Geographies of circulation and exchange: Constructions of markets

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I Introduction

When we sat down to start working on this Progress Report, the most recent crisis of global capitalism had finally spread to Germany. The head of Deutsche Bank, Josef Ackermann, had just made headlines world-wide with his admission that he no longer believed in the market's self-healing power, demanding a concerted action of governments, central banks and private banks in order to restore the confidence in global financial markets. A key member of the transnational financial elite who has never stopped singing to the tune of the free market suddenly wants the state back! What is more appropriate, at a moment when commentators see the "pendulum swinging back from the old belief in leaving markets alone" (The Guardian, 27 March 2008, p. 36), we thought, than writing our report about "the market", the key institution dominating the arena of circulation and exchange?

Knowing our heterodox economics literature we could not help but being amused about the sudden fuss. Since the rise of modern neoclassical economics scholars across the social sciences have dissented, unmasking – not without admiration – orthodox economists' ingenious sleight of hand: To inscribe a distinction between economy and culture/society and to conceptually separate an abstract perfect *Market* from concrete imperfect *markets*. This allows market apologists to blame unwelcome external infringements (social, cultural, political etc.) for "market failure" immunizing them from criticism.

There is broad agreement in the interdisciplinary heterodox literature that the story is more complex. Markets do not simply fall out of thin air, but are continually produced and constructed socially with the help of actors who are interlinked in dense and extensive webs of social relations. This common ground notwithstanding, there are differences in opinion as to precisely how markets are realized. Elsewhere, we have started to work with a stylized differentiation of three heterodox approaches (Berndt and Boeckler 2007; Boeckler and Berndt 2005) which may also be applied to the understanding of market exchange: Socioeconomics questions the orthodox free market mantra by pointing out that concrete markets cannot be separated from their social and institutional context. Dissolving the market in social networks, scholars writing in this tradition socialize markets. Political economy looks at how powerful players see to it that the abstract market model is confused for real markets by market participants. Work in this tradition stresses the damage inflicted on "the social", the market being portrayed as a destructive force. Both sets of heterodox literature are well-known and have had considerable presence in economic geography recently. There is a third approach, *cultural* economy, however, which is still comparatively neglected and as we feel also widely misrepresented, above all with regard to the work on seemingly hard economic phenomena such as the market. Cultural economists dissolve the opposition between market and non-market in a different way, pointing to the practical self-realization of economic knowledge. In short, they argue that the abstract market model is *performative*.

In what follows we discuss recent conceptual and empirical contributions which deal with the "the market" widely understood, structuring our argument around these three heterodox economic positions. In preparing each of the three sections we asked ourselves two questions: How are markets conceptualized by representatives of the respective intellectual tradition? What have economic geographers contributed to these literatures recently? Before we contin-

ue, a few words about our own positionality: During our academic careers we have been influenced and inspired by work from all three heterodox economic fields. It is fair to say however that in recent years our intellectual home has become poststructuralist-inspired cultural economy. Therefore, although our approach forces us to draw boundaries for didactic reasons, we are perfectly aware of the fallacies of modernity's "diacritical practices" (Boeckler, 2004), that is the misrepresentation of contingent differentiations as quasi-natural differences. After all, this is what the so-called cultural turn was all about: To deconstruct modernity's cultural binaries, for instance between "the economic" and "the non-economic". Our stylized differentiation of heterodox approaches is therefore not intended in an exclusionary way. The differences spelt out below notwithstanding, there is a great degree of overlap between the positions. It is more than adequate therefore that some authors appear in two or even all three sections. We think this is an adequate approach, one that shares the view of those who see economic geography as an open, pluralistic discipline (see Barnes, 2006; James et al., 2007: 2; Lee et al., 2008: 1114; Schamp 2007).

II Socializing markets

More than two decades after economic sociology had been effectively redefined as a "sociology of markets" (Fligstein and Dauter, 2007) there have been a number of review articles, interventions, edited books and special issues of journals recently which look back and attempt a retrospective stocktaking (e.g. Bazin and Selim, 2006; Beckert, 2007a; Fligstein and Dauter, 2007; Fourcade, 2007; Grabher, 2004; Granovetter, 2005; Smelser and Swedberg, 2005; Swedberg, 2004; White, 2005; Zelizer, 2007). In this interdisciplinary literature, the question of how markets and economic activities more generally are conceptualized plays a crucial role.

1 Markets as networks

In an obvious reversal of the logic dominating orthodox economics, socioeconomic approaches lay stress on actually existing *markets* and their social and cultural contexts rather than the ideal-type *Market* model. At the center of this perspective is the "problem of social order". It is argued that market exchange is necessarily accompanied by uncertainties arising from the twin problems of exchange (buyer vs. seller/user vs. producer) and competition (between producers/sellers). In the face of these uncertainties, markets depend on socially agreed institutions which provide stability for the various actors involved (Beckert, 2007b; White, 2005). While this is the general thrust of the socioeconomic argument on markets, different schools of thought have different priorities. On the one hand are more micro-level oriented *network theorists*, who focus on relational ties between actors and emphasize the role that social networks play in generating the trust between buyers and sellers that makes exchange possible. This understanding of "market-as-network" arguably is the dominant position within socioeconomics. In particular, it has been the concept of embeddedness which became established as a categorical instrument to take note of those ordering processes (Granovetter, 1985). On

¹ It would be wrong to reduce the network approach to Mark Granovetter and embeddedness. There have been opposing views from within economic sociology, for instance by Harrison White (2005) for whom the embeddedness argument does

the other hand are the so-called *institutionalists* who focus mainly on how relatively formal institutions format concrete markets and give the state a more prominent role in this process. It is pointed out that contractual market exchange depends on the rule setting and sanction enforcement of states, but also that states may define what types of products are appropriate for exchange (Aspers and Beckert, 2008).

These differences notwithstanding, socioeconomic approaches converge in proposing a specific solution to the structure/agency problem: Individuals as well as the wider society move to the background. Emphasis is placed instead on the intermediate level, institutional arrangements at different social scales such as conventions, cultural values and routines equipping the individual with prosthetic tools. It is in this way that socioeconomists conceptualize markets as social structures (Fourcade, 2007) or social constructions (White, 2005).

Socioeconomic work on markets casts a strong shadow over economic geography. From the early 1990s onwards economic geographers took up conceptual developments in economic sociology, applying embeddedness and networks as key concepts to better understand differences in the performance of firms and regions in an increasingly globalized economy (see Amin and Thrift, 1994; Dicken and Thrift, 1992; Grabher, 1993; Storper, 1992 for early examples). More recently, economic geographers have contributed to the socioeconomic project with a number of general interventions. These include Gernot Grabher's (2006) discussion of the use of the network concept both in economic geography and beyond, papers criticizing the reduction of complex social processes to one-sided oppositions of informal and formal institutions (community vs. society; Storper, 2005), Jamie Peck's (2005) critical assessment of the New Economic Sociology, or Ash Amin and Joanne Roberts' (2008a) plea for a more cautious approach when dealing with the communities of practice literature (see also the papers in Amin and Roberts, 2008b). In the remainder of this section we focus on more explicitly geographical contributions and discuss network-oriented literature which applies various forms of relational thinking to economic processes.

2 Territorial embeddedness and relational networks

Relational thinking has been present in economic geography for quite some time now (e.g. Bathelt 2006; Boggs and Rantisi, 2003; Dicken et al., 2001; Ettlinger, 2001; Yeung, 2005). An early presence in this context was the Global Production Network approach (GPN). GPN draws from a wide, not easily to integrate array of conceptual and theoretical sources. In addition to Porter's value chain framework, global commodity/value chain analysis, cultural political economy and actor-network theory, network and embeddedness perspectives in economic sociology play a crucial role (Coe et al., 2008; Dicken et al., 2001; Henderson et al., 2002; Hess and Yeung, 2006). A production network is conceptualized "as nexus of interconnected functions, operations and transactions through which a specific product or service is produced, distributed and consumed" (Coe et al., 2008: 274). "Production" is therefore defined very broadly to include intermediate and final markets, emphasis being put on the circulation and exchange of finished and semi-finished products, of services and of materials across the

not go far enough. He is less interested in the coordination problem but rather in the positioning of market actors towards each other in so-called fixed role markets (product markets where buyer and seller maintain their role as opposed to role switching in financial markets; White, 1981, 2005; see also Aspers and Beckert, 2008; Krippner, 2001).

value chain (Henderson et al., 2002: 445). This loose and fuzzy understanding of production and markets makes sense, given that both the market and its antipode – hierarchy – are conceptualized as networks rather than understanding network governance as a third form positioned somewhere in-between (Coe et al., 2008:; 292; Dicken et al. 2001: 92).

Laying stress on both local and translocal relations and advancing a geographically more sophisticated understanding of embeddedness, GPN gets a good empirical grip at the multiscalar nature of the processes at work. Recent empirical examples include studies of the global telecommunications industry (Hess and Coe, 2006), the Fiji-Australia garment-production network (Weller, 2006) and the role of ethical campaigning in shaping organizational practices of power and authority in global production networks (Hughes et al., 2008). This wide range of conceptual and empirical papers provides evidence of the dynamism of the GPN-framework, the protagonists managing to make themselves heard beyond the narrow confines of geography (e.g. Nadvi, 2008; Sturgeon et al., 2008).

More recently, Harald Bathelt (2006) laid out a particular German reading of relational economic geography (REG) as a broad movement which starts from economic actors and their social relations (almost exclusively business firms and inter-firm relations), not from takenfor granted spatialities, adopts a microlevel approach to economic phenomena and focuses on the institutions which frame economic interaction. Bathelt developed his contribution together with Johannes Glückler with the aim of challenging the persistent hegemony of the spatial science approach in German-language economic geography (Bathelt and Glückler, 2003, 2005). With its stress on the context-bound "nature" of economic agents and their situatedness in social relations, their operation under specific institutional and cultural conditions and the path-dependent and at the same time contingent nature of economic practices, this variant of relational economic geography is clearly connected to the network paradigm (see Glückler, 2006 for an application to the internationalization strategies of consulting firms).

Differences in detail notwithstanding, these literatures have three things in common. First, they have contributed to a more sophisticated understanding of the spatial renegotiation of economic and social relations in the global age. In so doing, scholars have played a prominent role in further overcoming the deeply engrained inclination of geographers causally to connect social with spatial proximity, putting emphasis on more diverse spatial formations instead. The second commonality concerns a somewhat cavalier treatment of markets. Convinced that the perfect market does not exist and that economic action is socially embedded, market exchange fades from view and moves to background. As a consequence of this, the market all but disappears in social relations, giving rise either to an economy without market or an economy where the market remains a black box and is simply taken as pre-given.

Finally, from a more critical point of view there is a conflation of approaches which are not readily integrated into a single conceptual framework. As Bathelt (2006: 224) himself acknowledges, there are a number of ways to think "relationally" and, in so far as these styles of thinking are applied to economic processes such as markets, there are also different relational

² It should be added that there is a great number of additional contributions in economic geography that contextualize economic markets with a specific focus on how exchange relations are being played out across multiple spatial scales, for instance studies dealing with the geographies of financial markets (e.g. Gilbert, 2005; Hall, 2007; Majury, 2007) or geographies of the food system (Feagan, 2007).

economic geographies. At the widest level all approaches converge in their rejection of orthodox economics and traditional quantitative economic geography and as such are part of attempts to establish a heterodox alternative. Yet, we are less convinced by claims to a relational ontology which substitutes an interest in relational for substantive properties. We will return to this point below. Here it should suffice to point out that, notwithstanding frequent reference to poststructural approaches towards "the economic" (i.e. cultural economy, ANT, Science and Technology Studies) most of the papers focus on relations *between* actors (individual and/or collective) and at least unwittingly work with these actors (firms, workers, managers etc.) as "final elements", that is as pre-given entities.³

III Destructive markets

In the course of the 1990s, political economy, above all in its more radical Marxist clothes, had lost much of the terrain won during the preceding decades (Castree, 1999). If Neil Smelser and Richard Swedberg (2005: 7) are to be believed the situation had not changed half a decade later: "much of Marxism" they assert "is erroneous or not relevant to economic sociology". At least for the subdiscipline of economic geography we think that in its generality this judgment is not warranted. This holds for more traditional Marxist arguments of uneven geographical development (Harvey, 2006a, b), institutionalist investigations of territorial capitalist systems (Peck and Theodore, 2007) or poststructuralist political economy alternatives (Gibson-Graham, 2006a, 2008).

1 Markets against networks

How do political economists conceptualize markets? Leaving aside for a moment institutionalist approaches to political economy with their considerable overlap with socioeconomics, the blue-print is provided by Marxism. Political economists imbue the market with farreaching power and tend to represent the market mechanism as destructive, doing away with tradition, community, solidarity or cultural particularities. In these accounts the counterpart is not the feeble understanding of markets underlying many socioeconomic approaches (feeble because in this view economic exchange is so fragile that it is only possible with the help of social structures and institutions), rather the "enemy" is the mythical and powerful "civilizing market" described by orthodox economists (Fourcade and Healy, 2007; Hirschman, 1982).

Political economists share with orthodox scholars an understanding of the market as a powerful and all-encompassing force. The key difference lies in the treatment of the relation between abstract notions of the Market and concrete markets. While neoclassical economics uses this distinction to immunize itself against criticism, for Marxist political economy there can be no abstract market outside multiple concrete activities of exchange and circulation. Instead it is precisely the relation between universal (capitalist) market logic and its concrete materialization which lies at heart of analysis. Although there are differences within the polit-

³ In the global production network literature the precise role of ANT is confusing. In early papers ANT is mentioned as a source of inspiration, but found wanting because "it lacks an appreciation of the structural preconditions and power relations that inevitably shape production networks" (Henderson et al., 2002: 443). In subsequent papers key GPN protagonists claim to have finally embraced ANT (e.g. Hess, 2004; Hess and Yeung, 2006; Yeung, 2005), yet, as it seems, in a rather "light" version without following the post-humanistic ontology of ANT.

ical economy camp, the key to an understanding of capitalist markets is not the sphere of exchange and circulation but rather the production process and the role of labor. Being "liberated" both legally from serfdom and from the possession of the means of production, workers are forced to engage in a particular form of commodity exchange (trading their labor-power for money in order to be able to buy other commodities produced by other people). In this sense material life in capitalist market societies is organized around commodities. It is "the market" that appears to decide what should be done, what counts socially and what has no value. As virtual abstractions and myths the commodity and the market assume material power and influence all areas of social life, permitting the separation of individual economic practices from the wider system in which they operate (Berger, 2008; Wallerstein, 2004). Marxist political economists insist that these processes are internal to the functioning of capitalism. They regard disembedding as a necessary process for the legitimization and reproduction of capitalism (Harvey, 2006b: 80-81).

A fully decentralized and egalitarian distribution of private property would be as detrimental to the capitalist market economy as its abolition and collectivization. Capital accumulation therefore necessarily depends on markets that are only partially free as producers compete with each other to gain advantage by adopting superior technologies and organizational forms. The result is a form of competition dominated by monopolies and oligopolies, giving rise to a highly uneven picture, shot through with contradictions (e.g. between the production of capital in the workplace and the realization of capital in the market) and class conflicts (Harvey, 2006b: 99-100; Wallerstein, 2004: 26). Geographers such as David Harvey (1982) and Neil Smith (1984) spelt out the extent to which the underlying social inequalities are translated into highly uneven geographies. Harvey has recently elaborated his earlier work on uneven geographical development (Harvey, 2006b) and continued to chart the seemingly unstoppable rise and naturalization of neoliberalism across a variety of scales (Harvey, 1989; Harvey, 2005; see also Peck, 2008).

These are well-known and important arguments which have regained currency following the renewed attention to social and spatial inequalities both within academia and in the wider public. Within economic geography, however, the renaissance of these arguments has been simultaneously accompanied by accounts which in one way or another tell a more complex story and identify market economy variants and territorial capitalisms.

2 Uneven neoliberal capitalism and market economy variants

After capitalism lost its state-socialist antipode, attention turned to internal differentiation and territorial capitalist variants. In the wake of this reorientation, the market/plan-dualism was replaced by the distinction between those capitalist systems which adhere relatively closely to the perfect market model and those which are more strongly coordinated by social and political (and mostly formal) institutions. Classically, the US is given role model status for the former, Germany for the latter variant. Although there have been antecedents of this discussion, the varieties of capitalism literature developed from the early 1990s onwards (e.g. Albert, 1992; Esping-Andersen, 1994) and culminated in a cross-disciplinary project straddling various heterodox approaches, such as regulation theory, institutional and evolutionary economics, economic sociology and comparative political economy.

Having only slowly responded to this literature (see Berndt, 2001; Clark et al., 2002; Gertler, 2001), geographers have recently engaged more directly with the variety approach. Developing a largely sympathetic critique in a recent paper, Jamie Peck and Nik Theodore (2007: 745) credit its proponents for their role as welcome antidotes to the universal market rationality advanced by neoliberal apologists of globalization. However, they join those critics (e.g. Boyer, 2005) who are uneasy about the reduction of a diverse literature to the Varieties of Capitalism (VoC) project advanced by Peter Hall and David Soskice (2001). This is mainly for three reasons. The first refers to the reduction of capitalist variants to only two and the fact that one of these variants, the (neo)liberal market economy, apparently functions as a benchmark against which the other diametrically opposed form, the coordinated market economy, is measured. In the former arrangement, economic activities are coordinated primarily via (private) hierarchies and the market which is conceptualized in close correspondence with neoclassical economics. The latter arrangement is characterized by a greater role for "non-market relationships", that is the embeddedness of economic activities in institutions. As Miller (1997: 14) has argued in an earlier critique of the comparative capitalism literature, such an approach presupposes a given abstract entity that is then differentially contextualized within an equally pregiven set of social or cultural structures.

A second, related criticism concerns the microeconomic orientation and what Boyer (2005: 523) referred to as "paradoxical absence (...) of politics". Although mainly pointing to formal institutions, the role of the state remains unspecified in Hall and Soskice's argument. This is different in neocorporatist or regulationist accounts where the state underpins the formal institutions (e.g. law, labor institutions) that stabilize the contradictions between the production and realization of capital. While institutionalists conceptualize a more autonomous potentially beneficial player that is able to choose between apparently more efficient and inefficient nonmarket institutions (Fligstein and Dauter 2007: 120-121), more traditional Marxist scholars regard the state in every national capitalist system, whether liberal/uncoordinated or corporatist/coordinated, as being subjugated and hijacked by market forces (see Harvey, 2006b: 105-106; Wallerstein, 2004: 26).⁴

Third, in addition to these deficiencies, geographers take issue with the methodological nationalism informing the VoC approach, that is, the taken-for-granted assumption that the nation state society is the natural social and political form of the modern world (Wimmer and Glick Schiller, 2002: 217). In this guise, methodological nationalism translates into a static, territorial account of the geography of the processes in question, unnecessarily pushing scholars to take sides for ongoing territorialization against equally one-sided accounts of a "singular world of market unification and institutional convergence" (Peck and Theodore, 2007: 731). The problem with this position is that in the global age national sovereignty and territorial borders are rearticulated in more complex ways. Being "about fixity rather than motion" (Harvey 2006b: 106), the state used to reproduce itself by drawing sharp lines between social inclusion and exclusion and by projecting these spatially via the process of territorialization. However, the very conditions which allowed the reproduction of the territorial welfare state in

⁴ Termed "cultural political economy", yet another strand stresses the role of symbolic meaning and the importance of economic imaginaries in constructing economic subjectivities in addition to the processes at the heart of institutional political economy (Jessop and Oosterlynck, 2008; Jessop and Sum, 2006; Sayer, 2001; see also Hudson, 2008).

the past have largely ceased to exist, transnational mobility of capital, goods and labor contributing to the erosion of the established territorial order (Offe, 1999: 219). Depending on the mobilities in question (e.g. labor or capital) the state instead adopts a deeply ambivalent policy of opening and closure, a policy impossible without contradiction and friction.

This more sophisticated geographical approach allows a more differentiated account of capitalist variety. The German variant of the neoliberal market economy, for example, can neither be reduced to its role as Anglo-American capitalism's other nor is it useful to predict its dissolution into a stylized Anglo-American system (see Bathelt and Gertler, 2005; Berndt, 2003; Berndt, forthcoming, for a more differentiated discussion). What is more, just as it is not helpful to pretend that apparently strong capitalist variants are able to exist as coordinated islands in a sea of seemingly unfettered market forces, neither is it correct to represent supposedly weaker territorial economies as being defenseless against the attacks of the neoliberal market. The latter is discussed in the burgeoning literature on the transformation of former state-socialist economies. Geographers have recently contributed prominently to this debate, the empirical focus ranging from unsuccessful restructuring of the coal industry in Eastern Ukraine (Swain, 2006), the messy privatization of the collective farming system in Russia (Lindner, 2008) or the ways in which neoliberalism gets entangled and "domesticated" in everyday life in Slovakia (Smith and Rochovská, 2007).

In one way or another, all the various accounts of capitalist variety discuss the relation between the economic and the non-economic, the former being embodied by the capitalist market mechanism, the latter mainly by the state as a guardian of the institutions allowing national capitalist systems to work more or less efficiently. There has been criticism from the "margins" of political economy of the affirmative nature of those accounts that represent capitalism as a naturally dominant monolith, directly or indirectly subjugating every facet of social life and every geographical place to the logic of the market (Gibson-Graham, 2006b: ix). With the "diverse economies framework" there exists a project advancing an alternative political economy that seeks to destabilize the asymmetric binary between market and non-market (see Gibson-Graham, 2006b, 2008; Lee et al., 2004; Lee et al., 2008; Smith and Stenning, 2006).

IV Performing Markets

While Actor-Network-Theory (ANT) as well as post-humanist approaches and poststructuralism more generally have been integrated into the work of human geographers for some time now (for overviews see Dixon and Jones III, 2004; Murdoch, 2006; Whatmore, 2004, 2006), Michel Callon's seminal and original extension of ANT to the economic field has not received much attention beyond the occasional reference in passing (e.g. Bridge and Smith, 2003; James et al., 2007; Smith, 2005; Thrift, 2005; but see Lee, 2006 for a more detailed critical engagement). This is awkward, because Callon's programme of an "anthropology of (the) econom(y)ics", deals with the most central institution of contemporary capitalist economies, that is, the market. In our view, the reason why Callon's contribution to the study of markets is still widely ignored seems to lie within the politics of economic geography itself: For neoclassical economic geographers the market doesn't constitute an object of inquiry. The market is no problem, it solves problems. For political economy the reverse is true with the

same consequences. Here, the market is the problem, creating as it does inequality through uneven accumulation processes. The market is therefore an object of critique and resistance rather than only a simple object of study. And finally, for the socioeconomic network tradition real markets simply do not exist outside social relations and social networks. Consequently, the focus of socioeconomic research is on networks not the market. But what if the market is neither a problem nor does it solve any problems but is simply real – under specific conditions? This is the argument of Michel Callon: Markets are real, homo economicus does exist and rational calculation constantly takes place.

1 Markets as network effects

As simple as the sentence reads, to follow the argument one has to take a detour into the ontology and concepts of the "anthropology of marketization", in particular the notions of agency and agencement, and the specific relationship between economics and the economy. Concerning the former, Callon conceptualizes markets as "calculative collective devices" which enable calculative agencies (Callon and Muniesa, 2005). To come to terms with this definition of markets one has to accept the ontological underpinning that dissolves the binary opposition between humans and non-humans. Human agency is a distributed agency that goes beyond the somatic resources of the individual; agency is the relational⁵ effect of the practice of socio-technical networks which are termed "agencement". Borrowed from Deleuze and Guattari the term carries the double-meaning of being "bien agencé", that is well equipped through the assemblage of heterogeneous elements, as well as that of agency: Markets as sociotechnical agencements then have to be considered as a combination of material and technical devices, texts, algorithms, rules, and human beings that shape agency and give meaning to action (e.g. Callon, 2007b: 319f). Understood in this way, calculative agencies are hybrid collectives linked to distributed equipments. Callon's (1998) claim that homo economicus is not simply a pure fantasy of neoclassical modeling exercises, but actually exists in economic spaces has to be seen in this context: He or she is not the expression of some type of pre-given natural human behavior, but a relational effect of distributed collective calculative devices (for a further discussion of market devices see Callon et al., 2007).

The second step in Callon's argument concerns the relation between economy and economics, or to put it differently, the answer to the question of how exactly markets as socio-technical agencements are realized. The key mechanism that brings these markets about is the multifaceted process of framing with its inevitable twin of overflowing. Borrowing from Erving Goffman and his frame analysis (Goffman, 1975), Callon argues that the functioning of markets necessarily depends on a highly selective and exclusionary ordering process: "To frame means to select, to sever links and finally to make trajectories (at least temporarily) irreversible" (Callon, 2007a: 140). Amongst the many framings necessary for markets to exist three are decisive:

⁵ Poststructuralist relational thinking is not about pointing to the importance of social relations. Rather, it challenges us to reimagine the either/or constructions of binary thinking. In economic geography, relational thinking is more adequately represented by the "reworking" of tested and tried binaries (culture:economy, market:hierarchy etc.; see Barnes, 2005; Boltanski and Chiapello, 2006 [1999]: 194ff).

- the conversion of goods into commodities: stable, tradable objects have to be constructed by emphasizing particular qualities in unambiguous and unchallenged ways and by doing so excluding certain relations, for instance those involving workers;
- the formatting of calculative agencies, unburdened from social obligations, bodily enhanced by tools and prostheses that are capable of valuing the objectified goods;
- the identification of the formative settings (socio-technical devices involving material elements, such as warehouses or computer screens, and procedures, such as price negotiations or auctions, that allow distanced exchange) through which encounters between goods and agencies are organised.

How are these framings accomplished? Rather than reducing economic practices to social

relationships and cultural scripts (the socioeconomic position), to false consciousness leading to a confusion between abstraction and reality (the political economic position) or to some sort of universal human nature (the orthodox economic position), Callon rejects the conceptual separation between Market model and market practice. He argues that markets realize themselves as practical enactments of economists' models or, to use a popular term, economic models are performative. "To claim that economics is performative", writes Donald MacKenzie (2006a: 29), "is to argue that it does things, rather than simply describing (with greater or lesser degrees of accuracy) an external reality that is not affected by economics". There is no need to engage in great detail with the concept of performativity/performance which is widely used in geography (for an example from economic geography see Thrift, 2002). For the purpose of this progress report it should suffice to point out that, for Callon, it is less that academic economists (termed "confined economists") see to it that the "model of the world becomes the world of the model" (Thrift, 2000: 694), but rather that the practitioners of sociotechnical economic disciplines such as accounting, supply chain management or consulting, (termed "economists in the wild") frame and perform markets by defining standards, surveying exchange processes, benchmarking goods, calculating prices and so on (Callon, 2005). In the academic literature there has been a mixed reaction to these arguments. Only belatedly taking notice, socioeconomists miss the embeddedness of economic action in inter-personal networks, cultural contexts or political institutions (Sunley, 2008; Yeung, 2005: 44). If mentioning the anthropology of marketization at all, established representatives of relational economic sociology treat it simply as an exotic add-on to the socioeconomic project (e.g. Beckert, 2007b: 12; Fligstein and Dauter, 2007: 107; Smelser and Swedberg, 2005: 19). Political economists, on the other hand, responded with more pointed criticism. Daniel Miller (2002: 219; see also Lee, 2006) argued that by treating the economic model of the market as if it were the core of actual economies rather than only a (false) projection of economists, Callon does the job of orthodox economics (see the exchange unfolding between Miller and Callon; Callon, 2005; Miller, 2002, 2005). However, as Petter Holm (2007) convincingly illus-

trates, all these criticisms work only at the expense of a misrepresentation. It is often overlooked that an attention to framing does not imply that economic sociology's focus on embeddedness is rendered redundant (MacKenzie, 2005: 263). To the contrary, Callon (e.g.

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⁶ Callon (cited in Barry and Slater, 2002: 292) does not criticize the original intention underlying the embeddedness metaphor, but rather regrets that in much of subsequent work on networks Granovetter's offer for a radical paradigm shift has been tamed, either giving it an oversocialised or an undersocialised twist. Accordingly, the ontological starting point is nei-

2007a: 143) is adamant that framing is a delicate process that easily gets out of control and is never completed. He uses the term overflowing to express this and illustrates that under certain conditions economic markets spur the proliferation of new social identities and trigger the creation of unexpected social communities with positive and negative consequences (Callon, 2007a). The reason for this is that goods are continuously prone to overflow. There may be connections which transgress and cannot be contained within the frames, for instance, environmental damage or illegal working conditions. The same holds for economic agents, who may break away from their frames and migrate to others, for instance, the researcher moving from an industrial laboratory to a University one (Callon, 2007a: 145). In all these cases things get out of control and unwanted connections are made visible. Markets are therefore approached as economic quasi-entities ever only stabilized temporarily by a double process of framing *and* overflowing.

The double play of framing and overflowing can also be applied to the "non-economic" which is as much the ambivalent result of performances as the market. J.K. Gibson-Graham's political project mentioned in the previous section, for instance, does not take the asymmetric nature of the market/non-market binary simply as pre-given (e.g. non-market/alternative market exchange as being subordinate to the capitalist market or as being an exotic residual of faraway traditional cultures), but rather to use it strategically as a starting point to destabilize the established economic order by practically strengthening, proliferating and extending what is commonly referred to as marginal economic activity (Gibson-Graham, 2006a, b, 2008).

2 Performing market geographies

In recent years there has been a flurry of conceptual and empirical texts which apply and extend Callon's arguments, establishing a truly transdisciplinary project. Unfortunately, economic geography has so far remained at the sidelines. This is not to say that geographers have been totally silent on the relationship between economics and the economy. However, it is more often Daniel Miller's alternative and contrasting vision of virtualism that geographers turn to (see for instance Hughes, 2005; Hughes et al., 2008; Leyshon et al., 2005). The contribution to the performativity approach by economic geographers is still in its initial stages. A brief review of two disparate literatures currently emerging as particularly vibrant fields of transdisciplinary engagement illustrates this.

The first field is comprised of an increasing number of studies engaging with financial markets in various disguises. Its leading proponent, the sociologist Donald MacKenzie somewhat loosely terms his approach "Social Studies of Finance", combining "Science and Technology Studies" and Economic Sociology to examine the performativity of economic models within financial markets. Starting from his famous study of the Black-Scholes-Merton model on option-pricing and how it transformed and recreated the derivatives market (MacKenzie, 2007; MacKenzie and Millo, 2003), MacKenzie later extended his work towards other examples and finally set out a general synopsis of his ideas around the concept of arbitrage (MacKenzie,

ther the atomized individual nor the determining structure. Actors are – following the relational perspective informing cultural economy – conceptualized instead as contingent effects of networks and practices (see Law, 1992). For academic research this has the important consequence that it is not the social relation which has to be explained and described, but rather market-type action and agency.

2004, 2005, 2006b; see also the special issue of Economy and Society on "Cultural Economy and Finance", e.g. Miyazaki, 2007; Muniesa, 2007; Pryke and du Gay, 2007). Within economic geography, Sarah Hall uses insights from this literature analysing the way that universal models and attempts to apply standard "objective" rules falter due to local particularities (Hall, 2007) and portraying the role of business schools in programming students to perform textbook economics in their professional life (Hall, 2008). Andrew Leyshon and Nigel Thrift (2007) put the global financial system back on its feet, arguing that below the shiny and spectacular surface of speculation there is the more mundane need for income flows from real assets and the need constantly to search and construct new asset streams. An innovative relational-topological account of financial markets is given by sociologist Karin Knorr-Cetina who advances a post-social understanding of the geographies of financial practices, overcoming the trap of a local-global dualism by combining more traditional emphases on physical copresence with technologically mediated response-presence and their specific geographies (face-to-screen, back-to-back; Knorr Cetina, 2003; Knorr Cetina and Bruegger, 2002; Knorr Cetina and Preda, 2007).

The second thematic field turns to the question of how neoliberal ideas about the market shape social and economic realities in the global south. At the forefront of this variant of the performativity approach has been the political scientist Timothy Mitchell. Using examples from Egypt and Peru, Mitchell (2002, 2008a, b) has shown how economics reorganizes the circulation and control of representations by drawing a clear cut boundary around markets. This allows practitioners of economics to represent what lies outside them as deficient and extend private property right arrangements to realms that were hitherto kept well protected against the orthodox market logic. This strand of literature may be used to demystify the argumentation of economists at institutions such as the World Bank who, inspired by Hernando de Soto's (2000) bestseller "The Mystery of Capital", follow a simple and familiar causal logic: private property as collateral, collaterals as a means to obtain credit, borrowed money used for productive investment, investments leading to economic growth and development. What Mitchell (2008b) demonstrated is that across the world very sloppy evidence from a relatively small development project in Peru (see Field, 2007; Field and Torero, 2006) is used as a legitimization for neoliberal development policy (for a brief case-study from Ghana, see Berndt and Boeckler, 2007; see also John Williamson's (1999) reference to de Soto and the Peru project in his defense of the "Washington Consensus").

Within economic geography, direct applications of the performativity approach towards north-south-relations are still rare. Eric Sheppard's (2005) historical reconstruction of how the free trade model of markets needed the cultural-economic geography of Manchester and socio-political architecture of sites in London in order to replace a regulated and protectionist political-economic system in the second half of the 19th century may be read in this spirit. And Adam Swain (2006) unveils how the consolidation of neoliberal economic knowledge around the Washington Consensus became an – eventually unsuccessful – recipe for the formatting of markets in former socialist countries. Finally, we are currently working on a particular implementation, trying to connect the framing/overflowing argument with the question of spatial borders (see Berndt and Boeckler, 2007; Boeckler and Berndt, 2005). In the economic geography literature, places at different scales and the borders defining these places

very often appear as pre-given, with goods, people, ideas and capital moving between these places and crossing borders. We turn the logic upside down and argue that it is these mobilities that produce places and borders. The idea of framing can be usefully applied to illustrate this, because spatial borders may be regarded as special cases of the framings mentioned earlier. Our argument is that the global movements of capital, goods, people and ideas always involve an ambivalent double play of de-bordering (overflowing) *and* bordering (framing) processes. These ambivalent border regimes are a necessary condition for the construction of global markets and trade systems. Yet, in order for these markets to work, these ambivalences remain hidden and have to be veiled. To take account of the observation that framings are necessary processes to provide some sort of quasi-natural economic order, we use the pun b/ordering. And we are particularly interested in north-south b/orderings, that is, the question of how global south and global north are being produced in and through these processes.

V Conclusion

In the preceding sections we have discussed three heterodox alternatives to the orthodox free market logic. For socioeconomists, markets are embedded in social structures and are a far cry from the virtual market model celebrated by orthodox economists. It is social relations that underwrite real markets, guaranteeing their functioning in the face of uncertainties. Work undertaken in this spirit puts emphasis on social relations and institutions, and analyses how non-economic institutions either enable or constrain efficient market exchange. Political economists insist that, neoliberal claims to the contrary notwithstanding, capitalism cannot exist without "market imperfections". In these accounts, the market model is nothing else than a fictitious ideological device to hide from view the underlying dynamics of capitalism. Accordingly, political economic scholars regard it as their task to remove the veil and to lay open the contradictory reality of concrete markets under capitalism. Cultural economists apply the cultural theoretical concept of performativity towards the market. Rather than reproducing the classical distinction between the abstract market model and real-life markets, protagonists point to the role that the practice of economists widely understood plays in the self-realization of economic thought. It is argued that the model of the perfect market realizes itself in the world in the assembly of far-reaching socio-technical arrangements. Here, markets take on ambivalent form as relational effects of socio-technical networks engaging in the twin processes of framing and overflowing. The latter process includes the proliferation of new social relations, groups and communities which may articulate economic and non-economic alternatives.

In the discipline of economic geography heterodox approaches have managed to break the hegemony of the neoclassical orthodoxy. Unfortunately, the arguments in heterodox debates on the market and on alternative economic geographies more generally are very often taken from entrenched positions, authors apparently finding it very difficult to understand the train of thought followed by the "opposing" camp. While this is true for all positions introduced in this progress report, cultural economy has arguably had a particularly difficult time. With our representation of the performativity approach we hope to have been able to clarify some of the misunderstandings. The strength of the heterodox project lies precisely in the co-existence of

competing positions, each challenging the still omnipresent logic of the perfect market in different ways. This is what a vibrant heterodox project should aspire to: A healthy competition of plurivalent and opposing ideas, a competition, however, which at the same time does not prevent conversation across different approaches and is pluralistic enough to gain from the application of different perspectives (see Barnes 2006).

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References

Albert, M. 1992: Kapitalismus contra Kapitalismus. Frankfurt: Campus.

Amin, A. and **Roberts, J.** 2008a: The Resurgence of Community in Economic Thought and Practice. In Amin, A. and Roberts, J., editors, *Community, Economic Creativity and Organization*, Oxford: Oxford University Press.

Amin, A. and **Roberts, J.**, editors 2008b: *Community, Economic Creativity and Organization*. Oxford: Oxford University Press.

Amin, A. and Thrift, N. 1994: Living in the global. In Amin, A. and Thrift, N., editors, *Globalisation, institutions, and regional development in Europe*, Oxford: Oxford University Press, 1-22.

Aspers, P. and **Beckert, J.** 2008: Märkte. In Maurer, A., editor, *Handbuch der Wirtschaftssoziologie*, Wiesbaden: VS Verlag für Sozialwissenschaften, 225-246.

Barnes, T. 2005: Culture: Economy. In Cloke, P. and Johnston, R., editors, *In Spaces of Geographical Thought*, London: Sage, 61-80.

Barnes, T. 2006: "Lost in translation": Wirtschaftsgeographie als Freihandelszone. In Berndt, C. and Glückler, J., editors, *Denkanstöβe für eine andere Geographie der Ökonomie*, Bielefeld: Transcript Verlag, 23-44.

Barry, A. and **Slater**, D. 2002: Technology, politics and the market: An interview with Michel Callon. *Economy and Society* 31, 285-306.

Bathelt, H. 2006: Geographies of production: growth regimes in spatial perspective 3 – toward a relational view of economic action and policy. *Progress in Human Geography* 30, 223-236.

Bathelt, H. and **Gertler, M.S.** 2005: The German variety of capitalism: Forces and dynamics of evolutionary change *Economic Geography* 81, 1-9.

Bathelt, H. and **Glückler, J.** 2003: Toward a Relational Economic Geography. *Journal of Economic Geography* 3, 117-144.

Bathelt, H. and **Glückler, J.** 2005: Resources in economic geography: from substantive concepts towards a relational perspective. *Environment and Planning A* 37, 1545-1563.

Bazin, L. and **Selim, M.** 2006: Ethnography, Culture and Globalization: Anthropological Approaches to the Market. *Critique of Anthropology* 26, 437-461.

Beckert, J. 2007a: Die Abenteuer der Kalkulation. Zur sozialen Einbettung ökonomischer Rationalität. *Leviathan* 35, 295-309.

Beckert, J. 2007b: *The Social Order of Markets*. Köln: Max-Planck-Institut für Gesellschaftsforschung.

Berger, J. 2008: Kapitalismusanalyse und Kapitalismuskritik. In Maurer, A., editor, *Handbuch der Wirtschaftssoziologie*, Wiesbaden: VS Verlag für Sozialwissenschaften, 363-381.

Berndt, C. 2001: Corporate Germany between Globalization and Regional Place Dependence: Business Restructuring in the Ruhr Area. Houndsmills: Palgrave.

Berndt, C. 2003: Territorialised keywords and methodological nationalism: Cultural constructions of institutional change in Germany. *European Urban and Regional Studies* 10, 283-295.

Berndt, C. forthcoming: Methodological nationalism and territorial capitalism: Mobile labor and the challenges to the "German Model". In McGrath-Champ, S., Herod, A. and Rainnie, A., editors, *Handbook of Employment and Society: Working Space*, London: Edward Elgar.

Berndt, C. and **Boeckler, M.** 2007: Kulturelle Geographien der Ökonomie: Zur Performativität von Märkten. In Berndt, C. and Pütz, R., editors, *Kulturelle Geographien*, Bielefeld: Transcript Verlag, 193-238.

Boeckler, M. 2004: Culture, geography and the diacritical practice of 'Oriental entrepreneurs'. *Geographische Zeitschrift* 92 (special issue), 39-57.

Boeckler, M. and **Berndt, C.** 2005: Kulturelle Geographien der Ökonomie. *Zeitschrift für Wirtschaftsgeographie* 49, 67-80.

Boggs, **J.S.** and **Rantisi**, **N.M.** 2003: The 'relational turn' in economic geography. *Journal of Economic Geography* 3, 109-116.

Boltanski, L. and **Chiapello, È.** 2006 [1999]: *Der neue Geist des Kapitalismus*. Konstanz: UVK Verlagsgesellschaft.

Boyer, R. 2005: How and why capitalisms differ. Economy and Society 34, 509-557.

Bridge, G. and **Smith, A.** 2003: Intimate encounters: Culture - economy - commodity. *Environment and Planning D: Society and Space* 21, 257-268.

Callon, M. 1998: Introduction: The embeddedness of economic markets in economics. In Callon, M., editor, *The Laws of the Markets*, Oxford: Blackwell, 1-57.

Callon, M. 2005: Why virtualism paves the way to political impotence. *Economic Sociology: Electronic Newsletter* 6, 3-21.

Callon, M. 2007a: An essay on the growing contribution of economic markets to the proliferation of the social. *Theory Culture Society* 24, 139-163.

Callon, M. 2007b: What does it mean to say that economics is performative? In MacKenzie, D., Muniesa, F. and Siu, L., editors, *Do Economists Make Markets? On the Performativity of Economics*, Princeton: Princeton University Press, 311-357.

Callon, M., Millo, Y. and Muniesa, F. editors, 2007: Market Devices. Oxford: Blackwell.

Callon, M. and **Muniesa, F.** 2005: Peripheral Vision: Economic Markets as Calculative Collective Devices. *Organization Studies* 26, 1229-1250.

Castree, N. 1999: Envisioning capitalism: geography and the renewal of Marxian political economy. *Transactions of the Institute of British Geographers* 24, 137-158.

Clark, G.L., Mansfield, D. and Tickell, A. 2002: Global finance and the German model: German corporations, market incentives, and the management of employer-sponsored pension institutions. *Transactions of the Institute of British Geographers* 27, 91-110.

Coe, N.M., Dicken, P. and Hess, M. 2008: Global production networks: realizing the potential. *Journal of Economic Geography* 8, 271-295.

De Soto, H. 2000: The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. New York: Basic Books.

Dicken, P., Kelly, P.F., Olds, K. and **Yeung, H.W.-C.** 2001: Chains and networks, territories: and scales: towards a relational framework for analysing the global economy. *Global Networks* 1, 89-112.

Dicken, P. and Thrift, N. 1992: The organisation of production and the production of organisation: why business enterprises matter in the study of geographical industrialisation. *Transactions of the Institute of British Geographers* 17, 279-291.

Dixon, D.D. and Jones III, J.P. 2004: Poststructuralism. In Duncan, J., Johnson, N. and Schein, R., editors, *A Companion to Cultural Geography*, Oxford: Blackwell, 79-105.

Esping-Andersen, G. 1994: Welfare states and the economy. In Smelser, N.J. and Swedberg, R., editors, *The handbook of economic sociology*, Princeton: Princeton University Press, 711-732.

Ettlinger, N. 2001: A Relational Perspective in Economic Geography: Connecting Competitiveness with Diversity and Difference. *Antipode* 33, 216-227.

Feagan, R. 2007: The place of food: mapping out the 'local' in local food systems. *Progress in Human Geography* 31, 23-42.

Field, E. 2007: Entitled to work: Urban Property Rights and Labor Supply in Peru. *Quarterly Journal of Economics* 122, 1561-1602.

Field, E. and **Torero, M.** 2006: Do Property Titles Increase Credit Access Among the Urban Poor? Evidence from a Nationwide Titling Program. Harvard University.

Fligstein, N. and **Dauter, L.** 2007: The sociology of markets. *Annual Review of Sociology* 33, 105-128.

Fourcade, M. 2007: Theories of markets and theories of society. *American Behavioral Scientist* 50, 1015-1034.

Fourcade, M. and **Healy, K.** 2007: Moral views of market society. *Annual Review of Sociology* 33, 285-311.

Gertler, M.S. 2001: Best practice? Geography, learning and the institutional limits to strong convergence. *Journal of Economic Geography* 1, 5-26.

Gibson-Graham, J.K. 2006a: *A postcapitalist politics*. Minneapolis: University of Minnesota Press.

Gibson-Graham, J.K. 2006b: *The End of Capitalism (as we knew it)*. Minneapolis: University of Minnesota Press (Second Edition).

Gibson-Graham, J.K. 2008: Diverse economies: Performative practices for 'other worlds'. *Progress in Human Geography* 32 (forthcoming).

Gilbert, E. 2005: Common cents: situating money in time and place. *Economy and Society* 34, 357-388.

Glückler, **J.** 2006: A relational assessment of international market entry in management consulting. *Journal of Economic Geography* 6, 369-393.

Goffman, E. 1975: Frame analysis: An Essay on the Organization of Experience. Harmondsworth: Penguin.

Grabher, G. 1993: Rediscovering the social in the economics of interfirm relations. In Grabher, G., editor, *The embedded firm*, Routledge London, 1-32.

Grabher, G. 2004: The markets are back! *Progress in Human Geography* 28, 421-423.

Grabher, G. 2006: Trading routes, bypasses, and risky intersections: mapping the travels of 'networks' between economic sociology and economic geography. *Progress in Human Geography* 30, 163-189.

Granovetter, M. 1985: Economic action and social structure - the problem of embeddedness. *American Journal of Sociology* 91, 481-510.

Granovetter, M. 2005: The impact of social structure on economic outcomes. *Journal of Economic Perspectives* 19, 33-50.

Hall, P.A. and **Soskice, D.** 2001: An introduction to varieties of capitalism. In Hall, P.A. and Soskice, D., editors, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford: Oxford University Press, 1-68.

Hall, S. 2007: Knowledge makes the money go round: Conflicts of interest and corporate finance in London's financial district. *Geoforum* 38, 710-719.

Hall, S. 2008: Geographies of business education: MBA programmes, reflexive business schools and the cultural circuit of capital. *Transactions of the Institute of British Geographers* 33, 27-41.

Harvey, D. 1982: The limits to capital. Oxford: Blackwell.

Harvey, D. 1989: From Managerialism to entrepreneurialism: the transformation in urban governance in late capitalism. *Geografiska Annaler, Series B, Human Geography* 71 B 1, 3-17.

Harvey, D. 2005: A Brief History of Neoliberalism. Oxford: Oxford University Press.

Harvey, D. 2006a: Neoliberalism as creative destruction. *Geografiska Annaler Series B-Human Geography* 88B, 145-158.

Harvey, D. 2006b: *Spaces of global capitalism: Towards a Theory of Uneven Geographical Development.* London: Verso.

Henderson, J., Dicken, P., Hess, M., Coe, N. and **Yeung, H.W.-C.** 2002: Global production networks and the analysis of economic development. *Review of International Political Economy* 9, 436 - 464.

Hess, M. 2004: 'Spatial' relationships? Towards a reconceptualization of embeddedness. *Progress in Human Geography* 28, 165-186.

Hess, M. and **Coe, N.M.** 2006: Making connections: global production networks, standards, and embeddedness in the mobile-telecommunications industry. *Environment and Planning A* 38, 1205-1227.

Hess, M. and **Yeung, H.W.-C.** 2006: Whither global production networks in economic geography? Past, present, and future. *Environment and Planning A* 38, 1193-1204.

Hirschman, A.O. 1982: Rival interpretations of market society – civilizing, destructive, or feeble. *Journal of Economic Literature* 20, 1463-1484.

Holm, P. 2007: Which way is up on Callon? In MacKenzie, D., Muniesa, F. and Siu, L., editors, *Do Economists Make Markets? On the Performativity of Economics*, Princeton: Princeton University Press, 225-243.

Hudson, R. 2008: Cultural political economy meets global production networks: a productive meeting? *Journal of Economic Geography* 8, 421-440.

Hughes, A. 2005: Corporate strategy and the management of ethical trade: the case of the UK food and clothing retailers. *Environment & Planning A* 37, 1145-1163.

Hughes, A., Wrigley, N. and **Buttle, M.** 2008: Global production networks, ethical campaigning, and the embeddedness of responsible governance. *Journal of Economic Geography* 8, 345-367.

James, A., Martin, R. and Sunley, P. 2007: The rise of cultural economic geography. In Martin, R. and Sunley, P., editors, *Critical Concepts in Economic Geography: Volume IV*, *Cultural Economy*, London: Routledge, 3-18.

Jessop, B. and **Oosterlynck, S.** 2008: Cultural political economy: On making the cultural turn without falling into soft economic sociology. *Geoforum* 39, 1155-1169.

Jessop, B. and **Sum, N.-L.** 2006: Beyond the Regulation Approach: Putting Capitalist Economies in their Place. Cheltenham: Edward Elgar.

Knorr Cetina, K. 2003: From Pipes to Scopes: The Flow Architecture of Financial Markets. *Distinktion* 7, 7-23.

Knorr Cetina, K. and **Bruegger, U.** 2002: Traders' Engagement with Markets: A Postsocial Relationship. *Theory, Culture and Society* 19, 161-185.

Knorr Cetina, K. and **Preda, A.** 2007: The Temporalization of Financial Markets: From Network to Flow. *Theory, Culture and Society* 24, 116-138.

Krippner, G. 2001: The elusive market: Embeddedness and the paradigm of economic sociology. *Theory and Society* 30, 775-810.

Law, J. 1992: Notes on the theory of the actor network: ordering, strategy and heterogeneity. *Systems Practice* 5, 379-393.

Lee, R. 2006: The ordinary economy: tangled up in values and geography. *Transactions of the Institute of British Geographers* 31, 413-432.

Lee, R., Leyshon, A., Aldridge, T., Tooke, J., Williams, C. and **Thrift, N.** 2004: Making geographies and histories? Constructing local circuits of value. *Environment and Planning D-Society & Space* 22, 595-617.

Lee, R., Leyshon, A. and **Smith, A.** 2008: Rethinking economics/economic geographies. *Geoforum* 39, 1111-1115.

Leyshon, A., French, S., Thrift, N., Crewe, L. and **Webb, P.** 2005: Accounting for ecommerce: abstractions, virtualism and the cultural circuit of capital. *Economy and Society* 34, 428-450.

Leyshon, A. and **Thrift, N.** 2007: The Capitalization of Almost Everything: The Future of Finance and Capitalism. *Theory Culture Society* 24, 97-115.

Lindner, P. 2008: Der Kolchoz-Archipel im Privatisierungsprozess: Wege und Umwege der russischen Landwirtschaft in die globale Marktgesellschaft. Bielefeld: Transcript.

MacKenzie, **D.** 2004: The big, bad wolf and the rational market: portfolio insurance, the 1987 crash and the performativity of economics. *Economy and Society* 33, 303-334.

MacKenzie, D. 2005: An Engine, Not a Camera: How Financial Models Shape Markets. Cambridge, MA: MIT Press.

MacKenzie, D. 2006a: Is Economics Performative? Option Theory and the Construction of Derivatives Markets. *Journal of the History of Economic Thought* 28, 29-55.

MacKenzie, **D.** 2006b: Globalization, efficient markets, and arbitrage. In Assassi L., Nesvetailova, A. and Wigan, D. editors, *Global finance in the new century: beyond deregulation*, Basingstoke: Palgrave Macmillan, 13-24.

MacKenzie, **D.** 2007: The material production of virtuality: innovation, cultural geography and facticity in derivatives markets. *Economy and Society* 36, 355-376.

MacKenzie, **D.** and **Millo**, **Y.** 2003: Constructing a market, performing theory: The historical sociology of a financial derivatives exchange. *American Journal of Sociology* 109, 107-145.

Majury, N. 2007: Technology and the architecture of markets: reconfiguring the Canadian equity market. *Environment and Planning A* 39, 2187-2206.

Miller, D. 1997: Capitalism: An Ethnographic Approach. Oxford: Berg.

Miller, D. 2002: Turning Callon the right way up. Economy and Society 31, 218-233.

Miller, D. 2005: Reply to Michel Callon. Economic Sociology: Electronic Newsletter 6, 3-13.

Mitchell, T. 2002: *Rule of Experts: Egypt, Techno-politics, Modernity*. Berkeley; London: University of California Press.

Mitchell, T. 2008a: Rethinking economy. Geoforum 39, 1116-1121.

Mitchell, T. 2008b: The world of economics: how neoliberalism makes its world. In Mirowski, P. and Plehwe, D., editors, *The making of the neoliberal thought collective*, Cambridge, Mass.: Harvard University Press.

Miyazaki, H. 2007: Between arbitrage and speculation: an economy of belief and doubt. *Economy and Society* 36, 396-415.

Muniesa, F. 2007: Market technologies and the pragmatics of prices. *Economy and Society* 36, 377-395.

Murdoch, J. 2006: Post-structuralist Geography: A Guide to Relational Space. Lo: Sage.

Nadvi, K. 2008: Global standards, global governance and the organization of global value chains. *Journal of Economic Geography* 8, 323-343.

Offe, C. 1999: The German Welfare State: Principles, Performance, Prospects. In Brady, J.S., Crawford, B. and Wiliarty, S.E., editors, *The Postwar Transformation of Germany - Democracy, Prosperity, and Nationhood*, Ann Arbor: University of Michigan Press, 202-224.

Peck, J. 2005: Economic sociologies in space. Economic Geography 81, 129-175.

Peck, J. 2008: Remaking laissez-faire. *Progress in Human Geography* 32, 3-43.

Peck, J. and **Theodore, N.** 2007: Variegated capitalism. *Progress in Human Geography* 31, 731-772.

Pryke, M. and **du Gay, P.** 2007: Take an issue: cultural economy and finance. *Economy and Society* 36, 339-354.

Sayer, A. 2001: For a critical cultural political economy. *Antipode* 33, 687-708.

Schamp, E.W. 2007: Denkstile in der deutschen Wirtschaftsgeographie. Aktuelle Umbrüche seit 1970. Zeitschrift für Wirtschaftsgeographie 51, 238-252.

Sheppard, E. 2005: Constructing free trade: from Manchester boosterism to global management. *Transactions of the Institute of British Geographers* 30, 151-172.

Smelser, N.J. and **Swedberg, R.** 2005: Introducing economic sociology. In Smelser, N.J. and Swedberg, R., editors, *Handbook of Economic Sociology*, Princeton, N.J., Oxford: Princeton University Press, 3-25.

Smith, A. and **Rochovská, A.** 2007: Domesticating neo-liberalism: Everyday lives and the geographies of post-socialist transformations. *Geoforum* 38, 1163-1178.

Smith, A. and Stenning, A. 2006: Beyond household economies: articulations and spaces of economic practice in postsocialism. *Progress in Human Geography* 30, 190-213.

Smith, N. 1984: *Uneven Development: Nature, Capital and the Production of Space.* Oxford: Blackwell.

Smith, S.J. 2005: States, markets and an ethic of care. *Political Geography* 24, 1-20.

Storper, M. 1992: The limits to globalisation - technology districts and international trade. *Economic Geography*, 68, 60-93.

Storper, M. 2005: Society, community, and economic development. *Studies in Comparative International Development* 39, 30-57.

Sturgeon, T., Van Biesebroeck, J. and **Gereffi, G.** 2008: Value chains, networks and clusters: reframing the global automotive industry. *Journal of Economic Geography* 8, 297-321.

Sunley, P. 2008: Relational Economic Geography: A Partial Understanding or a New Paradigm? *Economic Geography* 84, 1-26.

Swain, A. 2006: Soft capitalism and a hard industry: virtualism, the 'transition industry' and the restructuring of the Ukrainian coal industry. *Transactions of the Institute of British Geographers* 31, 208-223.

Swedberg, R. 2004: What bas been accomplished in new economic sociology and where is it heading? *Archives Européennes De Sociologie* 45, 317-330.

Thrift, N. 2000: Pandora's box? Cultural geographies of economies. In Clark, G., Feldman, M. and Gertler, M., editors, *The Oxford Handbook of Economic Geography*, Oxford: Oxford University Press, 689-704.

Thrift, N. 2002: Performing cultures in the new economy. In du Gay, P. and Pryke, M., editors, *Cultural Economy*, London: Sage, 201-233.

Thrift, N. 2005: Knowing Capitalism. London: Sage.

Wallerstein, I. 2004: World-systems Analysis: An Introduction. Durham, London: Duke University Press.

Weller, S. 2006: The embeddedness of global production networks: the impact of crisis in Fiji's garment export sector. *Environment and Planning A* 38, 1249-1267.

Whatmore, S. 2004: Humanism's excess: some thoughts on the 'post-human/ist' agenda. *Environment and Planning A* 36, 1360-1363.

Whatmore, S. 2006: Materialist returns: practising cultural geography in and for a more-than-human world. *Cultural Geographies* 13, 600-609.

White, H.C. 1981: Where do markets come from? *American Journal of Sociology*, 87, 517-547.

White, H.C. 2005: *Markets From Networks: Socioeconomic Models of Production*. Princeton, N.J. Oxford: Princeton University Press.

Williamson, J. 1999: What Should the Bank Think about the Washington Consensus, Paper prepared as a background to the World Bank's World Development Report 2000. Washing-

ton: Institute for International Economics (http://www.iie.com/publications/papers/williamson0799.htm; 11.2.04).

Wimmer, A. and **Glick Schiller, N.** 2002: Methodological nationalism and the study of migration. *Archives Européennes de Sociologie* 43, 217-240.

Yeung, H.W. 2005: Rethinking relational economic geography. *Transactions of the Institute of British Geographers* 30, 37-51.

Zelizer, V. 2007: Pasts and futures of economic sociology. *American Behavioral Scientist* 50, 1056-1069.