Mundane market matters: from ordinary to profound and back again

Daniel Neyland, Véra Ehrenstein and Sveta Milyaeva 2018

To cite this paper, a final version has been published as

Neyland, D., Ehrenstein, V., & Milyaeva, S. (2018). Mundane market matters: from ordinary to profound and back again. *Journal of Cultural Economy*, 11(5), 377-385.

Mundane market matters: from ordinary to profound and back again

Daniel Neyland, Véra Ehrenstein and Sveta Milyaeva

Introduction

Markets continue to be a matter of concern for both scholars and the public at large. Financial trading and meltdowns, public sell-offs and regulation, demands for intervention and access to trade, all continue to provide focal points for orienting a range of questions. As we sit in our offices in London writing this introduction, a quick glance at one news source reveals dramatic and compelling headlines that vie for our attention regarding the impact of Brexit on financial mar- kets,1 the role of market-based thinking in the future of UK higher education2 and the continuing repercussions of low interest rates.3 Although the term 'market' is common across these stories, and notions of competition and price or cost appear central, we are left with no certainty regarding just what a market is, from where or what it is formulated, who participates and how, and with what consequence. In these stories, markets are presented as both a part of the problem (e.g. with UK higher education becoming problematically reoriented by market imperatives) and a part of the solution (e.g. with access to new markets key to the post-Brexit UK economy).

In this special issue we present a series of papers which in different ways dig into the detail of these market matters. We pose our own questions about the stuff of markets – the ordinary, taken-for- granted things that go toward making markets what they are. Drawing on notions of the mundane,4 we ask: how does the stuff of markets come to be both ordinary, pervasive, everyday and profound – helping to establish and hold in place the very nature of markets and how they come to matter? What can a focus on the mundane tell us about how markets come into being and how they are maintained over time? Under what conditions do mundane market things come to matter? Or conversely, for whom, in what ways, and in relation to what is this market stuff ordinary? How do things come to be pervasive and taken for granted? And finally, how do scholars come to participate in the shaping of markets by studying such mundane matters?

The papers herein explore mundane market matters through the field of Science and Technology Studies (STS). In recent years STS has, in part, focused on treating markets as socio-material assem- blages that are continuously made and re-made through the work of economists, models, calculative devices, forms of valuation and experimentation which disentangle entities from their social, cultural, and technical obligations, in order to be reentangled into specific market framings (Callon 1998, MacKenzie, Muniesa and Siu 2007, Muniesa, Milo and Callon 2007). This suggests a rich array of tools for developing a detailed understanding of mundane market matters and opens up opportunities for treating economics and market matters as performative (MacKenzie 2006); investigating such things as pervasive modelling, measurement, and quantification as constitutive practices (MacKenzie 2009); questioning what counts as an ordinary market actor and what makes market relationships hold together (Cochoy 2009, Riles 2011); and assessing how frequently over-looked matters such as market metrology or product circulation intersect with broader political systems (Barry 2002, Mitchell 2011).

These ideas and other provocations introduced by the field of STS and closely allied approaches provide a rich array of means for engaging with the mundane. The following papers draw on these ideas in their focus on empirical settings ranging from electricity

metres, to plastic, to queues – experimenting with re-orderings of market things and taking up the challenge of drawing together STS approaches to markets with ideas from other disciplines. But before we engage with the papers in detail, we first go on a brief excursion through what we consider important in mundane market mat- ters that occupy positions as both ordinary and profound.

The ordinary and the profound in mundane market matters

In choosing to focus on the mundane, one might be forgiven for thinking that the matters of concern in focus are trivial, pervasive, and easy to overlook. The suitably dull term 'ordinary' might capture the nature of these matters. We suggest, however, that this ordinariness is exactly what points toward the importance of these matters. To understand how a market comes to be considered such, excavating what has become ordinary might be a good place to start. For example, to examine the enactment of global trade emphasises the central role of market maintenance in achieving the physical exchange of commodities, through routine paperwork, shipping, and interpersonal ties. The ordinary work that follows the settlement of a deal (its volume, schedule, quality, and price) is what brings market transactions into being as fragile and contingent relations.5 The achievement of ordinariness might itself be the outcome of market and marketing practices that seek to, for example, accomplish a broad market share (pervasiveness), attune goods to the vagaries of everyday life or attune everyday life to the exigencies of goods (such that those goods become routine). That the achievement of ordinariness is in itself not straightforward is made evident in the vast array of marketing textbooks and gurus, marketing teams and experts in product launch. Their very reason for being, we might say, is dedicated to the accomplishment of ordinariness.6

This is not to say that ordinariness is without politics, but instead to suggest that the politics lies in accomplishing demarcations of the ordinary. The nature of matters – their ontology – is at stake, and settling the nature of matters is a political act. As Mol (2006,p. 2) suggests, it is not that 'ontology is given before practices, but that different practices enable different versions of the world. This turns ontology from a pre-condition for politics into something that is, itself, always at stake'.7 If we orient these ideas toward the ordinary, there is in principle no limit to the entities at stake. As such the politics of accomplishing ordinariness are significant because of their pervasiveness. Yet to use the term politics in relation to the demarcation of the ordinary does not reduce the matter of concern to traditional STS interests in, for example, distinctions between people and things or the nature of relations between people and things. Instead, what is always and already at stake is the nature of the demarcation which accomplishes a position from which we can talk of difference.8 The politics is thus in the demarcation.

One way to capture the importance of this pervasive, overlooked, ordinary, and trivial stuff is to turn to the work of sociologist and ethnomethodologist Mel Pollner. Pollner (1974) draws on the Latin etymology of the word mundane (mundus) to explore how matters are not just pervasive, but become of the world – that is, a taken-for-granted, accepted feature of a particular social situation. Understanding how people and things become of the world of markets is central, we will suggest, to exploring how markets come to be what they are. For Pollner's study of US court decisions on speeding, the pertinent question is how putative evidence that a car was driving at a certain speed can become of the world of the court charged with making a decision about a driver's possible speeding offence. Through what organisational relations, material stuff, responsibilities taken on, and accountabilities discharged can potential evidence come to be of the world of the court's decision-making

process? Pollner suggests that in instances of dispute, accountability relations are arranged such that a car and its driver cannot be permitted to drive at both 30 and 60 miles per hour simultaneously – the evidence must be made to act on behalf of one of the accounts (30 or 60), not both. Selections are made to demarcate what will and what will not count, what will become part of the world of the court and what will be dismissed, at the same time as responsibilities and accountabilities for action are distributed and their consequences taken on. In making sense of what composes a market situation, questions of who and what becomes of the world of the market, who and what gets to count and who and what gets dismissed, how accountabilities and responsibilities are taken on, are all crucial.

This suggests that rather than being unbearably dull, questions of ordinariness set things at stake: What gets to count as ordinary? How is pervasiveness accomplished? Through what means do matters become of the world? In market situations, these questions are anything but trivial. In trying to introduce a new smart metre to render consumers eco-citizens, for example, just how do metres become ordinary, routinised, and taken-for-granted (Grandclément and Nadaï, this issue)? What has enabled plastic to become of the world of mass consumption (Hawkins, this issue)? In introducing a new market-based system for funding vaccines in low-income countries, what is required to make the vaccine pervasively accessible (Ehrenstein and Neyland 2018)?

Through these questions, we attain a sense of the importance of ordinary stuff. And yet we are having to work hard to hold this focus steady. Although we suggest that the pervasive is in itself important, the ordinary also comes to make sense, it seems, through moments that are in various ways out of the ordinary. In other words, in many market situations matters are not just pervasive but also profound. In this way, we suggest that the mundane relates broadly to matters that are pervasive and taken for granted, but the mundane also alerts us to the question of how things become of the world – that is, not only to the fact of their ordinariness, but to the process through which they achieve that position. Ordinariness refers to those specific mundane matters that are left unmarked for a time and continue to contribute to the accomplishment of consistent effects.

By introducing the profound as a counter point to the ordinary, we thus draw attention to those matters that in different ways need to be called to attention and for which new sets of actions need to be arranged. They are marked, and a response is needed. In market matters, the nature of what is called to question or seems to insist on a response is broad. It can involve questions posed by the introduction of new objects, such as the smart metre in Catherine Grandclément and Alain Nadaï's article (this issue), which at the point of inception provides a new insertion into the home and into the regulation of the electricity market. It can involve specific matters of concern, such as plastic and its environmental consequences, as Gay Hawkins writes (this issue). Or it can involve questions provoked by the travails of trying to accomplish scale, for example in the introduction of new vaccines, as two of us have previously described (Ehrenstein and Neyland 2018).

Drawing together these points, we note that there is not one single cause of what makes something profound. But we can also begin to see that the pervasive and the profound are deeply entangled: The smart metre raises questions as a result of its broad roll-out, the environmental consequences of plastic are derived from its pervasiveness, the broad use of vaccines opens up possibilities for measuring and questioning their efficacy. The challenge, then, is to figure out a way of working through mundane market matters that can stay attuned to their simultaneous or alternating ordinariness and profundity. How can we accomplish a

position from which we can reflect on such distinctions? Here we offer two examples as initial entry points into the study of the profound and the ordinary – the tension between the marked and unmarked – before engaging with the papers of this special issue in greater depth. Both examples focus on the use of markets to intervene in public problems and this focus seems to make distinctions between the ordinary and the profound particularly acute.9

Example 1: pervasive data

In recent years nothing has become more pervasive and ordinary than our digital data. Every time we click, search, browse, call, text, mail, buy, link, like, dislike, or block, we participate in the creation of data that can be stored and utilised to say something about us. Data is so ordinary, it has become at times easy to overlook as an aspect of who and what we are, how we live, work, and enjoy ourselves: we become our data or our data becomes us in various everyday ways. For example, the online advertising industry uses our search histories to compose profiles of who we are and the kinds of advertising to which we might respond. It is a mundane market matter at its most pervasive and unmarked. And yet data also has profound moments.

For example, data has been a matter of regulatory concern for more than 20 years. The drafting of the first EU Data Protection Directive in 1995 and its subsequent implementation from 1998 set out the principles (such as necessity and proportionality) for controlling data and its access, movement, and ownership. Partly in recognition of the vast changes in the data landscape that have emerged in the years since 1995 (when a major regulatory concern was the storage of VHS tapes by CCTV systems), the new EU General Data Protection Regulation (GDPR) signalled a number of changes that rearranged the regulation of data, now oriented more closely toward digital or big data, the internet, and data scraping and mining. The move from a Directive that set out shared principles to a Regulation that has sought to put in place a single legislative framework for all EU member states has raised a number of market-oriented concerns. 10 Chief among these is that the new Regulation looked to introduce a 'single data market.' This apparently banal switch in legal form (Directive to Regulation), thus seems to carry with it a huge change in legislative approach, from preventing to enabling flows of data, from an emphasis on helping Data Protection Officers to helping the data industry, and from not including online data advertising (at least not in the 1995 version) to putting such advertising centre-stage. Legal form thus draws together ordinary and profound market matters on the same page.

What is this market in data to be? As a product of EU bureaucracy, its ordinariness is almost guar- anteed. As a Regulation that will apply to every EU member state, its pervasiveness is similarly assured. Yet the GDPR is also about making data profound. The regulatory effort is oriented toward marking data as a matter that should concern us.

In the European Union, to a degree, this has already begun to work. The market-oriented Regulation has inspired newspaper headlines and required companies to contact individuals on their databases. We now know about the GDPR. Yet the precise nature of the concern – the constituent features of what is profound, what is at stake, and why data is now being marked for our attention – is articulated in different ways by different market participants. For some, the Regulation provides the grounds for a market for data, while for others it is a market inhibitor.11 Indeed, data industry lobbyists call upon long-standing concerns in economics12 to suggest that anything that prevents the free flow of data is a restriction on economic growth. Here, growth is noted as an outcome of the opportunity for the data

industry to find ever more innovative means to mine, scrape, and analyse data to create and sell profiles based on our internet activities, as well as to create ways to bid for, buy, and sell online advertising space.13 What is presented as crucial to economic growth is also central to discussions regarding the inequities of online data across Europe, the US, and elsewhere. Concerns include who owns data, how it could and should (or should not) be capitalised, who is in control of data as it is stored and circulated, and what happens to our understandings and practices of privacy when data can be freely scraped and then monetised (and at the point of monetisation, data no longer flows so freely). Finally, the use of data becomes embroiled in politics when firms such as Cambridge Analytica are accused of harvesting data from nominally academic research to produce targeted advertising in the run-up to elections to shape voting outcomes.14

Ordinariness and profundity abound then. But we can only begin to make sense of the ordinary and the profound (and how they are enabling and constraining, problematic and essential, and involved in what gets marked and how by a market intervention), by paying close attention to the position from which such distinctions are accomplished.

Example 2: everyday costs of care

Switching attention to a second example provides the opportunity to reflect further on the accomplishment of these ordinary and profound – and occasionally fraught – market matters. In contrast with the deep-seated banality of data, our second example seems to carry with it a normative injunction: never allow care to become routine or dull. The direct connection to people's wellbeing, even survival, suggests it ought not to be thought of as ordinary. Yet the transformation of care into a field amenable to market intervention requires just such ordinariness for its success. Preparing care for the rigours of market work requires the accomplishment of distinctions between the ordinary and profound in order to establish a position from which an intervention can take place.

Here, we turn attention to a specific intervention in the UK: Essex County Council's Social Impact Bond for children at-risk of being taken away from their families and placed in residential care homes.15 'Children at-risk' is one of a number of classifications (also including recidivism, homeless- ness, and the elderly) that were identified as seemingly intractable costs for the UK government in the late 1990s and early 2000s. Whatever money was invested in an intervention, the argument went, the problem and its associated costs remained. As a result, 'children at-risk' became a notable target for policy experimentation that sought to rethink the nature of what counted as a cost, how levels of required government spending might be reduced, the terms of investment (and who might be an investor), and what might count as a return on investment and for whom. These experiments have taken the form of concerted interventions that have transformed children at-risk from a cost to an investment proposition, from an intractable problem of government to a source of returns for private investors, and from the margins of government policy to the centre of experimentation in Social Impact Bonds (SIB).

SIBs enable the building of a government-backed investment structure, in which an investment- return relationship sits centrally. The financial-contractual structure is presented as a requirement that provides sufficient security to investors (perhaps unused to working on public problems). Much of this security depends on timing: how much money will be put in, when, with returns triggered by what means and paid at what amount and at what time? What is bought and sold is not just a financial return, but a better imagined future for the subjects of

the SIB, a more efficient public sector, and an opportunity for the investors to promote their own positive role in the world.

Yet for SIBs to work as an intervention backed by government, they must operate in a generalised and pervasive manner. The specificities of individual children at-risk, the specific issues of any particular form of care – however fraught, however profound – must be ignored. A demarcation must be created through standardised contracts, template agreements, central government advice, and financial regulations that compose a position from which the ordinary and profound can be separated. This also enables the creation of a position from which children at-risk can be seamlessly entered into a form of intervention from which the individual concerns of specific children and their care can be separated. Such profound matters, with so much at stake for individual children, should not travel into the investmentreturn structure. Instead, children at-risk (along with recently released prisoners, the elderly, underperforming school pupils, and many other subjects of SIBs) must be successively transformed into aggregated entities that sit ever further away from their profound origins. In place of being individuals marked out for careful consideration relating to their own specific (pro-found) circumstances, they must be drawn together into an individually unmarked collective (and made ordinary). Initially, this transformation takes place by arranging the aggregated group through a single metric: a cost. The cost is then successively transformed into an investment opportunity, as outside investors are invited to invest sums that will cover the cost (of care, prisoner rehabilitation, pupil incentives, etc.). The cost-investment is then successively transformed into a set of targets – in particular, money that could be saved by carrying out a successful intervention (for example, reducing the number of children going into care by using investors' funds to pay for alternatives). The target is then transformed into a potential return to investors by dividing up the costs saved between the investors (their return) and the state (who have acted as backers of the intervention).

Profundity slips from view as standard accounting, investment, and contractual practices come to the fore. Mundane market matters and the successive accomplishment of ordinariness thus form a requirement for children at-risk to become of the world of the market intervention. Whereas in our first example, the ordinariness of data is a problem for regulators seeking to promote a widespread set of concerns with data in order to justify their intervention, in this second example, profound concerns are a problem for limiting the universal applicability of the intervention. In place of a transition from ordinary to profound, we find a transition from profound to ordinary, so that such matters as children at-risk can take their place in market situations. We suggest that making sense of the grounds on which distinctions are accomplished between the ordinary and the profound provides an important means for making sense of the markets involved in these cases. This is because the transformations rendered by switching between the ordinary and profound is central to settling, at least for a time, questions of the nature of entities involved and their politics. Data must be made profound through the GDPR for it to succeed in marking for our attention why we need a market-enabling piece of legislation. Children at-risk must be made into an unmarked, aggregate ordinary in order to become the subject of investment. Markets, the ordinary and profound are inseparable.16

The papers

This inseparability of markets, the ordinary and the profound is a theme that recurs across the papers collected together here. Gay Hawkins, for example, suggests that plastic moved from novelty to ordinariness as it shifted from unique innovation into everyday commercial life. In

this move, plastic raises questions about how food is preserved and consumed, how consumers are targeted by advertising, and how consumers' sense of who they are is transformed through packaging. This transformation provokes new normativities and accountabilities for how everyday lives ought to be organised.

This focus on the material enactment of normative prescriptions is further developed by Véra Ehrenstein in her paper on the problematic marketisation of the carbon stored by trees in the tropics. Ehrenstein describes how market relations are negotiated to try to enrol earthly things in emissions offsetting schemes in order to address the profound problem of global warming. In her paper, Zsuzsanna Vargha examines the act of queuing and shows a shift between registers of recognition. Vargha suggests that in the socialist era in Hungary, the wait for access to scarce resources was an ordinary feature of the organisation of everyday life, in which the resources to be accessed were sometimes unclear. This contrasts with the organisation of waiting in post-socialist banks, wherein the ordering and accessing of financial services and resources retain a mysticism as customers fail to see whose turn it is, who has what expertise, or how their needs are being prioritised. To take a number in the post-socialist bank is both the most ordinary move in the making and maintenance of a routine organisational form and a profound matter of digitalisation, political trans-formation, and capitalisation.

In their contribution, Alain Nadaï and Catherine Grandclément pursue similar themes. The smart metres they study operate in a similar manner to new queuing technologies in asserting new ways to organise everyday activities. These metres are also profound in their redistribution of responsibilities for action, with regard to who and what does what work. At the same time, the metre is the focus for political controversy with questions posed of the bundling and unbundling of consumers, metres, and other market actors. What is never unbundled is the continuing entanglement of the ordinary and the profound that marks mundane market matters.

Finally, Christian Frankel looks at the market conceptually, focusing on how it has come to occupy a position as both ordinary and profound in the work of STS scholars. The now famous strawberry market study (Garcia-Parpet 2007) is, in this sense, both profound in its specificity, provoking an array of new thinking around what constitutes the market, and more pervasive in its pro- motion of a market-like concept to be picked up and further scrutinised by subsequent works.

Looking across the papers, several themes are drawn to the fore:

Metrology has already been identified by STS scholars as a key means to calculate and qualculate (Cochoy 2002) Callon and Law (2005) market participation, its stability, and its effects. This work demonstrates the numeric performativity of measurement. A focus on mundane market matters can re-direct these questions to ask: what needs counting? How is mundane metrology made sensitive to the needs of a particular market intervention? From smart metres and bank queueing systems to an acacia plantation absorbing carbon dioxide, the papers in this collection ask: what are the devices and practices of mundane metrology in markets? What logistics sustain market metrology? What are the spaces and temporalities enacted through metrological practices? How might the specificities of counting in, for example, the strawberry market encourage the development of broader conceptual reflection on markets? How is measurement combined with resource allocation?

Accountability broadens the focus from techniques and devices of counting and accounting to an investigation of the material structures of accounting devices and how these might achieve technical standards, set in place demands for the provision of particular forms of information, and establish particular relations of responsibility. In Hawkins's article, for example, plastic becomes a matter for the protection and division of food at the same time as it is involved in an unfolding domestic realm, dividing what ought to happen and who ought to act. While metrology might usefully turn our attention to matters of counting, accountability can broaden our horizons toward the everyday exigencies of figuring out expectations of who and what ought to act, in what way, toward whom. How might such accounts inform further action?

Politics then enters into mundane market matters at the intersection of counting, accounting, distributions of responsibility, and subsequent decisions about inclusion and exclusion. From the infrastructural sense of politics in post-socialist societies, through the exclusionary practices and promises of material divisions in queueing, utilising customer data in smart metres, and separating food through packaging, to grassroots movements and critiques of carbon markets, mundane market matters are infused by and accomplish particular political struggles. Our papers ask: what political matters emerge through market exchange? What are the matters of disagreement? In which settings are market matters problematised, debated, and contested? Whose politics get voiced, and who speaks for the mute devices?

Categorisation and division also pervade these papers: through the ordinary matters of display in, for example, food packaging and its marketing, or through interfaces in bank queues, the politics of the United Nations, or pricing with smart metres, tied once again to forms of metrology and accountability. Exploring these matters brings to the fore the definition and delimitation of broad wholes, the process of assimilation, and the organisational and personal consequences (among others) of being divided and categorised. Questions abound about, for example, how categories and hierarchies are accomplished through the mundane, or how our everyday matter, so familiar and overlooked, also participates in the generation and maintenance of division and order.

Ontology and normativity provide a final sense of what is at stake in these studies. The very nature of matter (questions of ontology) is drawn to our attention at the same time as questions are posed of what the matter ought to be (questions of normativity). The two are inseparable. We end up with questions about what Mol (2013) terms onto-normativity. But a particularly trenchant form of onto-normativity appears to stalk our mundane market matters. Arguments about, for example, the environment, finance, children at-risk, and data all suggest that market matters and profound questions of individual or collective futures are at stake. This provides a methodological and theoretical challenge. Perhaps we need a new grammar for explicating the onto-normativity of ordinary market things? Through these themes, the mundanity of market matters shifts in subtle and sometimes dramatic ways – incorporating a focus on the pervasive, the ordinary, the overlooked; figuring out the ways market matters participate in ordering the everyday; questioning how people, things, resources, and relations become of the world of markets.

Notes

1. See: http://www.ft.com/cms/s/0/0793f094-7514-11e6-b60a-de4532d5ea35.html

- 2. See: http://www.ft.com/cms/s/0/f39bad38-6b73-11e6-ae5ba7cc5dd5a28c.html#axzz4JkP5ZEtW
- $3. See: \underline{http://www.ft.com/cms/s/0/bb21b56a-7573-11e6-b60a-de4532d5ea35.html?ftcamp=published_links%2Frss%2Fmarkets%2Ffeed%2F%2Fproduct#axzz4JkP5ZEtW$
- 4. See: Pollner (1974), Woolgar and Neyland (2013), Hawkins, Potter and Race (2015).
- 5. Caliskan (2010), Tsing (2015), see also Cholez and Trompette (2016).
- 6. Cochoy (1998), Simakova and Neyland (2008).
- 7. Mol (2006).
- 8. Suchman (2007), Bruun Jensen (2010), Denis and Pontille (2015).
- 9. Thanks to the editors for making this point.
- 10. Neyland and Milyaeva (2016).
- 11. Ibid.
- 12. Posner (1981).
- 13. Neyland and Milyaeva (2016).
- $14. \ See \ for \ example: \ https://www.theguardian.com/news/2018/mar/26/the-cambridge-analytica-files-the-story-so-far$
- 15. Neyland (2017).
- 16. Despite both these examples comprising interventions into public problems, there is no clear divide between

ordinary/profound that maps onto a divide between economy/society; both the nature of economy and society are at stake. (Thanks to the editors for drawing our attention to this).

References

Barry, A., 2002. The anti-political economy. Economy and Society, 31 (2), 268–2284. Bruun Jensen, C., 2010. Ontologies for developing things. Rotterdam: Sense Publications. Caliskan, K., 2010. Market threads. Princeton, NJ: Princeton University Press. Callon, M. and Law, J., 2005. On qualcuation, agency and otherness. Environment and Planning D: Society and Space, 23, 717–7733.

Callon, M., 1998. The laws of the markets. Oxford: Blackwells.

Cholez, C. and Trompette, P., 2016. Economic circuits in Madagascar: "Agencing" the circulation of goods, accounts and money. Consumption Markets & Culture, 19 (1), 148–166. Cochoy, F., 1998. Another discipline for the market economy: marketing as a performative knowledge and know-how for capitalism. In: M. Callon, ed. The laws of the markets. Oxford: Blackwell Publishers, 194–221.

Cochoy, F., 2002. Une Sociologie du Packaging ou l'Aê ne de Buridan Face au Marchë [A sociology of packaging, or Buridan's ass in the face of the market]. Paris: Presses Universitaires de France.

Cochoy, F., 2009. Driving a shopping cart from STS to business, and the other way round: On the introduction of shopping carts in American grocery stores (1936–1959). Organization, 16, 31–55.

Denis, J. and Pontille, D., 2015. Material ordering and the care of things. Science, technology & Human Values, 40 (3), 338–367.

Ehrenstein, V. and Neyland, D., 2018. On scale work: evidential practices and global health interventions. Economy and Society. doi:10.1080/03085147.2018.1432154

Garcia-Parpet, M., 2007. The social construction of a perfect market: The strawberry auction at fontaines en sologne. In: D. Mackenzie, F. Muniesa, and L. Siu, eds., Do economists make markets? On the performativity of economics. Princeton: Princeton University Press, 20–53. Hawkins, G., Potter, E., and Race, K., 2015. Plastic water. London: MIT Press.

MacKenzie, D., 2006. An engine, not a camera. London: MIT Press.

MacKenzie, D., 2009. Making things the same: gases, emission rights and the politics of carbon markets. accounting. Organisations and Society, 34, 440–455.

MacKenzie, D., Muniesa, F., and Siu, L., eds. 2007. Do economists make markets? On the performativity of economics. Oxford: Princeton University Press.

Mitchell, T., 2011. Carbon democracy: political power in the age of oil. London: Verso.

Mol, A., 2006. Bodies in theory: physical actors of various kinds. In: Paper presented at the stuff of politics conference, Worcester College, Oxford, 7–10 December.

Mol, A., 2013. Mind your plate! The onto-norms of Dutch eating. Social Studies of Science, 43 (3), 379–396. Muniesa, F., Milo, Y., and Callon, M., 2007. Market devices. Oxford: Wiley-Blackwell.

Neyland, D., 2017. On the transformation of children at-risk into an investment proposition: A study of social impact bonds as an anti-market device. The Sociological Review, online first.

Neyland, D. and Milyaeva, S., 2016. Brexit and the failure of pre-emptive reconciliation. The Sociological Review. https://www.thesociologicalreview.com/journal/rapid-

 $responses/article/brexit- and -the-failure- of-pre-emptive-reconciliation- a-study- of-the-general-data-protection-regulation. \\html.$

Pollner, M., 1974. Mundane reason. Cambridge: Cambridge University Press.

Posner, R., 1981. The economics of privacy. American Economic Review, 71 (2), 405–409.

Riles, A., 2011. Collateral knowledge. Chicago: University of Chicago Press.

Simakova, E. and Neyland, D., 2008. Marketing mobile futures: assembling constituencies and narrating compelling stories for an emerging technology. Marketing Theory, 8 (1), 91–116.

Suchman, L., 2007. Human machine reconfigurations. Cambridge: Cambridge University Press.

Tsing, A., 2015. The mushroom at the end of the world: on the possibility of life in capitalist ruins. Princeton, NJ: Princeton University Press.

Woolgar, S. and Neyland, D., 2013. Mundane governance. Oxford: Oxford University Press.