on episodes which contributed to *changes* in the constitutions of networks. We addressed the connections between systems of conventions, such as legal and non-legal rules, and the evolving patterns of interactions between manufacturers and retailers. These patterns of interactions included institutionalized forms of annual contract negotiations and business reviews as well as the interactive processes among multiple actors. Our aim was to evaluate, test and determine the extent to which our knowledge claims do, or do not, truly represent or correspond to the world (Hunt, 1976, 1983).

Our primary goal in data analysis was to link the theoretical knowledge with the empirical observations. We established this link through several cycles, moving between theoretical ideas and data on rules and principles as well as practices. We conducted an iterative examination of the technologies of thought. These included business plans, statutes, declarations, contract drafts, numbers and formulas as well as memoranda of understanding. This process encouraged conceptual dimensions of the theoretical model to emerge from the data rather than being imposed on them.

4.1. What do constitutions of networks include?

We will now examine a variety of manifestations of constitution and analyze their impact on the making and functioning of networks. We have chosen to present these particular manifestations because of their frequency of occurrence and application as agreed-upon principles to resolve conflicts and controversial issues during negotiations among companies. This will demonstrate that in many cases, manifestations of the constitution of networks spell out a framework for a continuing regulation of interaction among actors. We will explore the advantages of constitutions of networks for participants and highlight the situations in which companies find them particularly useful, such as those involving the security and calculability of exchanges. We will also show that the reasonable expectations and central values enshrined in these manifestations of the constitution of networks mean that managers can time and again use them as a way-station to test their understanding of what is feasible in their networks.

5. Discussion of empirical results

The manifestations presented in Table 1 demonstrate that the function of the constitution of networks is to provide a shared system of conventions that guides interaction among actors. The interactions that take place between a number of actors in consumer goods networks in the United Kingdom do not occur in a vacuum; they are based on shared conventions. Manifestations of the constitution of networks, such as those enshrined in property rights, electronic data interchange, subcontracting rights, trade allowances, umbrella agreements, brands, industry and quality standards, as well as statutes and trade and industry rules draw upon bases of agreement that pre-exist related actors to articulate a system of shared conventions (Choi, 1993; Lewis, 1967; Young, 1993). For example, there is a pre-existing base of agreement that property rights for manufacturers' brands remain a property that manufacturers own; and that manufacturers need to pay trade allowances in order to obtain listing within retailers

(Sullivan, 1997). The manifestations presented in Table 1 comprise customary, expected, legal, and often non-legal rules and principles. Their validity and legitimacy, however, is continuously redefined through the evolution of consent over time among manufacturers, retailers, consumers, public authorities and other related actors (Barnett, 1986, 2003).

In our study, the consumer goods network is *constituted* by shared systems of conventions that make possible the interaction and, thereby, the conclusion of exchange between actors. Table 2 illustrates this. Firstly, shared systems of conventions cope with the existence of *multilateral interaction* among actors. Manifestations of property rights, exclusivity or subcontracting rights, electronic data interchange, trade allowances, good faith and reciprocity rules provide evidence of a multiplicity of interaction forms. This multiplicity of interaction forms increases the degree of complexity and, thereby, the need for transparency in the interaction process (Mouzas, Henneberg, & Naudé, 2008). Secondly, shared systems of conventions attempt to provide *focal frames* of mutually perceived expectations and shared appreciations. In consumer goods networks, focal frames may include umbrella agreements, domain consensus, quality standards, pre-estimates or business valuations. These focal frames provide a sense of direction which transforms the complexity of interaction among manufacturers, retailers, consumers and public actors into joint formulations of common ends. This transformation possibly occurs because focal frames such as umbrella agreements are built upon each actor's wider view of the interactions in order to preserve and refine their substance (Ford et al., 2003; Mouzas & Ford, 2006; Sabel, 1994; Stinchcombe, 2001). Thirdly, shared systems of conventions incorporate *recursive time*, in the sense of institutionalizing recurrent pattern of episodes such as annual renegotiations, stock replenishment, business reviews and meetings as well as sanctions and reputations. Multilateral interactions, focal frames and recursive time *constituted* the conceptual dimensions of a 'topology' or 'podium' of factual physical and social conventions which shape the making and functioning of consumer goods networks in the United Kingdom. While in medieval England markets were created and organized by individuals as fairs under the franchise of the King, the contemporary consumer goods business in the United Kingdom is shaped by the use of information technology, statutes, quality standards, trade associations and a series of non-legal but customary rules and principles.

Let us now examine how the three conceptual dimensions, multilateral interactions, focal frames and recursive time impact

upon each other and evolve over time. This examination is best done by linking the idea of constitutions of networks with the notion of investments in network assets.² Investing in factual, physical and social artifacts of exchange practices creates externalities in the form of 'network assets' that may be used by one company without limiting their use by others (Cornes & Sandler, 1986; Johanson & Mattsson, 1985). Before the turn of the last century, for example, investments in the use of information technology enabled radical changes and establishment of new conventions in the way that manufacturers and retailers arrange their information exchange, replenish their inventories, manage their product categories or interact with consumer. Consider the initial investment of retailer Wal-Mart in an Electronic Data Interchange with manufacturer Procter and Gamble which provided the basis for a specific form of Continuous Stock Replenishment called Vendor Managed Inventory. The selection and subsequent replication of this practice by the two companies established a 'network asset' for other companies. Procter & Gamble and Wal-Mart capitalized on the Electronic Data Interchange and Continuous Stock Replenishment programs to implement further exchanges with related third parties and, hence, committed further resources for future use. Over recursive time, the actors' continuing interactions and investments in these selected and recurrent practices established a new order of conventions which became focal points for multilateral interaction activities which are known in consumer goods networks as Category Management and Efficient Consumer Response (Araujo & Mouzas, 1999; Corsten & Kumar, 2005; Mouzas & Araujo, 2000). In this way, the dialectic impact of multilateral interactions, focal frames and recursive time resulted in a re-shaping of the constitution of consumer goods networks aimed at transforming a range of existing practices and making the whole system accountable to the final consumer.

5.1. How is the constitution of networks seen by actors?

Consumer goods markets demonstrate the existence of *several*, heterogeneous, overlapping and, frequently, conflicting manifestations of constitution. These have been well documented in earlier channel research (French, 1960; Mallen, 1964).³ Many of the declarations issued by the Trade Associations or the International Chamber of Commerce contain non-legal rules and principles of fair dealings and standards that reflect legal rules defined in statutes such as the Unfair Terms in Consumer Contracts Regulations 1999 (Macdonald, 1999). Similarly, there is an overlap between different manifestations. Category management systems, for example, overlap with Efficient Consumer Response and Supply Management Systems, and umbrella agreements often transform implicit norms which are already embedded in customs into explicit norms for interaction (Mouzas & Ford, 2006). Some of the shared conventions are regarded as general constraints applied to multiple actors and areas. For example, property rights, competition law, advertising restrictions or ethical and communication standards apply to manufacturer brands as well as to retailer brands.

We can identify a number of variations in the way that these constitutions are seen. Some of them, such as statutes, contracts or standards are binding, which means that the rules contained in these manifestations are legally enforceable. Other constitutions contain default or yielding rules (Ayres & Gertner, 1989; Riley, 2000) that are non-mandatory but often self-enforcing. Manufacturers and retailers usually conclude their interaction in accordance to default rules

Table 2
Networks constituted by shared systems of conventions.

Conceptual dimensions	Shared systems of conventions
Multilateral interaction	Property rights Exclusivity Electronic data interchange Subcontracting Trade allowances Volume/prices/discounts Good faith Reciprocity
Focal frames	Domain consensus Manufacturer/retailer brands Umbrella agreements Guarantees/liabilities Quality standards Investment valuations Statutes/declarations Legal/non-legal rules
Recursive time	Annual re-negotiation Business reviews Notification/information Periodic reviews Meetings Sanctions Reputations

² Often referred to as 'market assets'.

³ Alexander and Hill (1958) tell an interesting story about the attempts of manufacturers to enforce retail price control. A large New York store cut the price of a well known fountain pen. The pen company employed so called Bowery bums to line up at the counter to take advantage of the sale. To save fumigation costs the store called off the whole affair.

because of the benefits that these rules confer and the cost of non-legal sanctions (Charny, 1990; Scott, 2003). These rules are valid for a certain period and they are usually reconfirmed or reordered through annual renegotiations, arbitration processes or court decisions. If rules are confirmed and renewed over time, they establish a 'principle' which is an optimization command (Esser, 1956). For example, in consumer goods networks there is an accepted principle that retailers are entitled a substantial delay of payment (see Table 1). Hence, retailers draw on manufacturers as trade creditors to provide working capital for their retail stores (Sullivan, 1997). Manifestations of the constitution of networks are, therefore, used by manufacturers and retailers to resolve some controversial issues, such as allocation of responsibilities, liabilities or gross margins. Nevertheless, the constitution of networks is often disputed. This is evidenced, for example, in the domain consensus between retailers and manufacturers. Domain consensus is related to the definition of boundaries, role sets and expectations in the relationship (Ford, 1978). The fact that domains are often disputed and redefined over time is demonstrated vividly in the engagement of the retailers in boosting retailer brands (Dunne & Narasimhan, 1999). This tendency can be regarded as an attempt by the retailers to invade domains that are traditionally the preserve of manufacturers, to redefine role sets and to redraw the boundaries of the network in which both retailers and manufacturers are embedded. What happens if the constitution of networks is disputed or breached? In the case of a breach of statute law or legally binding regulations, the usual consequence for the violating company is to pay a fine. Companies, however, rely increasingly on 'non-legal sanctions' to enforce constitutions of networks. Non-legal sanctions may take three different forms (Charny, 1990; Richman, 2004). First, non-legal sanctions may involve the loss of relationship-specific assets, such as the partial or complete loss of future business. Retail chains, for example, often impose on consumer goods manufacturers the non-legal sanction of brand de-listing. As umbrella agreements in consumer goods networks are reviewed on an annual basis, a de-listing of brands is often a rather ephemeral non-legal sanction. Second, they may involve reputation costs. The problem with reputation costs is that they are likely to be ineffective in heterogeneous and large business sectors. Third, non-legal sanctions may also involve the loss of access to business networks and strategic alliances or the sacrifice of status privileges. Such a sacrifice is the loss of a 'preferred supplier' status or 'category captain' status, which are reserved for the exceptional contractual partners. These empirical observations are in line with recent studies of one hundred and thirty-seven litigated cases in the USA that demonstrate that businesses are indifferent to legal enforcement because they are able to create efficient non-legal mechanisms (Scott, 2003).

6. Conclusions

On the basis of this empirical study in important consumer goods networks in the United Kingdom, it is apparent that we can identify a constitution of the network that defines the topology of the business landscape. This constitution provides a framework for the interaction between actors such as manufacturers, retailers, consumers or public authorities. The constitution of the network comprises shared systems of conventions of legal and non-legal rules which express the actors' appreciations and expectations about how they and others should conduct business. The empirical work in this study demonstrates the importance of distinguishing between values and expectations that may exist within actors, within specific relationship level or more widely across different areas of a network such as groups of manufacturers or retailers or within the heterogeneous set of actors that comprise the totality of the network. We conclude from the study that the idea of constitutions of networks is useful for the analysis of networks and interaction within them as it constitutes an additional and important dimension of the current and evolving views of actors

that is likely to form the basis for evaluation of innovations or changes in practices. An interesting issue which is not addressed in this study is the extent to which the constitutions of networks are explicit, formalized, legal, non-legal or illegal and the extent to which they are viewed in the same way by all actors in either similar companies or across the network. It is also interesting to conjecture about variations in these constitutions in different networks having different characteristics. For example, we would expect more explicit constitutions and widely held commonality of views in older and more stable networks, where mutual knowledge of each other and the 'workings' of the network were well developed. It may also be in these networks that there is a greater likelihood that constitutions may take the form of illegal cartels or restraints on trade.

This empirical study demonstrates that consumer goods networks are arrangements that have evolved over time as an intended or unintended outcome of the actors' effort to interact. In this effort, the constitution of networks delivers shared systems of conventions that facilitate the realization of interaction practice among actors. These conventions cope with the existence of multilateral interaction, allow the creation of focal frames and enable recurrent episodes over recursive time. For this reason, we can conclude that there is a dialectic relationship between 'interaction' and 'constitutions'. This is demonstrated in the existence of market assets such as electronic data interchange, continuous replenishment systems, EAN codes, or institutionalized forms of annual negotiations created through investments in factual, physical and social artifacts. In this way, the present study introduced the term *constitution of networks* in an attempt to link interaction and networks. In practical terms, this implies that research on markets needs to include the investigation and analysis of interaction practice among actors as well as the analysis of the consequences of these interactions. The present study has shown the importance of shared systems of conventions in the realization of interaction practice. Empirical research on how companies in different industries, with different backgrounds, potentials and interests undertake jointly agreed action may improve our understanding of the dynamic interplay between interaction and constitutions and may contribute to a new comprehensive theory. Such a research theme comes at a time when a range of factors, such as globalization, financial market changes, mergers and acquisitions and outsourcing are forcing many companies to reconsider their practices. Companies are susceptible to changes in their context and have to negotiate with other companies to protect and advance their own interests. An agenda for further research, therefore, needs to include an investigation of how companies deal with the security and calculability of interactions in their particular contexts and how companies see this issue as a possibility of exploring and exploiting new opportunities. Looking at the conceptual dimensions of multilateral interaction, focal frames and recursive time, further research may explore how companies negotiate and manifest the achievement of shared systems of conventions and how these conventions are impacted by or impact on their own practices.

References

- Akerlof, G. (1970). The market for lemons: Qualitative uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488–501.
- Alderson, W. (1957). *Marketing behaviour and executive action*. Homewood Illinois: Irwin.
- Alderson, W. (1965). *Dynamic marketing behavior: A functionalist theory of marketing*. Homewood Illinois: Irwin.
- Alexander, R., & Hill, R. M. (1958). What to do about the discount house. In A. Seelye (Ed.), *Marketing in transition* New York: Harper and Bros.
- Amstutz, M. (2005). The constitution of contractual network. In *The proceedings of the International Conference on Contractual Networks: Legal Issues of Multilateral Cooperation*. Fribourg, Switzerland.
- Anderson, J. C., Håkansson, H., & Johanson, J. (1994). Dyadic business relationships within a business network context. *Journal of Marketing*, 58, 1–15.
- Araujo, L., & Mouzas, S. (1999). Manufacturer–retailer relationships in Germany: The institutionalisation of category management. In P. Naude & P. W. Turnbull (Eds.), *International marketing* (pp. 211–232). Oxford: Pergamon Chap. 11.

- Atiyah, P.S. (1986). *Essays on contract*. Clarendon Press, Oxford University Press, Oxford.
- Ayres, I., & Gertner, R. (1989). Filling the gaps in incomplete contracts: An economic theory of default rules. *Yale Law Journal*, 99, 87–130.
- Bagozzi, R. P. (1975). Marketing as exchange. *Journal of Marketing*, 39, 32–39.
- Bagozzi, R. P. (1978). Marketing as exchange: A theory of transactions in the marketplace. *American Behavioral Scientist*, 21(4), 535–556.
- Barnett, R. E. (1986). A consent theory of contract. *Columbia Law Review*, 86, 269–321.
- Barnett, R. E. (2003). Constitutional legitimacy. *Columbia Law Review*, 103, 111–148.
- Buchanan, J. M. (1975). A contractarian paradigm for applying economic theory. *American Economic Review*, 65(2), 225–230.
- Buchanan, J. M. (1978). Markets, states, and the extent of morals. *American Economic Review*, 68(2), 364–369.
- Buchanan, J. M. (1988). Contractarian political economy and constitution interpretation. *American Economic Review*, 78(2), 135–139.
- Buckley, F. H. (2005). *Just exchange*. London and New York: Routledge.
- Buzzell, R. D., & Ortmeyer, G. (1995). Channel partnerships streamline distribution. *Sloan Management Review*, 36(3), 85–96.
- Casson, M. (1982). *The entrepreneur: An economic theory*. Oxford: Martin Robertson.
- Charny, D. (1990). Nonlegal sanctions in commercial relationships. *Harvard Law Review*, 103, 373–467.
- Choi, Y. B. (1993). *Paradigms and conventions: Uncertainty, decision-making and entrepreneurship*. Ann Arbor: University of Michigan Press.
- Coase, R. (1988). *The firm, the market, and the law*. Chicago: University of Chicago Press.
- Cooper, R. (1992). Formal organization as representation: Remote control, displacement and abbreviation. In M. Reed & M. Hughes (Eds.), *Rethinking organization: New directions in organization theory and analysis* London: Sage.
- Cornes, R., & Sandler, T. (1986). *The theory of externalities, public goods and club goods*. Cambridge: Cambridge University Press.
- Corsten, D., & Kumar, N. (2005). Do suppliers benefit from collaborative relationships with large retailers? An empirical investigation of efficient consumer response adoption. *Journal of Marketing*, 69(3), 80–94.
- Denrell, J., Fang, C., & Winter, S. (2003). The economics of strategic opportunity. *Strategic Management Journal*, 24, 977–990.
- Dunne, D., & Narasimhan, C. (1999). The new appeal of private labels. *Harvard Business Review*, 77(3), 41–49.
- Dworkin, R. (1967). The model of rules. *University of Chicago Law Review*, 35, 14–46.
- Easton, G. (1995). Methodology and industrial networks. In K. Möller & D. T. Wilson (Eds.), *Business marketing: An interaction and network perspective* (pp. 411–491). Norwell (MA): Kluwer Academic Publishing.
- Easton, G., & Araujo, L. (1992). Non-economic exchange in industrial networks. In B. Axelsson & G. Easton (Eds.), *Industrial networks: A new view of reality* London: Routledge.
- Easton, G., & Håkansson, H. (1996). Markets as networks: Editorial introduction. *International Journal of Research in Marketing*, 13, 407–413.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Esser, J. (1956). *Principle and norm (Grundsatz und Norm)*. Tübingen: J.C.B. Mohr (Paul Siebeck).
- Feldman, D. (1984). The development and enforcement of group norms. *Academy of Management Review*, 9(1), 47–53.
- Ford, D. (1978). Stability factors in industrial marketing channels. *Industrial Marketing Management*, 7(4), 410–422.
- Ford, D., Gadde, L.-E., Håkansson, H., & Snehota, I. (2003). *Managing business relationships*. Chichester: John Wiley.
- Ford, D., & Håkansson, H. (2006). IMP: Some things done, much more to do. *European Journal of Marketing*, 40(3/4), 248–258.
- French, C. L. (1960, September). Correlates of success in retail selling. *American Journal of Sociology*, 128–134.
- Gadde, L. E., Huemer, L., & Håkansson, H. (2003). Strategizing in industrial networks. *Industrial Marketing Management*, 32(5), 357–365.
- Gnyawali, D. R., & Madhavan, R. (2001). Cooperative networks and competitive dynamics: Structural embeddedness perspective. *Academy of Management Review*, 26(3), 431–445.
- Håkansson, H. (1982). *Industrial marketing and purchasing of industrial goods: An interaction approach*. Chichester: John Wiley.
- Håkansson, H., & Ford, D. (2002). How should companies interact in business networks? *Journal of Business Research*, 55(2), 133–145.
- Halinen, A., & Törnoos, J. A. (2005). Using case methods in the study of contemporary business networks. *Journal of Business Research*, 58, 1285–1297.
- Hart, H. L. A. (1961). *The concept of law*. Oxford: Clarendon Press.
- Helgesson, C. F., & Kjellberg, H. (2005). Multiple versions of markets. *Multiplicity and performativity in marketing practice, in the proceedings of the 21st IMP Conference in Rotterdam* Netherlands: Erasmus University.
- Houston, F. S., & Gassenheimer, J. B. (1987). Marketing and exchange. *Journal of Marketing*, 51, 3–18.
- Hunt, S. D. (1976). The nature and scope of marketing. *Journal of Marketing*, 40, 17–28.
- Hunt, S. D. (1983). General theories and the fundamental explananda of marketing. *Journal of Marketing*, 47, 9–17.
- Johanson, J., & Mattsson, L.-G. (1985). Marketing investments and market investments in industrial networks. *International Journal of Research in Marketing*, 3(2), 185–195.
- Khalil, E. L. (1995). Institutional theory of the firm? Extension and limitation. *Review of Political Economy*, 7(1), 43–51.
- Kjellberg, H. (2001). *Organising distribution: Hakonbolaget and the efforts to ationalize food distribution, 1940–1960*. Ph.D. Dissertation, Stockholm: The Economic Research Institute, Stockholm School of Economics.
- Kriesberg, L. (1955, November). Occupational controls among steel distributors. *American Journal of Sociology*, 203–212.
- Lewis, D. (1967). *Convention: A philosophical study*. Cambridge: Harvard University Press.
- Loasby, B. J. (2000). Market institutions and economic evolution. *Journal of Evolutionary Economics*, 10(3), 297–309.
- Loughlin, M. (2005). Constitutional theory: A 25th anniversary essay. *Oxford Journal of Legal Studies*, 25(2), 183–202.
- Macdonald, E. (1999). The emperor's old clauses: Unincorporated clauses, misleading terms and the unfair terms in consumer contracts regulations. *The Cambridge Law Journal*, 58, 413–436.
- Mallen, B. (1964, Spring). A note on a scale of resale price control. *The Marketer*, 10–11.
- Mannix, E. A., Tinsley, C. H., & Bazerman, M. H. (1995). Negotiation over time: Impediments to integrative solutions. *Organizational Behavior and Human Decision Processes*, 62, 241–251.
- Maskin, E., & Tirole, T. (1999). Unforeseen contingencies and incomplete contracts. *The Review of Economic Studies*, 66(1), 83–114.
- McCammon, B. C. (1964). Alternative explanations of institutional change and channel evolution. In S. A. Greyser (Ed.), *Toward scientific marketing, proceedings of the Winter Conference of the American Marketing Association* (pp. 477–490).
- Mehta, J., Starmer, C., & Sudgen, R. (1994). The nature of salience: An experimental investigation of pure coordination games. *American Economic Review*, 84(3), 658–673.
- Miller, P., & Rose, N. (1990). Governing economic life. *Economy and Society*, 19(1), 1–31.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48, 261–297.
- Mouzas, S., & Araujo, L. (2000). Implementing programmatic initiatives in manufacturer-retailer networks. *Industrial Marketing Management*, 29(4), 293–303.
- Mouzas, S., & Ford, D. (2006). Managing relationships in showery weather: The role of umbrella agreements. *Journal of Business Research*, 59, 1248–1256.
- Mouzas, S., Henneberg, S. C., & Naudé, P. (2008). Developing network insight. *Industrial Marketing Management*, 37(2), 166–179.
- Nee, V. (1998). Norms and networks in economic and organizational performance. *American Economic Review*, 88(2), 85–89.
- North, D. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Palamountain, J. C. (1955). *The politics of distribution*. Cambridge: Harvard University Press.
- Ragin, C. C. & Becker, H. S. (Eds.). (1992). *What is a case? Exploring the foundations of social inquiry* Cambridge: Cambridge University Press.
- Richman, B. D. (2004). Firms, courts, and reputation mechanisms: Towards a positive theory of private ordering. *Columbia Law Review*, 104(8), 2328–2368.
- Ridgeway, V. F. (1957, March). Administration of manufacturer-dealer systems. *Administrative Science Quarterly*, 464–477.
- Riley, C. A. (2000). Designing default rules in contract law, conventionalism and efficiency. *Oxford Journal of Legal Studies*, 20(3), 367–390.
- Ritter, T. (2000). A framework for analyzing interconnectedness of relationships. *Industrial Marketing Management*, 29(4), 317–327.
- Romer, P. M. (1990). Endogenous technological growth. *Journal of Political Economy*, 98(5), 71–102.
- Sabel, C. F. (1993). Constitutional ordering in historical context. In F. W. Scharpf (Ed.), *Games in hierarchies and networks: Analytical and empirical approaches to the study of governance institutions* (pp. 65–123). Frankfurt: Campus Verlag/ Westview Press 73.
- Sabel, C. F. (1994). Learning by monitoring: The institutions of economic development. In N. Smelser & R. Swedberg (Eds.), *The handbook of economic sociology* (pp. 137–165). New York: Princeton University Press.
- Sabel, C. F. (1997). Constitutional orders: Trust building and response to change. In J. R. Hollingsworth & R. Boyer (Eds.), *Contemporary capitalism, the embeddedness of institutions* Cambridge: Cambridge University Press.
- Schelling, T. C. (1960). *The strategy of conflict*. Cambridge, MA: Harvard University Press.
- Scott, R. E. (2003). A theory of self-enforcing indefinite agreements. *Columbia Law Review*, 103(7), 1641–1699.
- Slater, D. (2002). From calculation to alienation: Disentangling economic abstractions. *Economy and Society*, 31(2), 234–249.
- Stein, J. (1997). Contract law: Fulfilling the reasonable expectations of honest men. *Law Quarterly Review*, 119, 433–442.
- Stigler, G. J. (1951, June). The division of labor is limited by the extent of the market. *The Journal of Political Economy*, 185–193.
- Stinchcombe, A. L. (2001). *When formality works*. Chicago and London: The University of Chicago Press.
- Strauss, D. (1999). What is constitutional theory? *California Law Review*, 87, 581–592.
- Sudgen, R. (1995). A theory of focal points. *The Economic Journal*, 105(May), 533–550.
- Sullivan, M. W. (1997). Slotting allowances and the market for new products. *Journal of Law & Economics*, 40(2), 461–493.
- Tirole, J. (1986). Procurement and renegotiation. *Journal of Political Economy*, 94(2), 235–259.
- Tirole, J. (1999). Incomplete contracts: Where do we stand? *Econometrica*, 67(4), 741–781.
- Tsoukas, H. (1989). The validity of idiographic research explanations. *Academy of Management Review*, 14(4), 551–561.
- Vaile, R., Grether, E. T., & Cox, R. (1952). *Marketing in the American economy*. New York: The Ronald Press.
- Villas-Boas, J. M., & Zhao, Y. (2005). Retailers, manufacturers, and individual consumers: Modeling the supply side in the ketchup marketplace. *Journal of Marketing Research*, 42(1), 83–95.

Wittreich, W. J. (1962, May–June). Misunderstanding the retailer. *Harvard Business Review*, 147–155.

Young, H. P. (1993). The evolution of conventions. *Econometrica*, 61(1), 57–84.

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