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*Organization Studies* 2010 31: 605

DOI: 10.1177/0170840610372184

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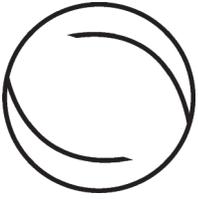
Jens Beckett: How Do Fields Change? The Interrelations of Institutions, Networks, and Cognition in the Dynamics of Markets.

In: *Organization Studies* 31(5), 605 - 627 (2010). Sage

The original publication is available at the publisher's web site: <http://dx.doi.org/10.1177/0170840610372184>

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# How Do Fields Change? The Interrelations of Institutions, Networks, and Cognition in the Dynamics of Markets

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## Abstract

Sociological approaches to the economy identify three types of social structures relevant for the explanation of economic outcomes: social networks, institutions, and cognitive frames. This article contributes to the development of a framework which aims at an integrated perspective on the social structuring of markets and their dynamics. Based on the field concept, the article discusses the interrelations between the three types of structures as a source of the dynamics of markets. Bringing the complex and possibly contradictory character of the different social structures to the center of attention highlights spaces for innovation which are anchored in the social organization of markets but remain obscure in approaches that focus on only one of the structures. The simultaneous inclusion of social networks, institutions, and cognitive frames makes it possible to address how actors employ resources gained from one of these structures in the field to reconfigure other parts of the social structure in a way favorable to their goals.

**Keywords:** markets, institutions, social networks, cognitive frames, institutional change, fields.

Sociological approaches to the economy explain economic outcomes based on the influence of social structures on individual action. By explaining the resolution of coordination problems and distributional outcomes by means of the social forces entangling market actors, sociology provides an alternative to those economic approaches that proceed on the basis of the individual interests of actors when addressing the question of economic order.

Three types of social forces have been identified as being relevant in explaining economic outcomes: social networks, institutions, and cognitive frames (Beckert 2009; Dobbin 2004; Fligstein and Dauter 2007; Fourcade 2007).<sup>1</sup> They have been shown to explain very diverse economic phenomena such as the level of competitiveness of economies (Hall and Soskice 2001), the formation of prices (Karpik 2007; Uzzi and Lancaster 2004; Velthuis 2005), the value ascribed to types of economic objects (Zelizer 1979), entrepreneurial activity (Burt 2002; Stark 2009), the levels of Foreign Direct Investment (Bandelj 2008) and the stratification of opportunities in labor markets (Granovetter 1995). Economic sociology has produced detailed accounts on how each of these structures influences these outcomes in the economy and how social networks, institutions, and cognitions emerge, reproduce, and change.

Organization  
Studies  
31(05) 605–627  
ISSN 0170–8406  
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DOI: 10.1177/0170840610372184

Frequently, however, the accounts have focused on only one of the structures and either ignored the others (White 1981; Williamson 1985) or argued that they could be subsumed under or integrated into the structure favored by the respective approach (Granovetter 1985: 491; Mizruchi 2007: 8). This segmentation has led to the unsatisfactory situation in which different types of structures have been dealt with in separate approaches that develop in relative isolation to one another (Fourcade 2007: 1019). This development is inadequate because it can be assumed that the three forces, in fact, exercise their influence simultaneously.

This article follows the hypothesis that it is only from the simultaneous consideration of all three structural forces that important aspects of the dynamics of markets become comprehensible. I argue that networks, institutions, and cognitive frames are irreducible and that one important source of market dynamics stems from their interrelations. The structures lead to the stratification of fields by positioning actors in more or less powerful positions. At the same time, actors gain resources from their position which they can use to influence institutions, network structures, and cognitive frames. To simultaneously consider all three social forces in market fields and their reciprocal influences allows us to consider their interrelations as sources of field dynamics. While it might be useful to distinguish the three structural forces analytically, any approach that does not take into account all the forces influencing action remains necessarily incomplete in its analysis and is in danger of drawing a distorted picture of the embeddedness of economic action and the dynamics of market fields.

This article contributes to the development of an integrated perspective on the social structuring of markets. Such a more comprehensive understanding needs to be based on a general framework that can encompass the notions of networks, institutions, and cognitions.<sup>2</sup> I suggest that the notion of fields (DiMaggio and Powell 1991; Bourdieu 2005; Fligstein 2001a: 67ff) makes it possible to bring simultaneous attention to the different types of social structures relevant in markets and at the same time shift the theoretical focus on the relationship between structures and agency processes. Fields are understood here as local social orders or social arenas where ‘actors gather and frame their actions vis-à-vis one another’ (Fligstein 2001b: 108).

Based on the field concept I discuss the interrelationships between the three types of structures identified and their role in the change of market fields. In the first part of the article, I discuss the notion of markets as fields and show how the relationship between structure and agency can be conceptualized based on the notion of fields. Subsequently (part 3) I discuss – based on a systematic tableau – the mechanisms through which actors change the structural composition of market fields based on the interrelations between the three social forces. This is followed by a brief conclusion.

### **The Irreducibility of Institutions, Networks, and Cognitive Frames**

‘Markets as institutions’ (Barmer and Vogel 2007; Fligstein 2001a), ‘markets as networks’ (McLoughlin 2002), and ‘markets as cultures’ (Abolafia 1998) are three

sociological approaches to the economy, each having developed large bodies of literature over the last twenty years. Several recent survey articles on the development of economic sociology, however, have criticized the segmentation of these approaches (Fligstein and Dauter 2007; Fourcade 2007). While network analysts focus on the structure of social relations (Burt 1992; Granovetter 1985; Uzzi 1997; White 1981), they often give little consideration to the role of institutions and cognition in their explanations of economic results (Fligstein 2001a: 229f). 'Network analysis is based on the idea that the most important components of social life rest neither in the formal institutions under which actors operate nor in the individual attributes and traits with which they are identified' (Mizruchi 2007: 7). Historical institutionalists (Carruthers 1996; Hall and Soskice 2001; Streeck and Thelen 2005) or cultural approaches (Callon 1998; Dobbin 1994; Kaufman 2004; MacKenzie and Millo 2003; Boltanski and Thévenot 2006), respectively, often provide little room for the role of network structures in their explanations of economic outcomes. Sometimes the 'very existence of a spatial field and the role of networks and relational patterns are in a sense wiped out' (Djelic and Sahlin-Andersson 2006: 22).

The assessment that the different approaches of economic sociology develop separately from each other is, nevertheless, only partially justified. While some authors have attempted to eradicate the social structures discussed by competing approaches by claiming that they do not have independent effects, many others have attempted to integrate them by considering them simultaneously. Cognitive frames have been brought into institutional theory and network analysis by combining them with networks and institutions. This can be seen in sociological institutionalism, which emphasizes the role of cognitive frames and meaning structures as decisive for the explanation of economic outcomes by broadening the notion of institution; institutions are defined as intersubjectively shared meanings and thereby become almost indistinguishable from cognitive frames (DiMaggio and Powell 1991; Fligstein 2001b: 108; Schneiberg and Clemens 2006; Scott 2008). A similar strategy can also be detected in those approaches of network analysis that attempt to 'endogenize' cognition. Networks are interpreted as 'networks of meaning' and are said to exercise their influence on actors based on narratives which express mental maps of the structure of social relations (Dequech 2003; Fuhse 2009; Kilduf and Tsai 2003; Mützel 2009; White 1992: 65ff). Hence, in these accounts, the objectivity of networks is not constituted by the position of nodes and the structure of their connections as such, but by the dominant interpretations through which actors *perceive* the network structure. Some network analysts (Granovetter 1992: 5) conceive of institutions as 'congealed networks' where 'interactions between people gradually acquire an objective quality, and eventually people take them for granted.' In this manner, institutions are integrated into the approach, but in a form which makes them indistinguishable from networks.

What is at fault in these strategies is that they are conflating the different types of social forces and therefore fail to take into consideration their analytic disconnection (Archer 2003). Only some conceptualizations recognize the irreducibility of the different structures identified. One example for this is the work

of those historical and economic institutionalists who concentrate on formal institutions but acknowledge at the same time the role of culturally shared meaning for the concrete interpretation of these formal rule systems without merging the two (Aoki 2001; Denzau and North 1994; Dequech 2006; Hall and Soskice 2001: 12f; Thelen 1999: 376). Moreover, the irreducibility of social structures has been acknowledged in a more comprehensive sense by inquiries which systematically investigate the influences of other types of social structures on the development of the structure in focus. This is the case in studies which, for example, explain institutional change based on the formation of new networks (Djelic 2004; Quack and Djelic 2005; MacKenzie and Millo 2003). It is the lead of these approaches which is followed here. But instead of conceptualizing an isolated influence of one social structure on one other, I contribute a systematic tableau of these influences based on the premise of the irreducibility of different social structures.<sup>3</sup>

The critique of approaches focusing on one of the social structures in isolation from the others is not only directed against their incompleteness. In addition, the concentration on a single macrostructure gives support to deterministic understandings of structure. Moreover, it ignores important sources of the dynamics of market fields which are related to the multidimensionality of social structures. With regard to the first point, it has been observed that network analysis follows a 'morphological determinism' (Fourcade 2007: 1021) through which action is subsumed under social structure. 'The agents, their dimensions, and what they are and do, all depend on the morphology of the relations in which they are involved' (Callon 1998: 8). Rational choice institutionalism and some variants of historical institutionalism see institutions as constraints on utility-maximizing agents and assume 'rational' responses to given institutional incentive structures without giving consideration to the contingency of responses of actors (Bates, et al. 1998; Williamson 1985). Finally, cultural approaches have often been criticized for their determinism (Thompson et al. 1990). Structural determinism, however, does not do justice to the role of agency in social processes. In contrast to laws in the natural sciences, institutional rules, social networks, and cultural structures do not affect behavior directly, but based on decisions, i.e. mediated through the meanings given to them by actors (Dequech 2005: 465; Deutschmann 2007:5). It is only based on their contingent *enactment* that social structures pattern social relations.

With regard to the second point, i.e. the dynamics of markets, approaches that are limited to one of the social structures do not recognize an important source of dynamics. Changes in the social structuration of markets can emerge, I argue, from changes in one of the structures, which lead to an alteration of power relations between agents and subsequently to action that results in changes of the other structures. To conceptualize systematically the mutual influences of the three social structures and the relationship of structure and agency, one needs, however, an overarching conceptual framework that can encompass the different types of structures and allows the conceptualization of their interrelations. The concept of fields provides such a framework (DiMaggio and Powell 1983; Bourdieu 2005; Fligstein 2001a).

## Markets as Fields

Markets can be understood as arenas of social interaction for the exchange of goods and services. A constitutive element of markets is competition, which leads to an indirect conflict between market participants (François 2008). Instead of viewing markets as being constituted by anonymous actors that can organize stable exchange relations solely based on their individual interests, sociological approaches to markets focus on the social structuring of market relations.

By understanding markets as fields, we shift the emphasis in the analysis of markets from the act of exchange to these structuring forces. The notion of field refers to a population of actors that constitute a social arena by orienting their actions toward each other (Fligstein 2001b: 108). The actors in a market field are producers (firms) and consumers as well as intermediating regulatory agencies that range from the state to lobbying groups, unions, advocacy groups, and social pressure groups (see also DiMaggio and Powell 1983: 143). Agency in fields is structured by the influences that social forces exercise on the actors who populate the field. These forces consist of the relational topographies of networks, the institutional rules prevalent in the field, and cognitive frames structuring the perceptions of agents. Through this 'invisible set of forces' (Fourcade 2007: 1022), a local order emerges where actors develop mutual expectations with regard to each other's behavior.

The different conceptualizations of fields that have been developed in the social sciences (Lewin 1951; Bourdieu 2005; DiMaggio and Powell 1983; Fligstein 2001) all share the view of fields as being structured by social forces that increase stability in social interaction. Each of the three structures discussed in economic sociology contributes to the order of market fields, and their concrete form decides on the relative power each actor has within the field. The boundaries of fields are not geographically determined but are culturally, politically, and socially established (Scott 1994: 206). The way they are established defines and limits a market. Hence, markets are constituted and demarcated from one another by the mutual orientation of actors towards each other, an orientation that is organized by the social forces identified. This understanding of markets as fields encompasses conceptualizations that view markets as realms of interaction structured by institutions *or* by networks *or* by local cultures. More importantly it allows to investigate the interrelations between these forces based on a unifying conceptual framework. Each of the three structuring forces contributes to the social organization of market exchange by shaping opportunities and constraints of agents as well as perceptions of legitimacy and illegitimacy.

(1) Firstly, network structures position organizations and individual actors in a structural space. Fields are comprised of the specific structures of social networks which create power differences between firms and status hierarchies (Aspers 2005; Podolny 2005). Network positions reflect the size of firms relative to others, reveal reputation orders, create entrance and exit barriers to the market, and allow for the diffusion of ideas. Each firm occupies a specific 'life space' (Lewin 1997: 338) in the market field that provides opportunities and risks, depending on the position they occupy in relation to others.

(2) Secondly, the relative force of actors is anchored in regulative institutional rules which allow and support certain types of behavior while discouraging others. Though the consequences of institutional rules are also evident in the network structure of a market field, they are nevertheless an irreducible social force. To be the firm with the largest market share has very different implications for that firm's strategic options, depending, for instance, on the regulations of antitrust law. If antitrust law stops dominant firms from undertaking mergers and acquisitions which would further increase their market share, it exercises an influence on the firm's behavior that is not already contained in the social structure of the field itself. Import customs, subsidies, intellectual property rights, or labor laws are other examples of institutional rules influencing competition in the market in ways that cannot be reduced to the network structure of the field.

(3) Thirdly, cognitive frames provide the mental organization of the social environment and thereby contribute to the order of market fields. Institutions and social structures must be interpreted by actors in terms of their behavioral implications, because rules are never specific enough to determine responses in concrete situations. Institutional theorists have shown that similar rules can lead to very different behavioral consequences based on distinct interpretations of their implications in a concrete situation (Edelman et al. 1999; Jackson 2005). Which strategic implications a competitive situation has results from the 'sensemaking activities' (Weick 2000) of firms that reflect socially anchored cognitions (DiMaggio 1997). Cognitive frames, however, also form a social structure in their own right. Social norms, as well as cognitive 'how-to' rules, are part of a socially inscribed meaning structure operating in a market field through which firms and other field actors assess situations and define their responses. Action reflects, in part, the 'taken-for-granted' scripts prevailing in the social environment of actors (Meyer and Rowen 1977).<sup>4</sup> These scripts or 'conceptions of control' (Fligstein 2001a) contribute to the order of markets by suggesting ways to act despite the uncertainty of outcomes; those firms are empowered whose organizational structures and strategies correspond to the prevailing scripts in the market field and thereby gain legitimacy.<sup>5</sup>

Together the three social structures form a 'social grid' constituting positions and entangling actors. The social forces are analytically independent but empirically closely interwoven, as will be shown in the next part. The social topology of fields constitutes power differences and different profit opportunities. The possibility of conceptualizing the simultaneous exposure of actors to all three types of social structures is one strength of the field concept. The second benefit is that its simultaneous recognition of several social forces provides a base from which to investigate the contingency of agents' reactions. Agents must synthesize in their responses the demands stemming from *different* social forces. The demands are multifaceted and may stand in contradiction to each other, thereby opening up a variety of ways to respond to the situation and thereby recomposing the field (see also Schneiberg and Clemens 2006: 206). An agency-centered approach of this kind to the analysis of the role of social structures demands that the focus is shifted to the interaction of social structures and agency processes, based on the meanings these structures attain for market participants.<sup>6</sup>

## The Change of Structure in Market Fields

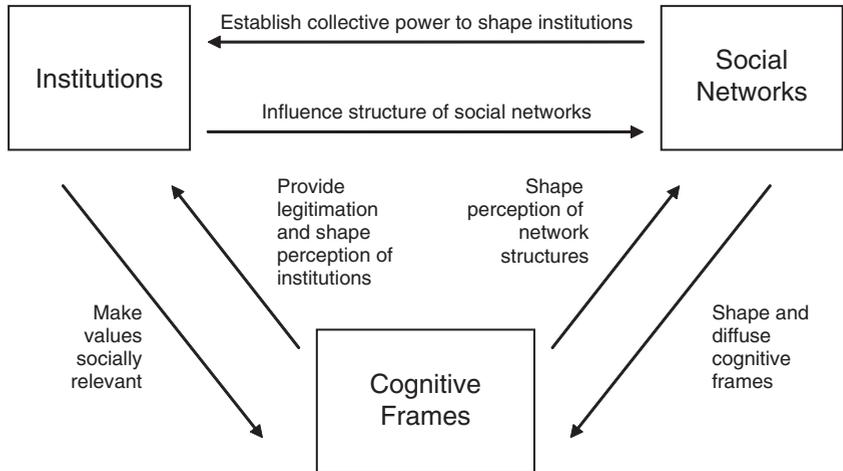
Institutions, networks and cognitive frames are not just 'neutral' devices to resolve coordination problems in market fields. By shaping the conditions of competition, they contribute to the social stratification of the market and are therefore subject to rival interests. While some firms benefit from the existing network composition, institutional rules, and cognitive mindsets in the market field, others are disadvantaged by them. Consequently, actors are engaged in an ongoing struggle to change or to defend the social forces operating in the field. One rationale for the creativity of actors in their response to the social forces they encounter is found in these interests to advance their respective position in the field.

The recognition of the plurality of social structures contributes to the understanding of the dynamics of fields by pointing to the resources actors obtain from the relative position they occupy. Here the simultaneous consideration of all three social structures becomes important because resources gained from one of them can be used to influence the others. Network positions can be used to influence institutional rules and dominant cognitions; institutions can be a resource to force changes in networks and to influence mental maps; ideas that are influential in the field can be used to advocate changes in institutional rules and network composition. The dynamics emerging from the interaction between different social structures stems from their relative independence from each other. This can bring prevailing networks, institutions, and cognitive frameworks in contradiction with each other and lead to conflicts due to the redistribution of power between agents. Changing cognitive frames, for instance, can put pressure on existing institutional regulations by delegitimizing them and empowering actors who are advocating new ideas. Should one of the structures change, new opportunities arise to change other elements of the structures of the field. This leads to field dynamics.

Although an important subject of investigation for all three dominant sociological approaches to markets has been the question about how best to understand the dynamics of social structures in market fields, the role played by the *interrelations* of different social structures has not been given systematic attention. Institutionalists have developed theories of institutional inertia as well as institutional change based on concepts like path dependence, critical juncture, and internal institutional contradiction (Campbell 2004; Carruthers 1996; Pierson 2000; Streeck and Thelen 2005). Network analysts have investigated the reproduction of social positions of firms in the topology of market fields (White 1981; Podolny 1993) as well as the emergence of new structural configurations based on the concept of market niches and brokerage (Burt 1992; White 1992). Cognitive approaches have identified mechanisms like mimicry and imitation to understand the stable reproduction of institutional forms (DiMaggio and Powell 1983; Lamont and Thévenot 2000) as well as processes of change in cognitive orientations (Fourcade-Gourinchas and Babb 2002; MacKenzie and Millo 2003; Meyer 1997).

However, the predominant orientation of these approaches to *one* of the identified social structures has prevented them from understanding the processes of

Figure 1:  
The reciprocal influence  
of the three social forces  
in market fields



stability and change more comprehensively by taking into account the *reciprocal influence* of forces stemming from the different social structures and the possible friction between them (see figure 1). Institutions, networks, and cognitive frames form conditions and restraints on each other for their reproduction and change. By categorizing the mechanisms through which these mutual influences operate, I add weight to the claim that it is only from a more integrated approach that the stability and the dynamics of fields can be explained.

In the following sections I will discuss the mechanisms through which this mutual influence is exercised based on a comprehensive tableau of the six possible interrelations (figure 1). The discussion is based on empirical illustrations, which provide examples from research on the dynamics of market fields.

### Stability and Change of Social Networks

Network analysis is based on the premise that the positioning of firms relative to each other, i.e. the structure of social relations, has a paramount influence on economic outcomes like prices, job opportunities, technological innovation, profit rates and the willingness to engage in risky contractual relations. Since profits stem from the relative position of a firm within the network (Podolny 1993), actors have diverging interests with regard to the reproduction and change of existing network structures. In its simplest expression, this is a struggle between incumbents and challengers (Fligstein 2001a). What then explains stability and change of these structures?

Within structural approaches to markets (White 1981; Bourdieu 2005), the explanation of stability of market structures gains much more attention than issues of change. Moreover, this stability is explained primarily by the logic of social networks themselves. An example is Harrison White's (White 1981) market model, where the focus on the stability of market structures can be seen already in his definition of markets as a 'self-reproducing role structure of producers' (White 1981: 517). White demonstrates in his W(y)-model that the

optimal production schedule for each individual producer is the precise schedule from the previous period. 'The producers therefore reproduce the same opportunity set' (Leifer and White 1987: 89). In a similar vein, Pierre Bourdieu (Bourdieu 2005: 196) expects the reproduction of existing social structures from the unequal distribution of capital which dominant firms use to reproduce their position. 'The tendency for the structure to reproduce itself is immanent in the very structure of the field: the distribution of strengths governs the distribution of chances of success and of profits through various mechanisms' (Bourdieu 2005: 196). Both authors provide a static model of the reproduction of market fields.

The change of network structures plays a greater role in a later work by Harrison White. *Identity and Control* (White 1992) discusses some general mechanisms through which actors attempt to shape networks by engaging in 'control projects' and blocking the action of others. Due to White's emphasis on narratives, cognitive frames are a factor in this explanation of changes of network structures. Ronald Burt (Burt 1992) also understands networks as formable by strategic actors and thereby puts emphasis on their dynamics.

However, the *reproduction* of network positions of firms finds important support in prevalent institutional regulations as well as in cognitive frameworks and *changes* in the composition of networks can be caused by institutional change and changes in perceptions. Before discussing the mechanisms underlying these processes, I illustrate this point with two examples from studies on historical changes in the social structure of market fields.

(1) During the post-war period, the structure of the German economy was characterized by a dense network of industrial firms, banks, and insurance companies. This network structure of the *Deutschland AG* reproduced very steadily until about the mid-1990s when banks and insurance companies started to sell off their shares in industrial firms (Beyer and Höpner 2003). While this disinvestment had its economic rationale in the attempt to increase profitability, changes in the cognitive frame of dominant market players as well as institutional reforms created an important background enabling the move. On the cognitive level, the increasing orientation toward principles of shareholder value caused financial institutions to reconsider their investments in the stocks of industrial firms. 'In the 1990s, a trend towards professionalisation, greater emphasis on economic and financial issues, recruitment from external labour markets and shorter in-house careers was observed. These changes influenced the perceptions and value orientations of managers, including their attitudes towards shareholder value' (Beyer and Höpner 2003). The emerging negative assessment of the tight coupling of the financial sector and industry and the reduced commitment of companies to societal considerations are cognitive factors contributing to the explanation of the dissolution of the network structures. The second group of contributing factors consisted of institutional changes. The Corporate Sector Supervision and Transparency Act (KonTraG), the permission for companies to use capital-market-oriented accounting standards, and the abolition of the capital-gains tax on the sales of stocks in other companies in 2001 provided the institutional bedrock for the large sell-off of stocks owned by

German companies that effectively dissolved the network structures in place until then (Beyer and Höpner 2003: 190f).

(2) Another example of the impact of institutional and cognitive change on network structures of firms in markets is Neil Fligstein's (Fligstein 1990) study on the transformation of American industry. Fligstein offers an explanation for the transformation of the organizational structures of the largest American firms from models of vertical integration to diversification, a process that started during the 1920s. Fligstein (Fligstein 1991: 319) argues that 'the roots of diversification were contained in the marketing revolution of the 1920s' which led to profound changes in the way managers would view the firm and its fundamental business. The new outlook – i.e., a changed cognitive frame – stated that new markets were to be developed through diversification. In addition to these cognitive changes, Fligstein emphasizes the role of institutional changes in the development. The Celler-Kefauver-Act, passed in 1950, 'made mergers that increased concentration in any given line of business illegal' (Fligstein 1991: 321) and effectively changed the rules by which firms could expand. Through this change in institutional regulation, diversification was directed to product-unrelated strategies, leading the way to the finance orientation of the largest American companies and very different forms of network relations through inter-firm integration.

The two examples show that the reproduction and change of existing network structures in market fields cannot be viewed independently from cognitive frameworks (see also Lizardo 2006) and the institutional regulations governing the field. The multiplicity of social forces structuring a market is a source of stability *if* the different structures reinforce each other. But it is also a source of instability in markets if changes in any one of the structures have repercussions on the strategies of actors because of newly emerging profit opportunities and the closure of hitherto existing ones. Contradictions developing from changes in one of the structures are a source of conflict, destabilizing existing structures by reshuffling power resources in the field and thereby providing new avenues for action for some actors while blocking others. The change threatens the positions of actors with a stake in the current social composition of the field and simultaneously provides opportunities for strategic interventions by firms seeking to improve their position. Institutional changes can affect network structures by preventing dominant players from applying strategies through which they reproduce their dominant position (McDermott 2007). Changes in cognitive frameworks can affect network structures by making market actors aware of profit opportunities that have hitherto escaped their attention and by aligning actors in joint activities allowing for new control projects. The role cognitive reorientations and institutional changes played for the restructuring of the network structures of German and American industry are examples of this.

### **Stability and Change of Institutions**

The question as to why and under what conditions institutions reproduce in a stable manner or change is probably the most significant current issue in the

development of institutional theories (Campbell 2004; Streeck and Thelen 2005). Just as network approaches explain the reproduction of network structures from the properties of networks themselves, institutional theories refer primarily to the properties of institutions to explain their stability and evolution. This leads again to a limited perspective because it does not allow for the important roles social networks and cognitive frames play in these processes.

Two concepts dominate explanations of institutional *stability*: path dependence and institutional complementarities. Path dependence means that institutional development sets ‘into motion institutional patterns or event chains that have deterministic qualities’ (Mahony 2000: 507).<sup>7</sup> The argument of institutional complementarities states that two institutions are ‘complementary if the presence (or efficiency) of one increases the returns from (or efficiency of) the other’ (Hall and Soskice 2001: 17).<sup>8</sup> This concept helps explain why institutions deemed efficient in one institutional setting are not necessarily so when transferred into another setting. Both mechanisms point to endogenous institutional logics to explain why institutions do persist despite seemingly advantageous alternatives.

Theories of institutional *change* are concerned with the mechanisms of institutional transformation. While change was conceptualized for a long time in dominant strands of institutional theory as the result of external ruptures, institutionalists have turned their attention in recent years to mechanisms of endogenous institutional change. In these explanations, however, the focus is on institutional dynamics caused by institutional logics themselves (Seo and Creed 2002). For example, Wolfgang Streeck and Kathleen Thelen (2005: 19ff) argue that ‘change is often endogenous and in some cases is produced by the very behavior an institution itself generates’ (Streeck and Thelen 2005: 19). Institutional rules are never so coherent and complete (or: total) as to eliminate all internal dynamics that can lead to their transformation or eradicate opportunities for political actors to transform them. Paul DiMaggio (DiMaggio 1991: 287) observes, with regard to the field of art museums, a contradictory dynamic whereby the legitimization of the specific form of organizing museums ‘empowered and authorized the museum reform movement, which offered delegitimizing criticism of existing museums. In other words, institutionalization bears, if not the seeds of its own destruction, at least openings for substantial change.’ Without denying the insight that change can be ‘constituted with materials provided by existing institutions’ (Schneiberg and Clemens 2006: 218), it is striking that institutional change is much less understood in these accounts as stemming from the force of other social structures, i.e., social networks or cognitive frames and *their* impact on the power of actors interested in the preservation of existing institutional rules or their change. Friction that contributes to institutional change, however, does not only exist between different institutions, but also arises from the interactions of institutions with social networks and changing cognitive frames.

This does not mean that institutionalists did not pay attention to these social forces at all (Campbell 2004: 107ff, 186f). Few authors, however, have attempted to systematically integrate them in models of institutional change, and those that have done so focus either on social networks *or* on cognitive frames. One example of the investigation of the relationship between social networks

and institutional change is Marie-Laure Djelic's (Djelic 2004) work on cross-national institutional transfers. Djelic shows that institutional changes in the French political economy after World War II were based on the 'co-construction' of social networks, on the one hand, and institutions, on the other. The diffusion of institutional models from the United States was only possible because of the political impact of a small cross-national network that had formed in the 1930s and early 1940s and brought together members of the American and French business and state elites. The network connections became relevant after 1945, when the key players in the network came into responsible positions of institution-building and could draw on the channels available to them through their network connections. From this empirical example it can be learned that the possibilities of agency that transforms market institutions are themselves embedded in network structures. 'The concept of social network allows the social theorist to navigate between the Scylla of free agency and the Charybdis of structural or cultural determinism' (Djelic 2004: 344).

In a similar vein, the relevance of cognitive frames for processes of institutional change has been investigated. This topic is at the core of sociological institutionalism (Meyer and Rowen 1977; Meyer 1997) but also attracted considerable attention among historical institutionalists and within economic institutionalism. Assessments of institutions derive from 'rationalized myths' (Meyer and Rowen 1977) that reflect taken-for-granted scripts prevailing in the institutional environment of actors. Hence, the normative and cognitive framing of markets, anchored in social belief systems, is a constitutive element of their structuring because it shapes the assessment of the desirability and suitability of institutional forms. In political economy, the emphasis is primarily on the investigation of the role of ideas in processes of institution-building (Blyth 2002; Campbell 2004: 107; Greif 1994; Hall 1989; Hall and Soskice 2001; Thelen 1999: 376; Woll 2005). Hall and Soskice (Hall and Soskice 2001: 12f) see shared understandings as the explanatory factor as to why actors coordinate on a specific institutional outcome in situations characterized by multiple equilibria. Mark Blyth (Blyth 2002) argues that, in situations of radical institutional rupture that create high levels of uncertainty for actors, the reference to ideas explains the institutional choices actors make. In the study by Neil Fligstein (Fligstein 1990) cited above, it was the change in prevailing ideas on how to run a company – i.e., the shift from a technology-based understanding of firm organization to a marketing-oriented understanding – which provided support for actors aiming at the new institutional model of the diversified firm. Within economic institutionalism, it has been especially Avner Greif (Greif 1994; Greif 2006) who has emphasized the role of 'cultural beliefs' for explaining institutional development and why societies keep inefficient institutions even in the long run.

Though cognitive frames are in many ways 'given' and escape manipulation because of being taken for granted, institutional entrepreneurs can pursue strategies that aim at what could be called 'cognitive hegemony.' One central activity of institutional entrepreneurs is to provide and secure the ideological grounds on which institutional regulations advocated by them find legitimation. The institutional changes associated with neoliberalism that have taken place since the 1980s would not have been possible without the profound changes in the cognitive frame

of dominant actors on how to steer the capitalist economy (Fourcade-Gourinchas and Babb 2002). The shift towards shareholder value as the overriding principle of corporate governance up until the current crisis is based on ideological changes which had consequences for the 'social grid' within which the decisions of market actors take place.

But it would be mistaken to argue that cognitive frameworks and their change are simply at the disposition of actors for strategic manipulation. In the competition for dominant cognitive frames, actors might simply fail to gather enough support for their ideas to influence institutional rules in the field. Ideological innovations might also have unintended side effects that prevent the control of their consequences even by powerful market actors. Moreover, resistance may arise to the ideas advocated and the consequences deriving from them for institutional regulation and the organization of network structures,<sup>9</sup> especially if the cognitive frameworks affected are not limited to 'how-to' rules but affect distributional outcomes or 'orders of worth' (Boltanski and Thévenot 2006) – i.e., normative orientations – prevalent in the field.

At the same time, cognitive frames do not have to support institutional change in markets; they can also be a buffer for existing institutions. John Campbell (Campbell 2004: 108) alludes to the fact that paradigmatic ideas structure discourse by limiting 'the perceptions of those engaged in it' and constrain what actors perceive and interpret 'to be reasonable and appropriate behavior' (Campbell 2004: 110), thereby limiting the range of options for institutional design.

Hence, together with social networks, cognitive frameworks are another structure that impacts the reproduction and change of institutions. Cognitive frameworks exercise their influence through the ways in which they constitute the perception and the legitimation of institutional forms and network structures. They are part of market fields and must be investigated in their interaction with networks and institutions. Institutional entrepreneurs are embedded in these social structures. Taking this into consideration makes it also possible to move away from individualistic concepts of agency in institutional theory that square oddly with the basic premise of the social embeddedness of economic action (Beckert 1999).<sup>10</sup>

### **Stability and Change of Cognitive Frames**

In the same way as the significance of cognitive frames can be demonstrated for institutional development and the evolution of social networks, so too can the role be examined that social networks and institutions play in the evolution of those cognitive frames influencing behavior in market fields. As is found in the literature on the other two social structures, a strong tendency also exists in culturally oriented approaches to focus on stability.

The classical sociological answer to the question of reproduction of normative and cognitive orientations in markets has been the role of socialization and sanctions. Actors reproduce norms because they internalize them in the socialization process and because norm violations will be sanctioned while norm compliance will be rewarded (Parsons 1951; Parsons and Smelser 1984). Since actors attempt to avoid negative sanctions, they comply with norms and thereby reproduce them.

In more recent institutional scholarship the role of socialization has been discussed using the notion of 'normative pressures' (DiMaggio and Powell 1983) exercised by the socialization of actors on the norms of their profession, which is one mechanism leading to the stabilization and homogenization of fields.

The self-reinforcement of cognitive frameworks is also emphasized by microsociological studies in ethnomethodology and their observation of normalizing practices in everyday interactions. For the coordination of their interactions, actors rely on 'taken-for-granted' orders and resist deviations from these strongly; if rules are breached, actors attempt to 'repair' this order by overlooking the deviations or correcting them. If actors fail at this 'normalizing,' an anomic state emerges (Garfinkel 1967). On the macrolevel, contemporary studies in comparative cultural sociology (Lamont and Thévenot 2000; Fourcade 2004) focus on cross-national differences in cognitive frameworks, but tend not to investigate the changes in national cultural repertoires of evaluation. To the extent cognitive frames are investigated as sources of dynamics, the emphasis is on internal contradictions emerging from the simultaneous existence of a plurality of such frames (Kaplan 2008; Swidler 1986; Thévenot 2007).

The stability and change of cognitive frames, however, can also be understood in connection with the other two social structures discussed, i.e., institutions and social networks. The influence of institutions on cognitive frameworks takes place through socializing institutions like universities, business schools, and professional associations which shape the cognitive frames of their members. This can either be a stabilizing influence on dominant frames or one that transforms prevalent cognitive frames if the actors entering into the market field have been socialized into a different mindset than the incumbents. The literature on the role that business schools play in shaping their students' perception of 'the economy' illustrates this institutional influence on meaning structures in the market (Déry et al. 2007).

A second influence from institutional sources on cognitive frames is exercised through the sanctioning capacity of institutions. Institutions support values and cognitive orientations by reducing the individual costs of compliance and raising the cost of defiance (Lepsius 1995: 394). Hence, it is through their institutional anchoring that cognitive frameworks shape social interaction beyond individual motivation. In this sense, institutions stabilize cognitive orientations – what is seen as appropriate by market actors is, in part, determined by the institutions in place. Conversely, this implies that changing institutions can be the source for changing cognitive orientations.

Finally, not only institutions but also networks play a role in the stability and change of cognitive frameworks influencing market actors. This can be shown with regard to changes in value orientations. Hans Joas (2000) has argued, with particular reference to Durkheim's sociology of religion, that the emergence of new value orientations and worldviews is connected with historical experiences of profound social transformations (see also (Collins 1992: 85f). The French Revolution, the Great Depression, the economic crisis of the 1970s – and possibly the current economic crisis – are events which triggered such profound reorientations (Blyth 2002; Collins 1992; Durkheim 1995; Hall 1989; Fourcade-Gourinchas and Babb 2002). While Joas follows Durkheim in his assessment of the emergence

of new value orientations in collective experiences of self-transcendence, he criticizes at the same time Durkheim's theory of institutions for overlooking the fact that 'the individuals who participate in the collective experience having developed differing interpretations of this experience, [must] [...] refine [them] into a collective interpretation through a process of discussion and argument (a process pervaded with power)' (Joas 2000: 67f). To be influential, cognitive frames must be 'well understood, expressed, advocated (involving tactical and strategic aspects), and legitimized' (Plehwe 2007: 5). Social networks play a crucial role in this process because they can influence interpretations of collective events more powerfully than individual actors. Discursive processes in networks which form as advocacy groups, groups of intellectuals, epistemic communities of experts, or social movements transform general cognitive orientations into coherent and legitimate suggestions for institutional forms. It is through networks that ideas for institutional reform get diffused. The structure of social relations and the positioning of actors within the network influence who can be reached by the new ideas and worldviews. By framing the normative and functional implications of institutions, networks contribute to 'cognitive evolution' (Adler 2005: 17).

An example of this is the dissimilar influence Keynesianism has had in different countries since the 1930s. 'Keynesian programs made a greater impact in Sweden than in the United States during the 1930s in part because Keynesians had greater access to decision making circles in Sweden than they did in the United States' (Campbell 2004: 110f; see also Hall 1989). A second example is the emergence of neoliberalism as the politically dominating mindset for economic policies since the last quarter of the twentieth century. Discourse communities like the Mont Pèlerin Society, which formed in the postwar period as a network of intellectuals, were instrumental in dispersing neoliberal ideas to political and economic decision makers and thereby in influencing political decisions on institutional reform (Mirowski and Plehwe 2009).

## Conclusion

Sociological approaches to the economy set out from the social forces in which economic agents are embedded. Economic outcomes like price formation, new products or economic growth are understood based on the social organization of market fields. This article started from a critique of approaches in the sociology of markets and political economy that limit their consideration of social structures to social networks, institutions *or* cognitive frames. In contrast to those approaches I have argued that the understanding of the reproduction of market fields and their dynamics is only possible if all three types of social structures are simultaneously recognized. While the mutual influences of the different social structures have been discussed selectively, this article contributes a systematic tableau of the interrelations and the mechanisms through which such influence is exerted (see Figure 1). The notion of fields provides a theoretical umbrella which permits seeing agents as entangled in a grid of different social forces that position them in the social space, which provides resources for realizing their goals as well as limitations on their opportunities.

To understand markets based on the notion of fields allows for a process-oriented conceptualization which sees the positioning of firms as the historical result of struggles in which they attempt to defend or improve their position in the field by both defending existing structures and changing these structures to realize new opportunities. The concrete reactions to the situation are not determined because firms can react to a situation in contingent ways. The processes described operate through agents who are making use of the power they gain through their positioning within the social structures of the field. By considering the different structures simultaneously it becomes possible to understand the stability and changes of any one of them as a process that is determined neither by an imminent structural logic nor as one that is shaped completely voluntaristically. Instead, processes of reproduction and change of social structures are understood as the result of agency processes that are themselves anchored in social contexts. This limits at the same time the possibility to make general predictive claims about the directions of changes in market fields. Instead, their development can only be reconstructed from a historical perspective based on the analysis of the concrete historical situation and actor responses to it. By making the contingency of actor responses an explicit element of the conceptualization, the article contributes also to the paramount debate on structure and agency.

Bringing the complex and possibly contradictory character of the different social structures to the center of attention highlights spaces for innovation which are anchored in the social organization of markets but remain obscure in approaches that focus on only one of the structures. The discussion in the third part of the article showed the interaction between the different types of social structures. By bringing in simultaneously social networks, institutions, and cognitive frames, we have the chance, on the one hand, to understand the mechanisms through which social structures reinforce each other. On the other hand, it becomes possible to understand the mechanisms through which actors employ resources gained from one of these structures to reconfigure other parts of the social structure in a way favorable to their goals. Friction between the three structures is a powerful source of change. Changes in cognitive frameworks can lead to the delegitimation of institutions and a different perception of the opportunities provided by existing institutions and network structures. Institutional changes can affect social network structures and make other cognitive orientations socially relevant. The re-composition of networks provides new actors with the power to influence institutional structures and to influence cognitive frameworks prevalent in the field. While some institutional theories, network studies, and cultural approaches have incorporated the role of 'other' structures for the purpose of understanding processes of change in market fields, this has not been done systematically.

## Notes

This paper was written while the author was Fernand Braudel Fellow at the European University Institute in Florence. My thanks to the EUI for making this stay possible. For comments on earlier versions of this paper I would like to thank Patrik Aspers, Marie-Laure Djelic, Sophie Mützel, and the participants of the conference 'Theoretical Approaches in Economic Sociology,' held in Berlin in February 2008. I would also like to thank the anonymous reviewers for their very helpful suggestions.

- 1 The three forces provide a comprehensive tableau of the *social composition* of market fields. Market outcomes, however, are also influenced by factors independent from the social composition of the field, like technology and resource scarcity. While the analysis of technology has become a prominent research object in the social studies of finance (Knorr-Cetina and Preda 2005), the effects of resource scarcity remain typically outside the scope of market sociology.
- 2 In a sense, the concept of embeddedness (Granovetter 1985; Zukin and DiMaggio 1990) provides such a comprehensive framework. However, it seems too deterministic and also too static. It is too deterministic in the sense that it suggests, despite its focus on 'ongoing systems of social relations' (Granovetter 1985: 487), that we grasp economic outcomes simply as a function of social structures without bringing into focus the agency processes through which actors interpret social structures and which lead to contingent responses to the situation. It is too static because it does not indicate the mechanisms through which the embeddedness of economic action changes.
- 3 The work of Neil Fligstein comes closest to such a comprehensive account. However, it does not become sufficiently clear in Fligstein's work how the different structures interact with each other. At one point Fligstein brings social positions to the fore but defines them not as objective entities but as related to socially shared meanings: 'The social structure of a field is a cultural construction whereby dominant and dominated coexist under a set of understandings about what makes one set of organizations dominant' (Fligstein 2001a: 68). In another definition, Fligstein accentuates cognitive frameworks: 'The social organization of fields broadly refers to three features: the set of principles that organize thought and are used by actors to make sense of their situations (what might be called cognitive frameworks or worldviews), the routines or practices that actors perform in their day-to-day social relations, and the social relations that constitute fields (Fligstein 2001a: 29). In yet another definition, institutional rules are brought in as constitutive elements of fields: 'Markets are a kind of field, one that depends not just on the power of incumbents, but on more general rules in society in order to stabilize the power of incumbents' (Fligstein 2001a: 28)
- 4 Cognitive frameworks should also be given ample consideration as a social force in the market field because they provide an important connection to the demand side which is left unattended by those market theories that focus only on producers (Fligstein 2001a; White 1981). It is from the cognitive 'homology' (Bourdieu) between producers and consumers that products offered in the market do indeed find demand (see also Aspers 2005; Rössel 2007). To 'attach' potential purchasers to products through the creation of such homologies is, at least in highly competitive and functionally saturated markets, one of the most demanding tasks for producers (Callon et al. 2002). The cognitive frameworks of consumers and producers must be closely aligned with one another for products to be successful on the market.
- 5 In recent years the role of economic theory as a cognitive frame influencing the perception of a situation by market actors and their reactions to it has gained special prominence in market sociology (Callon 1998; MacKenzie et al. 2007). The way market actors perceive the functioning of markets, based on the economic theories they apply, informs their choices and thereby 'performs' the market in the way described by the theories. But it would be shortsighted to reduce relevant cognitive frameworks of market actors to economic theories.
- 6 The strongest reference to the creative role of actors in the reproduction and change of social structures in market fields is made by Neil Fligstein. For him it is 'skilled actors' who stabilize a particular field by inducing others, whom they get to agree with their definition of a particular social terrain, to cooperate (Fligstein 2001b: 107). Fligstein emphasizes 'how the subjective orientations of actors mediate the effect of social structures to shape the functioning of markets' (Fourcade 2007: 1024).
- 7 For a detailed discussion of the concept of path dependency, see Beyer (Beyer 2005), Djelic and Quack (Djelic and Quack 2007), Thelen (Thelen 1999: 384ff).
- 8 This is only one understanding of institutional complementarities. For a detailed discussion on the concept see the symposium on institutional complementarity and political economy in *Socio-Economic Review* (2005, issue 2).
- 9 Changes in cognitive orientation may also arise from non-economic social spheres, affecting markets but not originating from the power struggles of market actors.
- 10 The notion of 'collective institutional entrepreneurship' (Möllering 2007) is based on the idea that institutional entrepreneurs are embedded in collective network structures. See also (Garud et al. 2007).

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