Geographies of Markets:
Materials, Morals and Monsters in Motion

Draft. Do not circulate.
For citation please refer to the published paper.

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Revised and copy edited version, July 28th 2010

I Introduction

The 2007-9 financial crisis and subsequent global recession have led to a fierce attack on free market economics. Surely we should now know which markets "work", and which do not? In our view, this is not the case. Instead, recent discussions amongst eminent economists indicate how little we know about markets (see, for instance, Greenspan, 2008; Krugman, 2009). We are convinced, therefore, that we still need more rather than less research that seeks to understand how exactly markets and other economic entities are put to work. This is why we would, first, call for intensified efforts to understand how real (as opposed to ideal) markets are produced, stabilized, and reshaped, and fall apart. In addition to this, against recent complaints about the inability of heterodox approaches to develop a coherent narrative about the contemporary economy (see Fligstein, 2009; Hodgson and Ingham, 2010), we argue for multiple ways to go about this first investigative task (including approaches which are nebulously referred to by critics as "post-modern" or "poststructural"). We venture down the "cultural economic" route (Berndt and Boeckler, 2009) and connect with the ongoing, transdisciplinary efforts of what has been termed social studies of marketization and economization.

In this context, we identify three strands of research and recent literatures that are all part of a widespread "pragmatic turn" in the study of economic activities (Muniesa et al., 2007: 1) and which help us to better come to terms with the contemporary capitalist economy. We shall use these perspectives to organize the remainder of this report:

- *Market devices.* The first body of research conceptualizes markets as arrangements of people, things and sociotechnical devices that format products, prices, competition, places of exchange and mechanisms of control, taking seriously the constellations of distributed agency that make processes of marketization possible.
- *Moral markets.* A second set of literature focuses more directly on the insight that – for all their force and resilience – processes of marketization at the same time are deeply ambivalent endeavors, mobilizing a variety of frames of reference in addition to instrumental rationality, resulting in a less than coherent picture and therefore providing openings for alternative imaginations.
- *Markets in motion.* A final, closely connected body of work takes issue with the stylized distinction between questions small and big, between micro- and macro-level studies, attempting to connect an interest in the performance of diversity and difference in concrete market contexts with an attention to mobility in network capitalism. Providing the most obvious link towards geography, this emerging transdisciplinary project rallies around chain-like notions of contemporary economic realities.

II Market devices

With the second part of their voluminous study on processes of economization, Michel Callon and Koray Çalışkan (2010) once more remind us of the sociotechnically distributed process of marketization. Markets are sociotechnical 'agencements' and the crucial question is to examine how these agencements are designed, implemented, maintained and reproduced. A large body of work on various market devices and how they shape particular markets has emerged in recent years (see, for instance, the contributions Callon et al., 2007; MacKenzie et al., 2007; Pinch and Swedberg, 2008). In this literature, financial markets play a particularly prominent role. Daniel Beunza and Raghu Garud (2007) explore the role of securities analysts and how their techniques are translated into reports which, in turn, have the capacity to trigger subsequent actions and market developments. Another important market device is the computer screen. As a trading screen it turns into a geographical device, relocating markets from their site in a network of places to a single place. In so doing, a micro-global interaction setting of "response presence" evolves, connecting and performing the trader, her screen and the world (Knorr Cetina and Bruegger 2002: 909ff.). Similarly, as a market device a stock ticker defines what trading is (and what traders are) in the financial world (Preda 2006). Finally, Alex Preda's (2007) historical analysis of the practice of chartism is yet another demonstration of the performativity of economic knowledge, because "technical analysis" does not only visualize interpretations of financial markets but plays an intrinsic part in the production of this particular market.

Outside the sociology of finance there has been work on supermarket shelves and shopping carts (Cochoy 2007), inherently geographical calculative devices that allow for spatial arrangement and comparison of goods in the process of a mundane transaction by orchestrating the difficulty of choice. A shopping cart is a material device for sure. But it is also enacted, in particular, as a "market" device because it reconfigures what shopping is, and because it is implicated in shaping what shoppers are and can do. The latter point refers to the observation that the practice of shopping is managed by consumer credit scores with the help of a distributed calculative apparatus that produces a system of consumer credit scores (FTCO® credit bureau scores), a mobile commercial symbol detached from the person in question that decides who should be included as consumers in the market and who not (Poon, 2007).

The merits of such an approach can also be illustrated on the example of the current economic crisis. In a fascinating historical sociology of the development of "evaluation cultures" surrounding ABSs (asset-backed securities) and CDOs (collateralized debt obligations), Donald MacKenzie (2009a: 4) demonstrates how evaluation cultures are material, encompassing not just the ideas and the actions of human beings, shared sets of beliefs, practices, ways of calculating but, crucially, also artefacts and technical systems.

It is true that there are more ingredients to the cataclysmic economic events we are currently witnessing (e.g. macroeconomic imbalances, regulatory politics, neoliberalism as a historical project). But without market devices, in particular calculative models of risk assessment and valuation entangled into the evaluation cultures of banks and rating systems, neither the invention of ABS CDOs would have been possible nor the subprime (temporary) homeowner, the greedy banker, or the economic boom following the dotcom bust and 9/11. The crucial question arising from the application of market devices such as the models used to format and evaluate CDOs is therefore not whether they were wrong or accurate. Had they simply been external representations, they might have remained reasonably accurate. However, as market devices are always influencing the processes they pretend to be modeled upon they were undone by their performativity. In other words, it was in the very process of their application that they changed the conditions of the world they were supposed to represent (MacKenzie, 2009a: 58ff.).

In order to really understand the financial crisis it would be rather pointless indeed to single out individuals or organizations, and personal or systematic interest in making money as the principal “causes”. This is because interests are not given, but are calculated within agencements (MacKenzie 2009b: 25). What has to be examined therefore is the hybrid collectif, made up of models, tools, beliefs, discourses, traders and bankers -- the complete sociotechnical arrangement that brings actors and agency about, giving meaning to action (Caliskan and Callon, 2010) and allowing the ABS CDO complex to have far-reaching performative effects.

We have to realize, as Giorgio Agamben writes, that “the extreme phase of capitalist development in which we live [is] a massive accumulation and proliferation of apparatuses” (2009: 15). Both terms, “device” as well as “apparatus” are interpretations of the Foucauldian dispositive (*dispositif socio-technique*). In a remarkable process of condensed translation, Agamben traces Foucault’s term back to the Latin term “dispositio” as it was used by the early Church to legitimate the Holy Trinity. Dispositio as it turns out, is nothing else but the interpretation of the Greek oikonomia and used to institute God’s will by way of a divine economy, “a pure activity of government that aims at nothing other than its own replication” (Agamben, 2009: 22). These apparatuses are very powerful not just in the sense of pure governance but also because they promise to fulfill the desire of happiness and, as Agamben (2009: 17) sees it, are rooted in the very process of humanization, the process that aims to form humans out of living beings. If contemporary capitalist societies are furnished with apparatuses, there seems to be no way out: Neither their destruction nor the naive idea of putting them to right use is an option. But we may develop a strategy of profanation, that helps to restore the things to common use that have previously been removed to the separate sphere of God (Agamben, 2009: 19) – or, in our reading, to the separate, abstract sphere of economic models and their subsequent sociotechnical shaping of the social world with all its disastrous consequences.

Remembering Bruno Latour’s map of ‘the modern constitution’ (Latour, 1993), we could either seize our translation and purification work and return to the premodern order and address the devices and apparatuses as monsters, as hideous and freaky creatures that indicate that something has gone wrong within our natural order or acknowledge their place as acting being within our hybrid collectif, holding them responsible and accountable for the actions they triggered.

III Moral Markets

The so-called Convention School (CS) played an influential role in the pragmatic turn of French scholars away from structuralist approaches in the 1980s and the attempts to surmount traditional binary thinking (micro/macro, individual subject/society etc.) which gave rise to what has been termed „New French Sociology” (Diaz-Bone, 2009: 268). For CS pioneers such as Laurent Thévenot or Luc Boltanski, economic and social worlds are made up of a plurality of modes of coordination. They directed their attention to the conventional forms that support the coordination of action, studying the different forms with which events are framed and evaluated in the context of pervasive uncertainty. The idea is that actors mobilize general moral principles in uncertain situations. They have the competence to recursively refer to "orders of worth", making judgments about the "quality" of a person or an object and practically structuring the coordination of economic and social processes (Thévenot, 2005; Boltanski and Thévenot, 2006 [1991]). Accordingly, starting from the assumption that modern economies comprise multiple principles of evaluation (only one, though admittedly crucial of which is "market rationality") it makes little sense to say that one lives in a "market economy" (Stark, 2009: 11).

Following a broader, renewed interest by heterodox economists and sociologists in the idea that markets cannot strictly be separated from morality and are shot through with moral considerations (for instance see, Hodgson, 2008; Jackson et al., 2009; Sayer, 2008), convention theory has seen a renaissance recently. Key texts (i.e. Boltanski and Chiapello, 2005; Boltanski and Thévenot, 2006 [1991]) inspired scholars across the social sciences to rethink the traditional division between "moral economies" (values) and market economies (value) (Stark 2009: 11). Amongst these are economic sociologists such as David Stark and adherents to the interdisciplinary "performativity approach" (see above) who critically engage with CS in their project of social studies of marketization or economization. Further examples include the dissemination of new accounting practices (Chiapello, 2009), or the transformation of capitalist institutions and modes of regulation in 1930s and 1950s France (Berland and Chiapello, 2009).

The more recent interest in conventions, orders of worth and the investigation of often conflicting frames of reference with which to justify decisions and practices in "network capitalism" (Boltanski and Chiapello, 2005: 429) is particularly prominent with a view to the moral implications of the ongoing drive to privatize the regulation of markets. Here, a particularly fruitful engagement with convention theory has been undertaken by scholars working within the global commodity (or value chain) perspective. Participants in the debate refer to convention theory as a source of inspiration for developing typologies of various dimensions of product quality, analyze the market and non-market frames of reference that are employed to legitimize specific functional divisions of labor along value chains, and ask for the moral implications of these practices (Busch, 2009; Gibbon et al., 2008: 325; see also Ponte and Gibbon, 2005). More strictly empirical projects include work on conventions in regional food networks (Sanchez-Hernandez et al., 2010; Trabalzi, 2007), and the interplay between various conventions in efforts to establish "green" commodity networks (see Baird and Quastel, 2011; Klooster, 2006).

With their emphasis on multiple orders of worth, only one of which comes close to the orthodox market model, convention theorists and those inspired by the work of Boltanski, Thévenot and others pursue a markedly different route than other scholars working around questions of market exchange. Directing attention to the multifaceted nature of economy and market, they decompose the mythical ‘hidden hand’ and in so doing reveal its fragility (Stark, 2009; Thévenot, 2005: 111). In a recent paper, Thévenot (2009) takes up the classical discussion of the Janus-faced character of social institutions and conventions: that is, the “understanding of the ‘conventional’ as what is agreed upon, accepted, established” which favors stability (on the one hand), and the arbitrariness, doubt and suspicion that surrounds conventions (on the other) (p. 795-796). Arguing that the former understanding of conventions has traditionally dominated the discussion, Thévenot (2009: 797) recently commented positively on the “critical activity of raising doubts about the first face of conventions”.

In contrast to STS/ANT-inspired work, however, proponents of convention theory are far more hesitant to include non-human actors in their studies and are arguably more sensitive to the plurality of conventions of qualification and the tensions between them that gets visible when markets are getting (re)configured. This appears to be especially valid for hotly contested marketization processes such as in attempts to perform markets for health care (for a recent study of the Dutch experience, see Zuiderent-Jerak, 2009).

IV Markets in motion

For some time now, concepts that were long regarded as given in Economic Geography have been subject to scrutiny by scholars from different theoretical backgrounds. During the last twenty years or so these challenges have arguably been most efficiently mounted under the banner of the “network”. The blurring of the boundaries between firm and market is a case in point, the “integrated firm” firm turning into the “network firm” (e.g. heterarchies, project ecologies) and markets into “consumption, distribution and production networks”. Given that it appears to be no longer adequate to take the neoclassical market or the integrated firm as a starting point, new blueprints are needed. And a particularly popular one is the idea that production and consumption are organized in steps and chains, network- or chain-like approaches accordingly dominating the academic literature on the contemporary global economy.

Echoing what Michel Callon (Callon et al., 2002: 196) has termed “economists in the wild”, however, economic entities do not so much take form according to the prescriptions of neoclassical economics, but are shaped by the normative prescriptions and the practical knowledge of applied sociotechnologies. Amongst these, the discipline of what has come to be known as “Supply Chain Management” (SCM) arguably is of particular importance. Virtually unknown in the academic literature prior to 1988 (Appelbaum and Lichtenstein, 2006: 111; Busch, 2007: 442), SCM has developed into the hegemonic blue-print for thinking and – crucially – performing the economy.

SCM is a very powerful device indeed with which to make markets and other economic entities. Working in the context of value/commodity chains and complex production systems, Larry Busch (2007), as well as Peter Gibbon and Stefano Ponte (2008) regard SCM as one of the most important practices with which to (re)organize markets. One could even go a step further and ascribe it transformatory force across the economy, given that SCM fundamentally changes the way we think about the borders of the business firm, too. Richard Appelbaum and Nelson Lichtenstein (2006: 112), for instance, compared the tool's impact on the business firm with the role of the assembly line in the early 20th century. More generally, Luc Boltanski and Eve Chiapello (2005: 398) regard the standardization and certification processes performed by supply chain managers as a "fairly suitable formula for control in a network world" and Anna Tsing (2009), in a recent inspiring article uses it to denote how difference and inequality became integral parts of contemporary capitalism.

According to Tsing (2009: 150), in the world of supply chain capitalism diversity is no longer some thing to be added on, external to the economy and part of a different sphere alternatively called "society" or "culture". This was the dominant logic of territorial or state-organized capitalism, the hegemonic formation of the postwar era, where the territorial nation-state actively sought to steer the economy, social questions were framed predominantly in distributive terms, and social divisions were viewed primarily through the lens of class. "The effect of this class-centric, economistic imaginary", argues Nancy Fraser (2009: 101), "was to marginalize, if not wholly to obscure, other dimensions, sites and axes of injustice".

The main reason for the changing role of diversity has arguably been the growing social and spatial complexity of production, distribution and consumption systems. Given that global supply chains are far more difficult to control than individual firms or territorial markets, the traditional solution of relying solely on stabilization via standardization is no longer a viable option. Decision-makers therefore began to opt for more indirect and more flexible governance models. In these constellations, the almost unstoppable drive towards outsourcing, the global diffusion of network organization and the changing role of diversity are simply different sides of the same coin. At the same time as capitalism mobilizes various socioeconomic differences in order to produce goods and services more cheaply, such positions are getting reproduced in the performances of identities through which participating actors (firms, entrepreneurs, workers etc.) seek to demonstrate their own positive worth. In so doing supply chain capitalism actively conditions both the strategies and responses of capital *and* labor to the challenges mounted by a global network economy.

Just as in accounts of earlier periods of capitalism, the transdisciplinary literature on the global network economy has chosen a specific firm as corporate role model. The company in question is the US retailer Wal-Mart, leading the way with regard to developing a tightly knit network of supply chains. Wal-Mart has arguably created the "world's largest and most efficient supply chain" (Appelbaum and Lichtenstein 2006: 108), a network of suppliers shaped and controlled mainly from its corporate headquarters in Bentonville, Arizona, and from the city of Shenzen in China's Guangdong province, where Wal-Mart's global purchasing operations are located. In this way market networks are performed which organize commodity flows and distribute labor according to the needs of global production.

One crucial way through which Wal-Mart "makes" markets is through its treatment of its suppliers. Wal-Mart's control over global consumer markets is a result of standardization transmitted through the supply chains, seeing to it that globally standardized products go hand in hand with globally standardized sources of supply (Petrovic and Hamilton, 2006: 140). However, the Wal-Mart example is not all about standardization and control. There is, in fact, a sharp line between what the company wants to control (e.g. prices, marketing, logistics) and what not (e.g. labor arrangements, environmental practices, subcontractors' investment strategies). Responsibilities for certain decisions and actions are thus delegated to other actors and distributed throughout the supply chain (Tsing, 2009: 156).

This ambiguous practice is also clearly "visible" with a view to the treatment of labor, both internally and externally. Here Supply Chain Management connects with its sister discipline Human Resource Management which is regarded by scholars as "a new way of valuing employees and of systematically unfolding their individual working capabilities" (Vormbusch, 2009: 9). Within Wal-Mart's supply chains there is no need to standardize labor practices. Economic success rather depends on the mobilization of difference, that is, the economic utilization of "the conflicts of interest and identity that segregate race, gender, and national status niches" (Tsing, 2009: 166). One example is the mobile worker. Wal-Mart's global sourcing network thrives on the back of migrant labor denied their rights, for instance uprooted regionally in China and Mexico or literally being made stateless by crossing the Mexico-US border. Another example, not seldomly converging in the same person, is the increasing feminization of work within supply chain capitalism (see also Wright, 2006).

V Conclusion: Thinking small or big?

'The market' is one of the many conceptual black boxes which are mobilized in economic geography and the social sciences more generally. Like other economic entities (e.g. the business firm, labor), markets are often taken for granted and rarely reflected upon: their existence is taken as a given, so focusing debates on their nature and implications. For some time now a transdisciplinary movement has emerged whose representatives take issue with this attitude. Across the disciplines new concepts have been proposed that move beyond essentialist accounts of economic entities, studying them as "practical accomplishments" and as never fully completed assemblages of heterogeneous elements instead. This project involves a shift from focussing on 'the market' to seeing markets as bundles of practices and material arrangements always in the making.

Regardless of their intellectual background, all the approaches discussed in this report look at the rationalities, frames of action and technologies which render things, behaviors and processes "economic". Shared understandings of what it is to be 'economic' are always precarious and therefore open to contestation. Starting from this general insight all three perspectives discussed above are not necessarily silent on what critics refer to as 'big questions'. It is more than short-sighted, for instance, to accuse the literature on 'market devices' of involuntarily playing the game of neoclassical economics. Like other economic entities, markets are realized and performed in a two-step process. Things, places, resources or people are removed from their contexts and mobilized, before new linkages are established and new connections are made. However, being unable to accomplish absolute stability, every device that separates and veils at the same time provides openings for (re)connections and changes. Accordingly, Callon (2007) refers to the possibility of co-construction of economy and politics, arguing that due to their incompleteness and dynamics markets trigger the emergence of matters of concern (overflows), spur the proliferation of new social identities and trigger the creation of unexpected social communities.

The literature on 'moral markets' is not silent on political issues, too. Having been developed in opposition mainly to Bourdieuian sociology and been criticized for its neglect of relations of domination and power, the 'convention school' certainly promoted a shift in emphasis towards issues of consensus and legitimacy. Self-critically acknowledging a deficit in this respect in earlier work, however, Boltanski (Basaure and Boltanski, 2008: 14) has recently been adamant that the world of "De la justification" has never been devoid of conflict and that more recent contributions have long remedied what critics refer to as an overemphasis on "micro-level" issues.

Finally, many of those scholars whom we have assembled under the label of 'markets in motion' deliberately regard their project as an attempt to go beyond stylized discussions of interfirm governance (see, for instance, Bair, 2008; Ramamurthy, 2004; Werner and Bair, forthcoming). Commodity chains can be used to illustrate that capitalism is not omnipotent. Even a company apparently as powerful as Wal-Mart is unable to fully keep track of the activities of every link in the chain. Although irritations and disruptions are not likely to destroy the system, they present openings for criticism and oppositional mobilizations.

To conclude, approaching markets as practical accomplishments and as assemblages of heterogeneous elements enables us to unmask the process of marketization as a deeply ambivalent endeavor. This is an endeavor that is never complete and always prone to failure. Marketization is about establishing *and* severing linkages, it is about incorporating *and* expelling places, people and things. This conceptualization has the advantage of permitting an engagement with global network capitalism without losing sight of the heterogeneity and differentiation of capitalist practices.

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