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MARKET DEVICES

Olav Velthuis

1 Introduction

“Devices are dead,” a Danish colleague whispered to me at a conference recently. We were listening to a paper presentation on devices within market settings, the umpteenth at the conference, and my colleague was obviously bored. During the break, he complained that devices did not do the trick anymore. They had been all the rage for almost a decade within the interdisciplinary field of market studies, but now their magic was gone. For him, it was time to move on.

To claim that they had been all the rage in market studies is certainly no exaggeration. Google scholar lists over 2000 articles mentioning ‘market devices,’ of which the vast majority (1770) was published in the new millennium, and more than 1200 since 2010. Because of the performative turn within economic sociology, new concepts like market devices, performativity, *agencements*, and assemblages (on the latter two terms, see Stavrianakis’ contribution to this volume) have been introduced to the subdiscipline, marking one of the most significant theoretical impulses for economic sociology in the new millennium. Indeed, this program has questioned the dominance of the embeddedness paradigm (Granovetter 1985; see e.g., Smelser and Swedberg 2010; Dobbin 2004) and has inspired many to start paying attention to material dimensions of markets, which hitherto received less scholarly attention (Mcfall 2009).

Akin to Pierre Bourdieu’s notion of capital, which has been extended to a wide variety of fields which Bourdieu had not scrutinized himself, ‘devices’ have been applied in a variety of ways within market studies: in the literature we find terms like calculation, status, legal, quotation, trust, encountering, mediation devices, and so on, which all have family resemblance and are part of the more encompassing category of market devices. Taking all these applications and small-time conceptual elaborations into consideration, it is no exaggeration to state that the proliferation of

device-studies within economic sociology broadly defined, is one of actor-network theory's major successes outside of the domain of science and technology studies. I see this proliferation as indicative of the mainstreaming of ANT within social science. At the same time, however, this mainstreaming may go hand in hand with the dilution of the analytical power of the concept. Increasingly, 'device' has been disconnected from the bodies of literature out of which it emerged. As a result, the concept is now also used as a substitute for everyday terms like 'tool,' 'technology,' or 'instrument.' 'Device' may sound more appealing intellectually, but its added analytical value is not always clear in recent studies using the term.

In this essay, I assess the recent intellectual biography of the term 'market devices.' When and where do we find its first uses? How was it introduced into economic sociology? What does it allow us to see which we otherwise would not see, and is it indeed successful in making us see these things? What are its blind spots? Should we make an effort to make it a fixed part of our analytical toolbox, and if so, what modifications does it need?

What I will not do is write an overall genealogy of the term, or, for that matter, of terms like *dispositive* or *apparatus* which have been used interchangeably (an issue of translation to which I will come back later on). Apart from the fact that parts of those genealogies already exist (see e.g., Beuscart and Peerbaye 2006; Agamben 2009; Bussolini 2010; Dodier and Barbot 2016), my poor commandment of French and limited grasp of Foucault, Deleuze, and other intellectual forefathers of the term, would make me particularly unfit for that task (see however Dodier and Barbot's and Stavrianakis' contributions to this volume).

Although my answers to the previous questions may to some extent be relevant for other domains where the term *device* has been in vogue (e.g., sociology of law, sociology of organizations, or political sociology), I focus on its use in economic sociology and the interconnected, interdisciplinary field of market studies. The reason for this is partially one of scope (the market devices literature is overwhelming in itself) and again one of expertise: my knowledge of those other domains and the ways they have incorporated and elaborated on 'devices' is simply insufficient. Moreover, economic sociology and market studies are among the domains where the impact of the term has been particularly strong.

2 A short history on the use of market devices

Although unfrequently and irregularly, economists have used the term *market device* since many decades. Remarkably, the first use of the term which I encountered is in Milton Friedman's bestseller *Capitalism and Freedom* (1962). Friedman does so while debating fixed exchange rates: debunking a series of arguments against their liberalization, he writes about the "tyranny of the status quo." Bankers for instance, are afraid what would happen to their business when exchange rates are allowed to float freely, but unnecessarily so, Friedman argues, since "market devices . . . would arise to cope with fluctuations in exchange rates" (Friedman 1962, 62). Although at that point in the text he does not define what market devices are, he immediately

afterwards refers to “firms that would specialize in speculation and arbitrage in a free market for exchange.” The gist of his argument seems to be similar to what Michel Callon would argue more than four decades later, and surely very different from common critical depictions or representations of neoclassical economic thinking, in which markets would arise spontaneously and free economic exchange is a natural phenomenon. That is not at all what Friedman argues. Instead, he seems fully aware that “free” markets with flexible prices do not come about naturally, but need to be actively produced. This requires among others discursive changes, a change in dispositive, so to say, so that the “inevitable tendency for everyone to be in favor of a free market for everyone else, while regarding himself as deserving of special treatment” (Friedman 1962, 61–62) gets remedied. Moreover, switching from a system of fixed to flexible prices entails a different form of *agencement*, as Callon would call it more than two decades later (Friedman obviously does not use the term yet), including different types of firms which at once render exchange rates flexible and enable traditional financial institutions to cope with such a system by offloading risk upon those firms.

My interpretation of Friedman’s use of the term in *Capitalism and Freedom* is supported by another instance, this time in his later bestseller *Free to Choose* (1990), co-authored with his wife Rose Friedman. And again the similarities with the recent Callonian device program are striking. In this instance, the Friedmans argue against government regulation of markets for consumer products. Countering the objection that in the absence of regulation, consumers would not be able to “judge the quality of complex products” (a comment that seems to come straight out of Lucien Karpik’s *Valuing the Unique. The Economics of Singularities*), the Friedmans write that “[t]he market’s answer is that he does not have to be able to judge for himself. He has other bases for choosing.” Prefiguring Karpik’s work they acknowledge that consumers will, in these moments of uncertainty, indeed not collect all available information on consumer products, use it to make highly-informed, independent judgments, and then choose a product. Instead they will rely on “market devices.” The Friedmans give several examples: middlemen and brands (similar to what Karpik calls impersonal judgment devices in the so-called mega regime), as well as consumer reports and test magazines (Friedman and Friedman 1990, 223–24), which point at the materiality of markets and the technologies which are sine qua non for a market *agencement* of consumer goods. These devices assist in creating attachments between consumers and goods.

After these first appearances in Friedman’s oeuvre, the term keeps popping up erratically in neoclassical economics literature. For instance, in a widely cited paper on the economics of stardom, Moshe Adler argues that in cultural markets, stardom operates as a “market device” which serves “to economize on learning costs” (Adler 1985, 208). In other words, consumers of cultural products do not learn about, and select artists autonomously by collecting information but instead, by paying attention to stardom, they rely on the selections which other consumers have already made. Again, the similarities to Karpik’s notion of a judgment device,

which consumers use in markets for singular products such as art and culture to effectuate choices, are striking.

In economic sociology and social studies of markets more widely, the term would only be used much later. The first instance I could find was in a French pragmatist analysis of evaluation in the context of firms (Eymard-Duvernay 1992), where the term *dispositif de marché* was used to point at the different ways in which goods are evaluated within a market setting as opposed to within a firm (*dispositif d'entreprises*). A decade later the term appears again in several other French studies of e.g., electronic markets (Kessous 2001), Napster (Beuscart 2002), the introduction of quota for CO₂ emissions (Godard 2005), or the introduction of electronic trading on the Paris Bourse (Muniesa 2005), but in most of these studies, the term is used in a generic sense, without much analytical leverage, often in passing, and sometimes as no more than synonymous with the term "market."

That is about to change, however, for in the meantime, Callon's contribution to and critique of the embeddedness paradigm in economic sociology, as originally formulated in *The Laws of the Market* (1998), is taking shape. For instance, in a widely cited article in *Economy & Society* he and two co-authors introduce the term socio-technical devices, to describe two processes which are crucial in the organization of markets: the singularization of goods and the attachment/detachment of economic agents to/from those goods (Callon, Méadel, and Rabeharisoa 2002). Together with Muniesa, Callon gives the term devices further substance in the 2005 article *Economic Markets as Calculative Collective Devices* which squarely puts the emphasis on the material character of markets. They do so in order to explain how economic calculation is performed within and generative of markets; this calculation, they emphasize, is distributed among human actors and material devices. Calculative agencies in other words singularize goods, objectify them, categorize them, frame them in terms of substitutes, etc., all in order to make it possible to calculate value and enable exchange.

In 2007, Callon, Muniesa, and Yuval Millo published the edited volume *Market devices*. Together with *Do Economists Make Markets* (MacKenzie, Muniesa, and Siu 2007), the book is a sequel to Callon's *Laws of the market* and is programmatic in a number of respects. Where *Do Economists Make Markets* thematizes the discursive production of markets through the notion of performativity (in particular the role of economic science in shaping markets), *Market Devices* puts materiality and the material production of markets squarely on the research agenda of economic sociology. While theoretically programmatic, the concept gets applied in the volume to a wide range of empirical cases including consumer credit, pharmaceutical markets, fishing quotas, mass retailing and cotton pricing.

With a British publisher, *Market Devices* makes the work of a range of French authors, who had until that time predominantly published in their native language, accessible to non-French scholars. It was strategic in presenting French actor-network theory and, to a lesser extent, French pragmatism to wider publics. However, by mixing the contributions in the volume with those by scholars from e.g., Scandinavian and American-trained scholars working in other traditions than ANT,

it avoided insularity and created a strategic, lasting bridge between literature on devices which had been developing in France from the 1980s onwards and international scholars of markets.

In the introduction to the volume, Muniesa, Millo, and Callon define market devices in passing as “the material and discursive assemblages that intervene in the construction of markets” (Muniesa, Millo, and Callon 2007, 2). The deployment of the term is part of a more encompassing project started in *The Laws of the Market*. Its overall aim is to demonstrate that, in contrast to new economic sociology which emphasizes the social and cultural embeddedness of markets, disembedded markets with relatively anonymous interactions between self-interested, calculating agents *do* exist. However, they do not come into being in and of itself. As Callon put it in his 1998 volume: “homoeconomicus does exist, but it is not an a-historical reality; he does not describe the hidden nature of the human being. He is the result of a process of configurations” (Callon 1998, 22).

Callon c.s. acknowledge in the volume that the device concept, or to be more precise its French equivalent *dispositif*, was coined by Foucault (for a discussion of the different approaches to the term *dispositif*, and the differences between the Foucauldian approach and the approach of actor-network theory, see Dodier and Barbot’s contribution to this volume). For Foucault, the term *dispositif* meant a

thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical and moral propositions – in short, the said as much as the unsaid. Such are the elements of that apparatus. The apparatus itself is the system of relations that can be established between these elements.

(cited in Agamben 2009, 2)

This definition, and the emphasis that Foucault put on the *dispositif*’s strategic nature, suggests continuity with Callon’s usage of the term. That’s indeed what some scholars have argued (see e.g., Dumez and Jeunemaître 2010). From the introduction to *Market Devices* it becomes clear, however, that Callon c.s. want to distinguish their own usage of the term from Foucault’s. It is telling that Callon c.s. choose to translate the French term “*dispositif*” not by “*dispositif*” but by the distinct term “*device*” (cf. Dodier and Barbot 2016). They legitimate this choice by arguing that it assists in positioning themselves vis-à-vis Foucault, and, for that matter, Bourdieu. While Bourdieu’s notion of disposition is too subject-oriented, Foucault’s *dispositif* is too object-oriented.¹ Unlike Foucault, but more in line with how Deleuze elaborated on the term *dispositif*, Muniesa, Millo, and Callon seek to avoid such a bifurcation of agency. Instead, they stress the agency of material objects and emphasize that “subjectivity is enacted in a device,” an idea which they refer to, again following Deleuze, as *agencement*. This resistance against the bifurcation of agency is what distinguishes the notion of market device from more generic terms which point at the materiality of economic life such as “*tool*,” “*technique*,” or “*instrument*.”

3 Mainstreaming devices

Now what kind of *agencements* do we find in empirical studies of market devices? What kinds of subjectivities are enacted in them? In the first place, many studies are about activities, processes and transformations needed for “free,” disembedded markets to come into being and exist: they assist actors for instance in making complicated calculations (e.g., of the worth of goods, services or financial instruments which are traded), in abstraction, objectification, or arranging the disentanglement of goods from their producers and the subsequent re-entanglement to their consumers. For instance, in MacKenzie’s by now classical study of the market for options, a formula for pricing options developed by the academic economists Black, Sholes, and Merton, which finds its way to the Chicago Board of Trade, enables the options market to become mature and grow exponentially (MacKenzie 2006). In Cochoy’s imaginative study of the shopping cart, these carts contribute to the creation of consumer cognition and of bonds between consumers and goods (Cochoy 2008). In Poon’s study of mortgage markets, the explosive rise of mortgage lending from the 1990s onwards was enabled by the collective use of so-called FICO scores and the integration of these scores into the market’s automated financial architecture. FICO scores were originally developed to measure, standardize, and control risk in markets for consumer credit, but later on traveled to other financial domains, turning them into a “traceable technological system involved in aligning the decision-making of lenders with regards to the qualities of borrowers” (Poon 2007, 2009, 658).

With its emphasis on calculation and abstraction, it is no coincidence that the concept has been particularly influential in studying financial markets, as opposed to other economic sociological topics such as regulatory dimensions of markets, where the embeddedness paradigm has remained much stronger and new approaches, such as Bourdieusian inspired field approaches, have become influential (Fligstein and McAdam 2012. See also Bartley, this volume). Indeed, the performative turn in market studies has been constitutive for the *social studies of finance* paradigm (Morgan 2012), which has institutionalized itself in the meantime as a subdiscipline, distinct from economic sociology, with its own conferences, self-identified scholars, edited volumes, a blog, etc.

While the core studies following the performative turn use “market devices” to account for the processes needed to produce disembedded markets, later studies have expanded the use of the term to e.g., trust devices which are used to judge the trustworthiness of claims made by counterparties in economic transactions (Bowen 2018); policy devices “that allow people to make sense of the world using statistics, measurement, and models” (Fligstein, Stuart Brundage, and Schultz 2017, 5); or judgment devices which assist in making judgments about the quality of goods (Karpik 2010). Attention for market devices has thus been further mainstreamed. In this process, the term’s ties to ANT were loosened. For instance, the term *agencement* is rarely used in these mainstream market studies, nor does the idea that agency is distributed across both human and non-human actors or that subjectivity is enacted in a device, surface very prominently.

Later studies also add a layer of complexity by pointing at the sequential nature of devices. As Dodier and Barbot (Dodier and Barbot 2016, 301) argue, they should be “conceived as a prepared concatenation of sequences, intended to qualify or transform a state of affairs through the medium of an assemblage of material or language elements.” An empirical example is the global halal certification industry analyzed by John R. Bowen, where a product needs to go through a series of device-centered events (tests in a lab, inspections in a factory, the issuing of the right paperwork, etc.) before these devices will have transformed it into a halal product, and that transformation is trusted as such by e.g., consumers (Bowen 2018).

What all studies have in common is a strong emphasis on the enabling character of devices. Reading one empirical study after another, the similarity in the type of pragmatic, “rolling-your-sleeves-up” language that is used is striking: the devices “afford” actors to do, see or perceive something, and without that “something” there would not be a market. They make sure that things get “enacted,” “ordered,” “rendered,” “settled,” “aligned,” “transformed,” or “organized,” and, again, without these interventions of devices a market would not come into being. To put it in terms of Dodier and Barbot, in the market device literature, the normative repertoire around the device is highly strategic. Its theoretical envelope, wider conceptual apparatus and understanding of agency may be entirely different, but the emphasis on the enabling, strategic dimension of devices at times reminds me of Swidler’s toolkit approach (Swidler 1986; Dodier and Barbot 2016, 304).

Karpik’s *Valuing the Unique* is exemplary in this respect. In the book, Karpik introduces the term judgment devices and, like Callon c.s., refers back to Foucault as the source (Karpik 2010, 44). The starting point of his analysis is that the quality of what he calls singularities (think of cultural goods, restaurants, personalized services such as those from lawyers or psychologists) is hard to assess for consumers. This is because singularities are multidimensional, incommensurable, while at the same time their quality is radically uncertain. Consumers in other words face a cognitive deficit when they need to buy such a singularity: how to make a reasonable choice? That’s where judgment devices come in. They “are used to dissipate the opacity of the market” (Karpik 2010, 44). Examples of judgment devices which consumers rely on are consumer reviews, rankings, brand names, the stated opinions of experts such as art critics or museum directors (who Karpik calls “cicerones”), or personal recommendations. The reasoning is strikingly similar to cognitive strands within neo-institutionalist theory or even behavioral economics, where limitations in the capacity to collect and process information are a reason for actors to rely on schemata, scripts, or routines whenever decisions have to be made, situations need to be judged, or goods need to be evaluated (see e.g., DiMaggio 1997; Lamont 2012; Scott 2001).

4 Critical reflections

As was already mentioned, Callon explicitly distanced himself from Foucault in developing the concept of device. This also shows in the fact that questions related

to power, governance, or discipline are rarely tackled in the market device literature. For some this surely is a virtue. Beuscart and Peerbaye, for instance, applaud the move away from Foucault, criticizing his use of the term for being “le lieu de l’inscription technique d’un projet social total, agissant par la contrainte, et visant le contrôle aussi bien des corps que des esprits” (Beuscart and Peerbaye 2006, 5) – just think of the panopticon as the quintessential Foucauldian dispositif.

However, to me it seems that Callon’s program, with its almost exclusive attention for the enabling, creative or productive dimensions of devices and by almost completely ignoring constraining aspects, is vulnerable to the opposite critique. Where Dodier and Barbot optimistically write that an “advantage of the concept of dispositif is that it enables scholars to consider varying degrees of constraint,” from, at one end of the spectrum, tough Foucauldian discipline to, on the other end of the spectrum, more subtle, flexible forms of constraint which take the form of e.g., “guidance” or “coordination” (Dodier and Barbot 2016, 295), in my reading of the market device literature, only the latter part of the spectrum is drawn on.² Moreover, empirical studies almost invariably present accounts of devices which have been successful in making markets by e.g., rendering objects calculable. We never hear about the myriads of devices which failed: the “misfires” (Butler 2010; Callon 2010) which have been designed, or were in the process of being designed, but did not materialize or did materialize but failed to perform the trick (see Hébert 2014 for a similar critique).

If we accept this assessment, how should the relative lack of attention by Callon c.s. for the constraining dimensions of devices be made sense of? Let me provide a number of – I admit speculative – answers. First of all, the strong micro-orientation of market device studies, which zoom in so far on ethnographic detail and the meticulous workings of devices, makes it hard to clearly see and analyze these constraining dimensions. Second and relatedly, the term is used exceedingly narrow in the device literature, frequently synonymous with tool or instrument, which contrasts with the much wider usage of the term by Foucault: as an ensemble of which those material forms are surely part, but other, heterogeneous elements such as institutions, regulatory decisions, moral propositions, or administrative measures are part as well. We see a tension here between the adoption of this wider, more encompassing use of the term which Foucault originally proposed, and Callon’s critique of the embeddedness program in economic sociology: paying attention to the constraining (e.g., legal, cultural, power-related) dimensions of devices would almost automatically mean bringing the embeddedness of markets back in. Distancing the device program from the embeddedness paradigm in other words came at a price.

A third reason for the relative neglect of the constraining dimension of devices may be that the attention of empirical studies has usually been focused on the devices themselves and their users (which in turn follows naturally from the idea of *agencements*). However, those whose economic lives are subjected to these *agencements* have received far less attention. For instance, we know a lot about how financial institutions developed FICO scores and other calculative devices which assisted

in creating subprime mortgage markets, but in these studies we learn very little, if anything, about the home buyers who, through these devices, were pushed into unsustainably high levels of debt and were then forced to vacate their houses; there has been a lot of attention for the ways in which judgment devices shape the decisions of e.g., restaurant lovers, but relatively little for restaurants and many other organizations who have to cope with being ranked and rated (Orlikowski and Scott 2013; Mellet et al. 2014; Espeland and Sauder 2016); we have detailed studies on the ways in which shopping carts shape the behavior of consumers, but little about the shop assistants whose jobs became superfluous once the carts, or, more recently, self-checkout machines made their appearance.

In this respect, the device literature is strikingly different from other bodies of literature which have also adopted the term *dispositive*. Think of the ways in which the term has been used in governmentality studies; remaining much closer to Foucault, these studies defined *dispositive* as “a common matrix through which knowledge and power are defined” (Silva-Castañeda and Trussart 2016, 492). Likewise, organizational studies using the term have been much more attentive to its constraining dimension. In these studies, it is used “as an interconnecting, broad, and diversified analytical tool,” which

permits an alternative access to the circumstances under which organizing and organizations take place. Deferring attention from the organization as an entity to a larger social field, without reducing the former to a given, even more fundamental entity (e.g. society), dispositional analysis elucidates conditions for organizing and organizational processes, which managers and concrete organizations as well as organizational theory need to address and take into consideration.

(Raffinsoe, Gudmand-Hoyer, and Thaning 2016, 274)

Another critique of the device program is the lack of attention for the ways in which devices themselves emerge, become dominant, or the circumstances under which they get adopted (cf. Kharchenkova and Velthuis 2018). If devices should be seen as the co-creators of markets, it would make sense to pay more attention to the co-creators' creators. I do not claim that these devices are treated by Callon as a *deus ex machina*. In fact, some of the best social studies of finance are detailed histories of the way a new market device was created and introduced to the market (see e.g., Preda 2006; Muniesa 2005). Also, the ways in which devices get translated (adjusted, interpreted, modified, etc.; see Poon 2009, 659) when they travel from one market setting to another or when they get integrated into a market's material infrastructure, have been thoroughly scrutinized (see e.g., Barman 2015 on the role of reporting standards and rating systems for firms in the creation of a market for impact investing). But how these processes of development and institutionalization fit in wider social structures, whose interests devices serve, or how specific political economic constellations such as financialization or neoliberalism shape devices in particular ways, hardly gets addressed (see Fligstein and Dauter 2007 for

a similar critique; Callon 2010). As Marion Fourcade has likewise argued regarding performativity:

the mere availability of certain economic technologies does not guarantee their performative effects for the simple reasons that these technologies may not muster enough institutional and political support or that they may not resonate enough with the cultural claims they are supposed to represent. In fact, economic methods for the valuation of nature come in very different shapes and imply very different forms of calculability. Neither of these are incidental, of course; rather, both the methods themselves and the calculability they embody are the product of very specific social processes that are of great relevance to the ‘performed’ outcome itself.

(Fourcade 2011, 1724–25)

5 Conclusion

The aim of this essay has not been to fuel skepticism of those who see ANT, as Liz Mcfall has phrased it, as no more than “a plethora of banal descriptions of processes and objects of limited, if any, general, interest” (Mcfall 2009, 275). With her I agree that devices and related concepts like *agencements* and performativity have greatly enriched the toolset of both economic sociology and market studies. The materiality of markets had indeed been mostly ignored, and the performative turn has proved to be an effective way to put it on the research agenda. Thus my critiques of this program should not be read as a defense of “new” economic sociology. In fact, some of these critiques could be leveled against new economic sociology as well: like the device program, new economic sociology, with its predilection for the social and cultural embeddedness of markets, paid relatively little attention to the wider political economy of markets.

Why does this matter? One of the many possible tests which the market device program could be subjected to, is how it compares to both hegemonic, orthodox economic approaches, as well as to heterodox approaches such as new economic sociology and institutional economics, in explaining key economic events and processes such as the financial crisis of 2008 or, more recently, the increasing share of economic profits flowing to capital rather than labor (see Butler 2010 for a similar critique). What does it add to our understanding of these events? My tentative answer would be: not that much. In fact, in all the detailed studies of calculative devices conducted right *before* the financial crisis, no signs of upcoming disaster was picked up (see Fligstein 2009 for a similar argument); in the studies published *after* 2008, the crisis itself is addressed relatively infrequently, especially when compared to “mainstream” economic sociology or political economy (however, for exceptions, see e.g., MacKenzie 2011; Beunza and Stark 2010; Morgan 2012).

To conclude, this chapter is meant as a friendly, not a skeptical critique. The market devices program has, over the last decade and a half, been highly successful in

channeling attention to the material dimension of markets. But for the concept to get anchored in the mainstream, it needs to build bridges to other strands in market studies such as (old) embeddedness inspired approaches or (new) field approaches (see MacKenzie 2019 for a similar plea), instead of continuing to define itself in opposition to those. In particular, it needs to have attention for the restraining (instead of only the enabling) dimension of market devices. Moreover, the social structures, institutional configurations, cultural contexts, and (political) power relations which shape devices, which co-determine if and how devices emerge and get (de-)institutionalized, need to be taken into account.³ In doing so, we can ensure that my Danish colleague will eventually be proven wrong, and that the term market devices turns out to be more than a conceptual hype.

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Notes

- 1 In the Foucault-exegesis literature, there is an ongoing discussion about the right way to translate the French term “dispositif”: as apparatus (Agamben 2009), device, or simply dispositive (Bussolini 2010). It is beyond the scope of this chapter to delve into that discussion.
- 2 In recent literature on the impact of e.g., rankings and ratings (Espeland and Sauder 2016; van Doorn and Velthuis 2018) or the use of algorithms in digital markets (Fourcade and Healy 2016; Faraj, Pachidi, and Sayegh 2018) this constraining dimension of market devices has received much more emphasis.
- 3 For instance, the popularity of academic rankings as a judgment device of universities in the United States (Espeland and Sauder 2016), cannot be seen as disconnected from the relatively limited amount of government funding, high tuition fees, while their relatively limited popularity in e.g., the Netherlands, cannot be seen as disconnected from legal frameworks which prevent status hierarchies among universities from coming into being.

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