Valuation Studies Vol. 2(2) 2014

Contents:

LiU Electronic Press
http://valuationstudies.liu.se
Valuation Studies logo by Rebecca Elfast

Valuation Studies is a peer reviewed open access journal connecting several vibrant research fields working on the study of valuation as a social practice.

The journal IT-infrastructure is provided and maintained by the *Linköping University Electronic Press* (LiU e-press). The operations of the journal is supported by a grant from the *Swedish Research Council* (VR).

Web:	http://valuationstudies.liu.se
E-mail, editors:	editors@valuationstudies.liu.se
E-mail, office:	office@valuationstudies.liu.se
Twitter:	@Val_Studies
Facebook:	http://www.facebook.com/ValuationStudies

Valuation Studies 2 (2) 2014: 87–96

Editorial note

Valuation Studies and the Critique of Valuation

Liliana Doganova, Martin Giraudeau, Claes-Fredrik Helgesson, Hans Kjellberg, Francis Lee, Alexandre Mallard, Andrea Mennicken, Fabian Muniesa, Ebba Sjögren, and Teun Zuiderent-Jerak

Critique of Valuation as a Topic

1. What are the possible relations and tensions between the study of valuation as a social practice and the critique of valuation? *Valuation* denotes here any social practice where the value or values of something are established, assessed, negotiated, provoked, maintained, constructed and/or contested. The question thus in effect asks how the very study of such practices relates to the exercising of critical judgement on these very same practices. This topic is pertinent here and now for a number of reasons.

2. First, it resonates with apparent scholarly preoccupations with matters of concern, critique, care and mattering, not least in relation to constructivist studies (e.g. Latour 2004; Boltanski 2011; Puig de la Bellacasa 2011). Where in these pensive positions would we find good support for worthwhile studies of valuation as a social practice? This question hinges on what counts as good and worthwhile research in the first place. Or rather, where *else* than in such pensive positions could any value be found? What comes to count as value can in the end only depend on what gets valued!

The Editorial Board, editors@valuationstudies.liu.se

LiU Electronic Press, DOI 10.3384/vs.2001-5992.142287
http://valuationstudies.liu.se

3. Second, since the publication of this fourth issue of *Valuation Studies* marks an end to the journal's immediate infancy, we have an adolescent urge to reflect on where we have been and where we are heading. Incidentally, the editorial "we" has simultaneously been refurbished and enlarged. The new editorial board now encompasses in total ten editors for *Valuation Studies,* all of whom have contributed to this editorial note. This extension of the editorial "we" has opened up for the possibility of more disagreement on and around the pages of this journal, and further warrants reflecting on our positions (in the plural) vis-à-vis valuation and critique. The core premise of this co-authored editorial note is that the topic of the critique of valuation is central, and that it is precisely for this reason neither possible, nor helpful, to produce a fully coherent and agreed-upon editorial position on it. That is also why we have modelled this editorial note on the format of a "provocation piece" (see, for instance, Woolgar et al. 2008).

4. The broad question of critique has been addressed before. Working with valuation and critique here aims to articulate an on-going engagement and concern with how critique is done. Such an engagement makes the matter more actionable in terms of positioning than the more comfortable and conventional practices of referencing (visible) and peer reviewing (invisible). Treating critique as a practical concern rather than an epistemological trap also hopefully avoids its constraining placement *on* an analytical pedestal or *in* a hair shirt. (Both of which have the common characteristic of making social scientists different from everyone else—albeit "better than…" or "worse than…," respectively.)

Positions and Questions on Critique

5. The study of valuation is, at its core, about making the social practices of valuation discussable and, possibly, thereby also accountable. It is about turning the establishment, assessment, and negotiation of values into topics for conversation. This obviously builds a bridge between the study of valuation and its critical examination. In fact, some could very well argue that critique and valuation are two angles for considering the same thing. Does not the social practice of valuation consist precisely in some sort of a critical examination of value? A sociology *of* critical capacities would lead us in that direction (Boltanski and Thévenot 2006). But we could also turn the argument around and study critique as a particular kind of valuation practice.

6. One approach to the study of valuation is to examine valuation practices while assuming an impartial and symmetric posture, in a manner similar to that which has been honed in science and

technology studies when considering the production of scientific knowledge and the shaping of technology (e.g. Bloor 1976; Latour 1987). Such an approach would urge us to examine one or several sites of valuation while refraining from presuming that one or the other produces an inherently more true valuation than the other. This provides no leverage for independently assessing the veracity of any valuation practice since no firm values are available against which one can compare its outcome. This does not mean that different valuations do not come with different consequences, many of which may well deserve a critical challenge. Employing a principle of symmetry (Bloor 1976) in the study of valuation surely does not need to result in the moral flat-land of relativism concerning the consequences of valuations. Symmetry rather makes a valuation *and* its consequences discussable by articulating what contributed to the shaping of, and the mediation by, the valuation at hand. This argument connects with the philosophical endeavour of Michel Foucault: a historical critique of truth that would give way to a genealogy of regimes of "veridiction," i.e. ways in which the truth of value is articulated and made sense of (Foucault 2008).

7. A further insight that we can take from science and technology studies is the analytical fruitfulness of moments of controversy and innovation. The "de-scription" (Akrich 1992) of valuation devices, which can be seen as a form of critique, is made easier in moments when valuation techniques and practices are contested and new ones are proposed. Easier, since a critique is already performed by the actors themselves. There is no need then for the student of valuation to add a layer of critique or make valuation "discussable." It is already criticized and discussed! Where are such fruitful sites for the study of valuation? Courts are certainly an interesting place to look (Fourcade 2011), as are other public arenas where the value of things—including peculiar things such as pieces of nature or years of human life—are debated and put on trial. Such arenas are increasingly populated with valuation techniques inspired by economics (and sometimes designed by economists themselves). Many scholars have, more or less explicitly, denounced this trend. Yet a diverse array of actors concerned by such valuations and involved in these debates have taken up the economic techniques imposed on them, with environmental activists calculating how much nature is worth protecting and patient groups demonstrating that their lives are worth saving. Do these developments call for a critique which points to the absurdities that inevitably follow from the attempt to quantify and monetize everything, or which warns against the perils of the continuous extension of neoliberalism? Or do these developments encourage a different form of critique, akin to what Isabelle Bruno, Emmanuel Didier and Julien Prévieux have called "statactivism," i.e. the art to fight with numbers (Bruno et al. 2014).

This would certainly depict numerical valuation as (an instrument for) critique.

8. It is possible to examine and make discussable the social practices of valuation while not being impartial to what is being studied. Open and blatant critiques of a particular valuation practice may bring greater force to discussions through the independent assessment (whatever this means) of the merits and demerits of what a certain valuation practice renders visible and invisible. There is indeed much to be said about the importance of, and even need for, critique within constructivist analyses. This resonates well with Boltanski's (2011) claims about the inherent weakness of a pragmatic sociology of critique and the worth of a more traditional critical sociology. It is a perfectly acceptable academic (and not just political) point to say that a specific metric has strong limits and problematic consequences. Blatantly taking sides with a critical tinge might very well make the social practices of valuation more discussable. But perhaps a journal devoted to studying valuation as a social practice should then particularly encourage careful explication of the position from which critique is leveraged?

9. While taking sides with a critical tinge could make the social practices of valuation more discussable, it could also generate stale discussions. The very fact that others do not agree on the premises and conclusions of an analysis might be helpful in making valuations discussable, but can run the risk of not doing any generative work other than to render repetitious discussions (Verran 2001). Such entrenchments are characteristic of many public debates and would hardly be productive for developing the study of valuation as a social practice. In other words, taking sides too early and without much reflection can get in the way of analysing and developing an understanding of the inner workings of valuation practice.

10. Partial and one-sided critiques might run the risk of reproducing oppositions, thereby inhibiting a deeper examination of the issues at hand and the possibly generative and insightful moments that might occur beyond such positions. This is reminiscent of the situation encountered by Helen Verran (1999) on having completed an earlier version of the book which later became *Science and an African Logic* (Verran 2001). It was through the African math teachers' laughter at her account that she realized that she had created a perfect opposition between Western and African numbers which left out all the generative moments where practices of doing numbers didn't fit into her neat story. She would rewrite the entire book and move such disconcerting empirical moments centre stage. In short, to take a non-symmetrical position risks producing an analysis of logics that is uneven and serves to reify entrenched positions rather than opening them up. This further

directs interest from what possibly happens in trading zones (Galison 1996), between these positions, which might be very important to highlight when seeking to make valuations discernible and discussable.

11. What would a science devoid of critique look like? Could it look like an agnostic appreciation of things we utterly detest? [redacted][1] Would such a position classify critical fields of study, such as postcolonial studies, whiteness studies, and feminist studies as biased and non-generative? Some favourite questions from the field of science and technology studies: If critique has run out of steam, where do we go next? How does agnosticism and symmetry intervene in practices? What would happen to our humanness if we imagined that we could completely leave our hearts and morals behind us? Objectivity? Nihilism? Amorality? What do we keep from agnosticism and symmetry, when we move from the study of knowledge production to the study of value practices? What is lost? What is found?

12. The intertwined principles of methodological and analytical symmetry are arguably only productive when considering asymmetric phenomena. These, of course, abound and make it interesting to ask how particular things, thoughts and practices become established and perpetuated (or the reverse). But if reality emerged *symmetrically* then there would be less need to understand how, when and why particular orderings emerged. In this sense, the field of valuation studies (also, if less visibly, in the first 'symmetric' sense described here) is premised on an assumption of the aesthetic (morality) of symmetry. Thus, the positions that 1) it *could have been otherwise*, 2) it *is* otherwise, or 3) it *should be* otherwise, are positions that are merely different in terms of analytic strategy. For all positions, it is (always) a question of how and where we do the valuation work—and what gets shown.

13. What about blatant celebrations of a particular social practice of valuation? Would reprints of, real or virtual, marketing brochures concerning a particular valuation practice qualify as a study of the very same practice? The study of valuation is not only a domain of academic inquiry, but also a professional activity in which valuation specialists and consultants claim expertise as well as the need to produce (and sell) knowledge. Such work delimits and stabilizes the very object that we aim to study. Should we be concerned about this? Can valuation studies contribute to an evaluation of valuation

[1] Editors' note: Although this text is full of tensions and differences, this sentence caused a disagreement among the authors about whether it even was appropriate to include it. We have decided to strike a compromise and keep the sentence in this redacted form.

practice? Are we running the risk of entering into competition with consultants, as management scholars have sometimes done? And is this a risk? In the short history of the journal we have already had to ponder and articulate the possible differences between *presenting* a valuation practice and *studying* it. Among the issues involved here is the analytical leverage gained from some form of reflexive detachment of the study from the practices examined. (Be it in the form of the symmetric and impartial posture, or the pose of the stern and firmly positioned critique.)

14. What about reflexive *attachment*, rather than detachment? The notions of 'posturing' and 'posing' smacks of unauthentic positions! Attachment is the exact opposite, that is, deeply committed views. The sociology of attachment, in some radical versions (Gomart and Hennion 1999), translates into a methodological stance: one that is attentive to the inquirer's *consideration* towards its object of inquiry. Some recent radical praise for the "reclamation of values"—the clarification of what "we" *cling to*, in the modern social sciences and the humanities—has been seen at work in these quarters (Latour 2013; Verran 2014). On the other hand, some would say with dismay, this leaves in quite an untenable position for the ones among "us" that *would rather not* stick to any value, at least not very firmly, and definitely not with a trenchant attitude (quite a cosmopolitan, liberal alternative).

15. What about the auto-ethnographic accounts of valuation or other accounts of intervention? They would not necessarily fall in either of the above genres, but would nevertheless have great potential in making valuation discussable. Given that we are no less involved in all sorts of valuations than the actors we study, and that values are never studied "from nowhere," studying our own involvements can provide interesting cases of what Donna Haraway would call "strongly objective" studies of valuation (Haraway 1988). Obviously, such accounts would be in dire need of also including the failed attempts, the tricked consequences, the surprising successes and the redefinition of the valuation and the valuation scholar in order to avoid sentimentality (Becker 1967) or slick accounts.

16. What about constructivism and activism (Woodhouse et al. 2002)? Can the pursuit of studying valuations as social practices productively join with James Scott (2012) in giving not one, but two, cheers for anarchism? Or be partial to David Graeber's (2004) agenda? Perhaps. But this is certainly complicated. The anarchist standpoint can very well be considered as just one type of value—a *political value*—in contradistinction to other such political values. But it can also be interpreted (perhaps more interestingly, some would say) as a

standpoint *against value*: no lord and no country, no superior principles to be hooked with, no overarching justification regime, just a flat land of unrepressed circulation. Daunting?

17. What about feminism? Would a feminist analysis of value practices demand a critical eye towards matters of power and subjugation as standpoint theory suggests (Harding 1991)? What would a non-critical feminist analysis of valuation look like? What would it mean to care (Puig de la Bellacasa 2011) or to stay with the trouble (Haraway 2008), without being critical? What would a symmetrical and agnostic feminist analysis look like? Would a symmetrical and agnostic stance entail a type of "god-trick," erasing the knower from the known (Haraway 1988)? Is the intellectual template of valuation studies (and of *Valuation Studies*, at any rate) phallic? And if so, *what is wrong* with it?

Situating the Journal *Valuation Studies*

18. What does it mean to make something "discussable" as referred to above? The conventional article format—which thus far has tended to dominate also *Valuation Studies*—is arguably not engineered for discussion but more for argument of a particular mode and manner. The difficult and typically time-consuming work of crafting a coherent line of argument, and choosing with whom to "discuss" and how, is commonly not visible by the time an article is published. A "beautifully written article" is arguably valued in part for its ability to make the hard work seem effortless. This makes academic work very similar to any number of other practices although we, as insiders, are more familiar with the cues that format discussion and disagreement when we have an "early draft" where "constructive comments are welcome" but "please don't circulate." Everyone knows that this goes on. But how the magic happens between that first and final draft is (more or less opaque) valuation work. Would it be generative to open the review process to public scrutiny by publishing the reviews and responses to reviewers as appendices to each published article?

19. The above discussion hints at the significance of making valuation discussable and the possibilities for various forms of critique to enable such discussions. At an overarching level, these concerns relate to how and where we make "punctualizations" (Law 1992) in the network of valuation practice that eases things and make a more delimited and comprehensible discussion possible. It is to us, as members of the editorial board, all the more clear that these issues are also at stake when assessing, individually and collectively, possible contributions to this very journal.

20. This editorial piece is an exercise in "doing something" with differences of opinion. Making disagreement and non-closure visible has the tendency to prompt further questions about what more can be done. Making the review process public would be one such measure. Perhaps we could ask of all of our authors, reviewers and editors to submit a section entitled: "A differential account." While a question, of course, would be who might partake in the disagreement it could be a productive resource in making visible also to a broader audience the disagreements that are more often aired in closed rooms (for other examples, see Latour et al. 2011; and the "epistemological chicken debate" between Collins and Yearly 1992a; 1992b; and Callon and Latour 1992).

21. In a nutshell: whether we consider critique in a mundane sense of the word (saying about something, for example a value metric, that it is good or bad, flawed or accurate, interesting or useless, from a particular point of view) or in a more philosophical sense (assessing the truth of a value statement from all possible, or at least several, angles, and especially from the viewpoint of the conditions of truth in which the statement is embedded), we end up with complicated intertwinements between practices of valuation and practices of critique (both "ours" and "theirs"). Good for this journal's agenda!

References

Akrich, Madeleine. 1992. "The De-Scription of Technical Objects." In *Shaping Technology, Building Society: Studies in Sociotechnical Change*, edited by Wiebe Bijker and John Law, 205–224. Cambridge, MA: MIT Press.

Becker, Howard S. 1967. "Whose Side Are We On?" *Social Problems* 14 (3): 239–247.

Bloor, David. 1976. *Knowledge and Social Imagery*. London: Routledge.

Boltanski, Luc. 2011. *On Critique: A Sociology of Emancipation*. Cambridge: Polity.

Boltanski, Luc, and Laurent Thévenot 2006. *On Justification: Economies of Worth*. Princeton, NJ: Princeton University Press.

Bruno, Isabelle, Emmanuel Didier, and Julien Prévieux. 2014. *Statactivisme: Comment lutter avec des nombres*. Paris: La Découverte.

Callon, Michel, and Bruno Latour. 1992. "Don't Throw the Baby Out With the Bath School! A Reply to Collins and Yearley." In *Science as Practice and Culture*, edited by Andrew Pickering, 343–368. Chicago: University of Chicago Press.

Collins, Harry M., and Stephen Yearley. 1992a. "Epistemological Chicken." In *Science as Practice and Culture*, edited by Andrew Pickering, 301–326. Chicago: University of Chicago Press.

———. 1992b. "Journey into Space." In *Science as Practice and Culture*, edited by Andrew Pickering. Chicago: University of Chicago Press, 369–389.

Fourcade, Marion. 2011. "Cents and Sensibility: Economic Valuation and the Nature of 'Nature'." *American Journal of Sociology* 116 (6): 1721–1777.

Galison, Peter. 1996. "Computer Simulations and the Trading Zone." In *The Disunity of Science: Boundaries, Contexts, and Power*, edited by Peter Galison and David J. Stump, 118–157. Stanford: Stanford University Press.

Gomart, Emilie, and Antoine Hennion. 1999. "A Sociology of Attachment: Music Amateurs, Drug Users." In *Actor Network Theory and After*, edited by John Law and John Hassard, 220–247. Oxford: Blackwell.

Graeber, David. 2004. *Fragments of an Anarchist Anthropology*. Chicago: Prickly Paradigm Press.

Haraway, Donna J. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575–599.

———. 2008. *When Species Meet*. Minneapolis: University of Minnesota Press.

Harding, Sandra. 1991. "Feminist Standpoint Epistemology." In *The Gender and Science Reader*, edited by Ingrid Bartsch and Muriel Lederman,145–168. London: Routledge.

Latour, Bruno. 1987. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge, MA: Harvard University Press.

———. 2004. "Why has Critique Run Out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry,* 30(2): 225–248.

———. 2013. *An Inquiry into Modes of Existence: An Anthropology of the Moderns*. Cambridge, MA: Harvard University Press.

Latour, Bruno, Graham Harman, and Peter Erdélyi. 2011. *The Prince and the Wolf: Latour and Harman at the LSE*. Hants: Zero Books.

Law, John. 1992. "Notes on the Theory of the Actor-Network: Ordering, Strategy, and Heterogeneity." *Systems Practice* 5 (4): 379–393.

Puig de la Bellacasa, María. 2011. "Matters of Care in Technoscience: assembling neglected things." *Social Studies of Science*, 41(1): 85–106.

Scott, James C. 2012. *Two Cheers for Anarchism: Six Easy Pieces on Autonomy, Dignity, and Meaningful Work and Play*. Princeton, NJ: Princeton University Press.

Verran, Helen. 1999. "Staying True to the Laughter in Nigerian Classrooms." In *Actor Network Theory and After*, edited by John Law and John Hassard, 136–155. Oxford: Blackwell.

———. 2001. *Science and an African Logic*. Chicago: University of Chicago Press.

———. 2014. "Extending the Cosmopolitical Right to Non–Humans." *Valuation Studies* 2 (1): 65–70.

Woodhouse, Edward, David Hess, Steve Breyman, and Brian Martin. 2002. "Science Studies and Activism: Possibilities and Problems for Reconstructivist Agendas." *Social Studies of Science* 32 (2): 297–319.

Woolgar, Steve, Tarek Cheniti, Javier Lezaun, Daniel Neyland, Chris Sugden, and Christian Toennesen. 2008. "A Turn to Ontology in STS? 1.2." Paper prepared for the workshop *A Turn to Ontology*, Saïd Business School, University of Oxford.

This text has been jointly authored by the members of the editorial board of *Valuation Studies*: **Liliana Doganova** (associate professor, Centre de Sociologie de l'Innovation, Mines ParisTech, France), **Martin Giraudeau** (lecturer, Department of Accounting, London School of Economics and Political Science, United Kingdom), **Claes-Fredrik Helgesson** (professor, Department of Thematic Studies—Technology and Social Change, Linköping University, Sweden), **Hans Kjellberg** (associate professor, Department of Marketing and Strategy, Stockholm School of Economics, Sweden), **Francis Lee** (assistant professor, Department of Thematic Studies—Technology and Social Change, Linköping University, Sweden), **Alexandre Mallard** (professor, Centre de Sociologie de l'Innovation, Mines ParisTech, France), **Andrea Mennicken** (associate professor, Department of Accounting, London School of Economics and Political Science, United Kingdom), **Fabian Muniesa** (professor, Centre de Sociologie de l'Innovation, Mines ParisTech, France), **Ebba Sjögren** (assistant professor, Department of Accounting, Stockholm School of Economics, Sweden), and **Teun Zuiderent-Jerak** (research fellow, Department of Thematic Studies—Technology and Social Change, Linköping University, Sweden).

Valuation Studies 2 (2) 2014: 97–118

"We Was Regenerated Out": Regeneration, Recycling and Devaluing Communities

Luna Glucksberg

Abstract

This article looks at well documented processes of urban regeneration and community displacement in the inner-city through an innovative anthropological perspective focused on concepts of waste and value. Using the notion of symbolic devaluation of the working classes developed by Skeggs (1997; 2004), it traces their exclusion from recycling practices while at the same time the estates they live on are being regenerated. Raising questions about the parallels and contradictions between regeneration and recycling, it shows how symbolic devaluation of specific areas and their inhabitants are necessary precursors of the physical demolition and removal that characterize regeneration processes. Through an ethnographic approach, the deep connections between people *and* their waste, and people *as* waste, are exposed and questioned, showing how valuable middle class selves are produced through appropriate waste management procedures, i.e. individualized recycling, while inner-city, estate dwellers are remade into uncaring, unworthy citizens who cannot take part in this value-producing circuit.

Key words: regeneration; recycling; waste; class; value; inner-city; gentrification

"We *was* regenerated out." What a strange expression, I thought, and yet there it was, this was how Mary explained being moved out of her home, against her will, off of her estate, which was then demolished, and onto another one, luckily still in her area, she said. The most interesting thing is that, at the time, I was asking her about her recycling habits, what she did with her rubbish, and how did she take

Luna Glucksberg, Department of Sociology, Goldsmiths College, University of London, l.glucksberg@gold.ac.uk

LiU Electronic Press, DOI 10.3384/vs.2001-5992.142297
http://valuationstudies.liu.se

it downstairs, and even absurd questions, typical of an anthropologist, such as "what do you see as waste?"

In one statement she had linked the experience of displacement, the ugly side of regeneration and, inevitably in London, gentrification, with a whole set of layers of symbolic mis-representations of working class people, poor inner city dwellers like herself, and their homes, often conflated and portrayed as dirt, waste, scumbags, wastes of space, sink estates and so on.

This statement intrigued me, especially because the research I was conducting at the time focused on something entirely different, specifically the ways in which people on housing estates in inner-city London dealt with their waste and recyclables. I had asked her explicitly about waste and she had answered, just as explicitly, describing the wastage of her entire estate and community: "We *was* regenerated out." It was at that point that I started to consider what was happening *to* the estates as well as *on* the estates: were they really being wasted, as Mary said? Was it too crude a metaphor, would it be too facile a parallel to make to be taken seriously analytically?

This process was of course nothing new, as the extensive literature and debates on gentrification both in the UK and around the world, by anthropologists and other social scientists, testifies (Glass 1964; Smith 1979; Smith and Williams 1986; Ley 1994; for a classic anthropological approach, see Perlman 1976 and 2006 on the slums of Rio). This article, however, aims to address the questions raised by Mary's statement by considering the social implications of urban regeneration from an anthropological perspective centred on concepts of waste and value. It is concerned with the symbolic devaluation of people, their homes and communities on inner-city estates in south-east London in the early twenty-first century.

I wish to reflect upon how symbolic devaluation of people is crucial to the actual demolition of buildings, and the following removal of communities from regenerated areas. Specifically, I am interested in how waste disposal practices, and recycling in particular, represent one of the many ways in which working class people are systematically stripped of value, as argued by Skeggs (1997) and Tyler (2013) in arenas as diverse as education (Evans 2006), the media (Skeggs and Wood 2012; Jensen 2013) and their housing arrangements (Back 1996; Henley 2007; McKenzie 2012; Smith 2012), to name but a few.

Setting the Scene: Symbolic Devaluation As a Precursor of Regeneration

Research for this article was carried out in Peckham, an inner-city area in the London Borough of Southwark (LBS) between 2006 and 2008. It was funded by the EPSRC (Engineering and Physical Science Research Council) to further understandings of how people living in inner-city estates practically dealt with waste and recycling issues, and

how to provide them with better services. It consisted of ethnographic observations, semi-structured interviews and many hours of unstructured conversations and participant observations with a variety of respondents, from councillors to residents, from planners to religious leaders and housing workers. It also relied on substantial historical and archival research, as well as a limited amount of quantitative data, collected from the Office of National Statistics (ONS) and other public databases.

In 1994, local politicians in a Labour led council submitted a bid to the then Conservative central government for funds to regenerate Peckham through a financial scheme called the Single Regeneration Budget (SRB). This was one of a number of schemes that, starting from the 1980s, aimed to increase tenure mix in UK inner-city areas. It was preceeded by Estate Action, which had run approximately from 1985 to 1994; SRB was active mainly in the mid-nineties, followed by the National Strategy for Neighbourhood Renewal and then later in the noughties by the New Deal for Communities (Tunstall 2012, 35). At the same time, and possibly inspiring the British efforts, across the Atlantic in the US similar schemes were being rolled out under HOPEVI (Homeownership and Opportunity for People Everywhere), which demolished public housing projects and dispersed their inhabitants through different strategies (Lees, Butler and Bridge 2012).

According to this bid, the London Borough of Southwark (LBS) believed that the key to regenerating this area of Peckham was the radical transformation of what were known as the "Five Estates," its most densely populated area. They were described as "a continuous area of 60 hectares of local authority (LA) housing containing over 4,600 dwellings with a population of around 11,000 people" (LBS Brief for Development Partner Selection, April 1994). The Five Estates were defined in the bid as "an area of unquestionable social need." Regeneration, it was claimed, will "reverse this cycle of decline, building a desirable residential area, a stable and prosperous community and a competitive and thriving commercial area" (p. 3).

The bid sketches out a "vision" for Peckham (p. 5) at the end of the regeneration: first in line were a reduction in density (from 4,532 units, or individual homes—and this could be one bedroom flats or four bedroom maisonettes—to 3,694 homes, with a net loss of 838 homes, approximately 2,000 people) followed by diversification of tenure (from 4,314 local authority homes to 2,154 local authority, 915 housing association and 625 privately owned homes, meaning a net loss of approximately half of all council homes) and a remodelling of the Five Estates.

This is perfectly in line with what we know was the aim of SRB grants, namely the creation of "mixed communities" by effectively displacing less affluent tenants. Nonetheless, even given the different demographic context of the eighties, where inner-cities were emptying

rather than expanding, the fact that by the mid-nineties a council could plan to displace over 2,000 people without making any plans for them, or ameliorating the loss of social and council housing incurred by the scheme, is remarkable.

The bid continues by listing the main "problems" affecting the area as: high density; a high percentage of BME (Black and Minority Ethnic) people; and the young age of the population. It then focused on various statistics that list Liddle ward's (now incorporated as Peckham ward) poor performance against many deprivation scores, pointing especially to long term unemployment. Deprivation data showed that Liddle was the second most deprived ward in Southwark at the time, and scored extremely highly on a wide number of deprivation indexes. An average of 38% pupils in the schools serving Liddle Ward spoke English as a second language. This figure went as high as 61% and 59% at two local primary schools, 90% of whose intake was from Liddle ward. Employment figures, according to the 1991 census, showed that only 7.6% of males and 7.2% of females were from professional/managerial/technical social classes. Unemployment was at 24%, while the average in Southwark was 16.5%, and just 9% in England and Wales. In June 1994, according to a Mori survey, 57% of children in Liddle ward lived in non-earning households.

This is a powerful narrative, but it is important to remember that it was put together in the bid with a very specific aim, which was to attract funds from central government. As Allen (2008) argues, these narratives have to be critiqued and contextualized as all other data, rather than used as a neutral or objective starting point to begin or frame a description. They constitute a frame and are, therefore, part of the story in and of themselves, as Alexander (2005) argues when considering the importance of framing devices when assessing environmental and generally speaking bureaucratic processes. In this light it is useful to consider what two councillors, Steve and Brandon, who were working on the bid at the time had to say about it during interview. Steve is an established local politician, a middle aged long term resident who was a councillor at the time of the regeneration of the Five Estates.

> The deal was, it was.. was a unique scheme at its time, it was under Conservative government actually, the deal was that if Southwark agreed to knock the estates down and rebuild them the government would give them money towards this, was that Southwark would have to build properties in mixed tenure, basically it was envisioned by a central government at that time that the problem was you had large, large numbers of council tenants.. ehm… who they believed were generally less educated, and their children… you know… were less… you know… inclined to to to… study or, you know… hang about in the streets, and what the solution was by the government was to say that, you would have to have mixed tenure, and therefore the deal was that… there would be a reduction in density, which is incredible now when you think about it, because now

> everybody is saying we need more density to to… for city living. But that was the agreement at the time, there was a reduction in density, there would be a lot more low rise properties, houses with gardens, and… there would be housing associations properties, council properties and private sector properties.

Brandon on the other hand is much younger, and had moved out of Peckham by the time the research took place, but he used to live on the Five Estates when he was younger and was also a councillor in the early '90s, when the regeneration of the Five Estates took place. He is very energetic and motivated, and his words convey a sense of the opportunities and chances that the Peckham Partnership (PP, the council body that run the regeneration of the area) brought to the area, even though some people, he said, failed to take full advantage of them. While the initial impetus of the programme was to address the housing situation, the physical landscape of the area, the main idea was to rebalance its demographic profile and draw in young professionals, to change the dynamics of the area. He acknowledged that this was not an easy task to achieve:

> Although of course decanting is always a very very fraught issue for a lot of people, who are of course attached to an area, and a community goes around an area, and of course, they don't necessarily understand the reasons why the council are regenerating the area. That creates a lot of resentment. In the process communities were destroyed, a number of local facilities that did exist were taken out as part of the regeneration process, with the understanding that they were going to be replaced, new. And that wasn't always the case… If every one of the tenants had exercised their right to return to social housing, it wouldn't have worked. 'Cause of course, the reason why the council won the funding from the government at the time, and it was a Conservative government, the actual government who approved this SRB scheme, was that the council was to reduce its stock of council housing in the area. *That was the aim*. Southwark still remains I think one of the largest landlords, biggest housing assets, and the key reason to get SRB funding was to reduce that. In the bid for funding that was one of the reasons, to regenerate the area, and to reduce the council housing stock in order to attract inward investment from developers.

An interesting point that Brandon made was the way in which the Five Estates were portrayed in the funding application for SRB (Single Regeneration Budget). While he agreed that the statistics looked really bad on paper, he was keen to stress that they had to make them look that way in order to get the funds. Nothing of course was made up as such, but there was a clear agenda when compiling those figures, which was to make the area look as desperate, needy and dilapidated as possible.

> It wasn't as if the area was all a sink estate, although, when you read the big document, you'd imagine this area was sort of beyond repair, sinking sinking, you know there were some social problems, but you know maybe in some respect some bits of that document blow your head off, even though there were

> figures and analysis, yes, there were some problems, there were problems with crime, low level crime, educational achievement, single parents, family breakdown, quite some indicators, you could argue, put together a compelling case. I am from the area, and I've got a friend who succeeded and left the area, went to university, so it wasn't as if the area was falling to pieces, really really bad and dire, it was just that maybe certain components of the housing stock was (sic) in disrepair, and had encouraged some behaviour, in terms of concentrating population, and in terms of concentrating certain problem families, with some kind of issues.

Brandon's words are useful in understanding the ways in which the project worked from his perspective, and need very little in terms of explanation. For the purpose of this article, the main thing to focus on is the need to make Peckham look at his worst in order to attract the funds, to the point that even he would not recognize it from the description. Secondly, what runs throughout is the clear aim to reduce the amount of social housing in order to reduce the number of social tenants in the area. Thus we have the symbolic devaluation through a powerful narrative of neglect and despair devised and signed by the council, paving the way for the demolitions that will then remove the old inhabitants of the area to make space for the new, regenerated Peckham.

Does this constitute recycling? Is this a way of regenerating people out, as Mary would have it? The rest of the article will weave through these two themes to bring together the similarities and differences that characterize them. It is unfortunate that I have not been able to follow the lives and stories of the residents who were actually, physically displaced by these processes, and that by a conservative estimate would be at least 2,000 individuals. Two years of solid research did not unearth any reliable, solid data on where they went, what choices were offered to them, whether they were happy in their new homes? Not even a simple breakdown of who the displaced were, by gender, age, ethnicity or household type.

In different contexts, scholars have argued that such gaps in data can be significant. Tarlo (2003), working on slum clearances in India, has shown how detailed archival research—of a scope that was beyond that of this particular project—can lead to very interesting data that can be extracted from what the records do not say, extrapolated from what is not there. Silences in the archives are part of the process of historical production (Trouillot 1995, 26). The fact that some data were deemed not important enough to be kept, as in the case of those 2,000 people who moved out of the Five Estates, could be data in itself, as Trundle and Kaplonski (2011) argue. It could at least suggest that their housing situations were not a pressing concern for the council at the time: they were not valued?

Wasting the Estates

Waste Is a Social Matter

Marcuse (1985) distinguishes between indirect and direct displacement, and what happened in Peckham in the nineties is certainly an example of both of these phenomena. The focus of the article, however, is on the symbolic devaluation of inner-city estate dwellers, rather than a study of displacement per se. I will consider this here through an anthropological lens focused on ideas of wasting and valuing (Douglas 1966; Thompson 1979; Alexander 2005; Darling 2009; Alexander and Reno 2012; Graeber 2001; Hart 2001; Reno 2009), applied to things and people, houses and communities, both in terms of literature and ethnographic observations of people's waste behaviours on the estates.

Mary Douglas's classic text *Purity and Danger* (1966), and its analysis of dirt and pollution, still constitutes the bedrock of anthropological understandings of waste, which is where this article originates. This was a book about "primitive" religions, and it was an attempt to demonstrate that the taboos in these religions were neither pointless nor irrational: instead they were responses to threats, both internal and external, to the current order and structure of any given society. The main thrust of the argument was that it is impossible to understand pollution behaviours in isolation: they had to be related to the rest of the social structure to become comprehensible. Pollution and dirt are never absolutes, but always socially determined.

Dirt then, is never a unique, isolated event. Where there is dirt there is a system. Dirt is the by-product of systematic ordering and classification of matter, in so far as ordering involves rejecting inappropriate elements (Douglas 1966, 44).

According to this argument, dirt is disorder, and eliminating it is not just a negative response to fear of disease or misfortune but a positive, creative effort to organise an environment according to ideas of what a person, home, city or society should be like. We can thus start to see how dealing with waste is much more then simply removing what is dirty and smelly: not only the definitions of what is dirty and smelly are socially constructed, but their appropriate removal and management affirm and re-constitute social structures in our everyday lives.

These processes are so practical and mundane that they can easily go unnoticed: however they become apparent when things go wrong—which is often the case, as Graham and Thrift (Graham and Thrift 2007; Graham 2010) argue—and rubbish is not collected from our doorsteps, for instance: strikes by refuse collectors can easily bring a government to its knees. Another poignant example is when artists decide to make art out of rubbish, which then goes on to sell for hundreds of thousands of pounds. The popular outcry that regularly

follows such events is indicative of supposedly inappropriate disposal practices: by acquiring huge monetary value waste crosses too many boundaries and threatens a social order in which waste is valueless and art is valuable, or invaluable, even (but see Thompson 1979).

In her most explicit formulation of a theory of waste, Douglas (1966) argues that there are two stages in the process of imposing order: in the first phase, dirt, meaning bits and pieces which are out of place and do not fit, are rejected and brushed away. At this stage they are still recognisable for what they are, they retain their identity and are therefore still dangerous. In the second phase, through processes of rotting and dissolving their identity is lost and they become common, unthreatening rubbish, especially when placed in their "right" place, be it a bin or a landfill.

In this final stage of total disintegration, dirt is utterly undifferentiated. Thus a cycle has been completed. Dirt was created by the differentiating activity of the mind, it was a by-product of the creation of order. So it started from a state of non-differentiation; all through the process of differentiating its role was to threaten the distinctions made; finally it returns to its true indiscriminable character (Douglas 1966, 198).

Understandably, there are a number of issues that can be raised with Douglas's argument, mainly to do with its rigidity, which was typical of her structuralist approach. A few years later another anthropologist, Thompson (1979), worked from this approach but moved beyond it, creating a system divided between transient, durable and "rubbish" objects, focusing on "the relationship between status, the possession of objects, and the ability to discard objects." He argued that it was always those at the top of the social hierarchy who established what was durable and what was transient: this meant not only that what they owned was therefore by definition durable and valuable, but also that they were the arbiters of taste, due to their power to name objects as durable or transient. This of course relates to Bourdieu's seminal work on taste and distinction in France (Bourdieu [1979] 1984). Waste is seen by Thompson as a social phenomenon, a necessary feature of human life: "Rubbish is a universal feature, not necessarily of the human mind, nor of language, nor of social interaction, but of socio-cultural systems" (Thompson 1979, 88).

If waste is a social phenomenon connected with hierarchies and taste, it is but a short step to start unearthing the political and class connotations of the various practices of sorting through the stuff. In the US, at the turn of the twentieth century, Strasser (1999) documented the ways in which talking of the poor and talking of the problems of waste and waste disposal was essentially the same thing, highlighting the political nature of waste practices. A social historian, she has traced the changes that took place in the United States during what she called the transition from a culture grounded in reuse to one

based on throwing away and disposal, emphasising how trash-making was a complex social process. She described trash as a fluid, dynamic social category created by sorting and characterised by a spatial dimension—what to keep and what to discard, where to put things—which somehow tends to end up at or near the margins of the household or the city—in the attic, in landfills out of town. In this sense she agrees with Douglas's (1966) definition of dirt as matter out of place. However, Strasser pushes things forward by adding a political element to her analysis of waste: "But above all, sorting is an issue of class: trashmaking both underscores and creates social differences based on economic status" (1999, 9).

Discarding, Strasser argues, had always been used as a way of demonstrating power, whether through potlatch or conspicuous consumption (Veblen 1899). Furthermore, discussions of marginal places and marginal behaviours, such as dealing, collecting or living off waste, often merge with discussions of marginal people, the poor, who thus become subtly (or very explicitly at times) identified with waste itself. At the beginning of the twentieth century poverty and trash were seen as deeply connected, and refuse was treated as an issue of poverty: reuse, recycling and bricolage became associated with the poor, and particular concerns were raised about the habits of the immigrant poor (Strasser 1999, 136). It was not only the poor's ways of making a living that connected them with waste: before municipal collections, the rich living in wealthy neighbourhoods paid private collectors to take away their rubbish, while the poor simply had to live with it, throwing it out of their windows and into their streets. We can see then how structural inequalities were translated into a cultural understanding of the very close relationship, if not full identification, between the poor and waste in the US at the turn of the twentieth century.

In the UK, Skeggs' contemporary ethnographic work on class, gender and respectability (1997) still resonates with Strasser's historical work, showing how British working class women are only too aware of the ease with which they are symbolically conflated with waste by those in power, which is why they attempt to remove themselves as much as possible from the label "working class," in a constant struggle to "pass" as respectable. Thus they avoid at all costs anything that is dirty or scruffy by carefully monitoring their clothes (Skeggs 1997) and their homes (Madigan and Munro 1996; Evans 2006) for cleanliness, which they equate with respectability.

Recycling Subjects

In recent years, recycling has become imbued with so many positive layers/evaluations that to challenge its orthodoxy can be seen in itself as morally dubious. For example, public opinion does not like it when commentators point out that recyclable materials circulate on

international markets and are sold and bought as commodities (Hickman 2009; Gregson and Crang 2010; Alexander and Reno 2012), or that for some materials recycling only makes sense up to a point in terms of the energy needed to collect them and transform them, if the material themselves are inert in landfills and easily available—such as glass, made of sand.

According to sociologist Martin O'Brien (2007) the amount of waste produced in the UK that can be traced back to individuals varies between 4% to 9%. Even using the highest available data of 9%, that means not even a tenth of what goes to landfill is attributable to the behaviour of individual households. The current highest targets to recycle up to half of all household waste would still, in fact, only divert from landfill up to 5% of total waste arisings: this would be a very optimistic estimate. Considering these numbers, O'Brien (2007) argues that individual recycling in the UK gets a disproportionate amount of attention by the public, media and policy makers alike, compared to its actual size.

Why the attention then? Luke (1993), a political scientist and environmentalist, argues that this is to do with fashioning "caring," "moral" and individualized selves that are, crucially, uncritical of and unconcerned with production processes. This is much preferable to the threat of a movement—as opposed to individuals—intent on challenging production processes for their impact on the environment, both socially and ecologically. By focusing on individuals and their individual actions—both in terms of waste and recycling to "save the planet"—larger questions about capitalist production and its social and environmental impacts are kept at bay (Luke 1993).

Social anthropologist Hawkins (2006) writes about the wellbeing generated by following appropriate recycling practices and equates them with purification rituals that Douglas (1966) referred to when she argued that ordering and discarding practices are not just about hygiene or disease prevention, but about constituting society and its members in the appropriate way, socially and culturally. Hawkins describes mundane activities such as washing, sorting and ordering glass bottles and jars before they are collected by the waste collectors early in the morning, and the satisfaction engendered by these practices in respondents who enjoy feeling they are doing the right thing, for themselves and for the planet. Recycling households, Hawkins (2006) argues, perform practices that are valuable in a symbolic and moral sense, accruing value for themselves as caring—if maybe politically unaware, according to Luke (1993)—citizens in the process.

This argument is certainly worthwhile, but what this article tries to do is problematizing the "we," or "us" that Hawkins refers to. Critically, I would argue that the "problem" with waste is not so much what people do with it, but rather how differently various people do it,

and are expected to, and how they are allowed—or not—to do very different things with the materials they chose or had to discard. The wellbeing generated by the purification rituals of recycling that Hawkins (2006) beautifully describes was definitely not available to all of my respondents: the question becomes then, what happens to those who cannot take part? Those who do not have the space, time or possibility to engage with waste rituals that society deems so intrinsically worthy, ethical, and good? What kinds of people and affects are created in this way?

Skeggs (2004) argues that working class people are continually created, named and represented by the middle classes as valueless, backward, uncaring and fixed in space, both physically and metaphorically, so that the middle classes can be seen as valuable, progressive, caring and mobile. This happens through representation across different sites—education, the welfare system, popular representations, legislation and various regulations that working class people are subjected to (Skeggs 2004). Recycling, I would argue, is another arena in which people, specifically poor, ethnically diverse, inner-city dwellers, are stripped of value by being actively excluded from a value-producing practice that has become a defining trait of active middle class citizenship and belonging.

An Ethnography of Recycling: Or Not?

Moving Waste on the Estates

Let us now consider some—of the many—examples of waste behaviours I encountered on the estates of Peckham: I shall focus on two residents and two officers in charge of their estates, as well as considering the borough wide policies that shape and constrain their behavior.

Julie lives in a two-bedroom maisonette, which is a flat distributed on two floors accessible via internal stairs, in a block on Grey Stones Estate, with her husband and their two sons, aged seven and nine. To go and visit her, I needed to gain access to her block via an entry phone system: I entered the number of her flat and she let me in the first door, inside the block. I took the lift to the second floor and then needed to buzz again, to get into her corridor, which is shared by another five maisonettes; she let me in, and then opened her own front door to welcome me in.

Julie's family recycles paper, cardboard, plastic and glass; the children are aware of what is "rubbish" and what is recycling; recyclables are left in the hallway, so that the children can pick out of it any materials they may need for their school projects. It is usually her husband that takes the recycling downstairs to the "recycling bank," which is the only recycling provision on her estate: it consists

of three large bins specifically set aside for cans, glass, plastic and paper that the council collects periodically and separately from other types of household waste. These special bins are painted black, as opposed to the other bins that are metal, and are physically separated from the others, located in the open air between two blocks, as opposed to the other bins that are located in the bin rooms.

The rest of Julie's waste is collected in a bin in the kitchen until it is full, or if it is meat it goes outside straight away, or at most stays on the balcony, but not inside the flat. Normal rubbish gets taken out by any of them, or sometimes even visitors are asked to take it downstairs, or to the chute. The chute is a hole in the wall that connects with a long pipe, or chute, running all the way from the top floor of the block and down to the paladin bins located on the ground floor, in the bin rooms. There is a chute room on each floor in most blocks, or sometimes, like in this case, on alternate floors where there are maisonettes that take up two floors, and therefore the corridors only run every other floor. The chute rooms are tiled and meant to be clean, empty and clear of any rubbish. Julie's chute room is the cleanest I have ever seen, and crucially it does not smell: usually chute rooms smell quite badly and are sometimes used to store bulky items to be discarded, or bikes, or rubbish that didn't quite fit in the chute hole and is left to fester until the cleaners deal with it.

The rubbish chutes are not meant to be used between 8:00 p.m. and 8:00 a.m., probably to avoid disturbing those living right next to them, as Julie explains to me, so if they want to get rid of something later than eight at night they have to take it down in the bin rooms themselves. The bin rooms are located on the ground floor, directly below the chutes running through the floors. They are accessed through outside doors, meaning Julie, or her children or husband, need to go outside the block and then enter the bin rooms; these have very heavy metal doors, that need to be pulled back to gain entrance to the rooms, which again are often smelly and quite dirty. This is because bin bags are often left next to the bins, as opposed to being put inside them: the cleaners are not meant to pick them up and so they often fester there for quite a while. I have never met anyone who admitted to leaving their bags outside the bins, and the general consensus from my respondents was that those who do that are just lazy and dirty. Having lived in an estate with similar facilities myself I can also add that the paladin bins are very tall, and throwing a bin bag in there requires a considerable degree of shoulder mobility, and strength if the bag is particularly heavy, which may also be a reason why some bags are left next to the bins.

Both rubbish and recycling have to be physically moved a rather long way from Julie's home to get to the place from where they will be collected from the council. Through the corridor and into the chute room during the day for normal rubbish, if not down the stairs or the

lifts, through the entry doors, into the bin rooms and into the paladin bins, or in the recycling bank. What these spaces have in common is their communal nature: they are not private, i.e. the responsibility of Julie or any other individual resident, nor public, like the street, where everyone is allowed to walk, cleaning is the council's responsibility and citizens' inappropriate or criminal behaviour is dealt with by the police.

Teresa, on the other hand, lives very close to Julie, but not on an estate: she is a homeowner, being part of a shared ownership scheme[1] for key workers in London. Her house is terraced, and she has a small front garden, as well as a large back garden. She lives there with her two sons, two dogs and two cats. The council collects her waste from her front door, as well as her recycling. She has a "wheelie bin"[2] for her general waste, which sits in her front garden and is emptied by the council once a week, and a recycling box, which she keeps just outside her front door. Teresa's kitchen is very close to the front door, and whenever she has anything to recycle she puts it in the box outside straight away, which is handy because her kitchen is rather small and doesn't allow for a lot of storage.

In the blue recycling box Teresa has to separate glass from cans, and she has an extra bag, also provided by the council, for paper and cardboard, of which she recycles quite a lot, hence the need for the extra bag. She is very happy with this system and on good terms with the "recycling guys," as she calls them, because "they do a great job"; she doesn't know the waste collectors because they often come when she is out of the house, so she doesn't have a chance to see them. Crucially, Teresa does not have to go through any "communal" spaces to deal with her waste or recycling, which are both collected straight from her front garden:

> We put them just outside the door, it's a brilliant system, I'm sure you could improve it but no, you just pop it outside the door on Friday and they come and take it away, I don't know what [it] is like with the flats and to be honest it's all very well sitting here gloating saying yes we recycle but, the guys in flats and things, actually is not as easy as you think, I don't know if I could be bothered to take all my things down from the thirteenth floor or whatever downstairs, on a

---

[1] Shared ownership schemes in the UK allow local key workers on low salaries (nurses, teachers, policemen, etc.) to own property where they would normally not be able to afford them because of very high house prices. They work on a part-buy part-rent system, where individuals buy part of the property and pay rent on the portion they do now own. Conditions and details vary not just across region but even across London, according to whatever borough and housing associations are running the scheme.

[2] Traditionally councils in the UK collect rubbish from individual dwellings in "wheelie bins," large capacity bins that residents push to the front of the house weekly for collection, as well as their recycling, depending on what system their local council runs.

> certain day at a certain time, and have to live with all that waste for a week, in my kitchen until then… I don't think I would be as happy.

Teresa's and Julie's experiences of recycling and waste are clearly very different. Julie is committed to recycling, and this is due not in small part to the pressure that her children put on her, from a school that tells them that recycling is good and something that "helps saving the polar bears." She does not want her children to feel they are not doing the right thing, or that they are different. However it is not always easy, and what we have not considered here, due to lack of space, are the millions of reasons why people like Julie may find it hard to recycle. Teresa hints at taking things down from a thirteenth floor, and I can easily remember how residents found it hard enough to take themselves and their children, often small, up and down the stairs when the lifts were invariably broken. Or how small their kitchens were, making the storing of recyclables simply impossible, especially materials like glass, who could be dangerous for curious toddlers and pets. Or how far even the recycling bins themselves often were, so that taking loads of materials there, often while pushing a pram or minding a couple of children, was not just impractical but simply impossible. But was this just a technical problem, or was there more to it?

Officers, Politicians and Policy

Tom is the Housing Officer in charge of the estate that Julie lives on. He thinks estates residents lack the necessary discipline to engage in recycling, and is not at all convinced that door-to-door recycling schemes should be introduced, not without an extensive educational campaign before hand at least. Having worked on an estate that did have such a scheme in operation, he became aware of a number of difficulties involved in the scheme. Tenants were constantly leaving bags out for collection on the wrong day, or in the wrong place; putting items that could not be recycled in the bags, thus contaminating entire loads; and bags were being ripped open by foxes and rats, usually because residents had not washed cans properly before putting them in the bags. And all this, he stressed to me, was on an estate for older people, without any children or teenagers around—he stressed the lack of children a number of times—and with what he called the "ideal" types of property for recycling, meaning terraced houses with ground floor access and a front garden for residents to leave their bags out without causing any nuisance.

Tom's views and fears were echoed by the local councillor, Terry. Much as both men were always ready to come out and defend estates and their residents from outside criticism, and both worked hard for their residents, Tom and Terry did not think it would be a good idea to introduce a scheme that required so much "discipline" of the residents. They both used the same word, discipline, and clearly expressed their

lack of trust in the residents' ability to cope with such a system. This lack of trust in estates residents, and especially those in high rise blocks, and doubts about their ability to engage effectively with recycling practices is echoed and institutionalized in Southwark's own Waste Management Strategy for 2003–2021

> The use of chutes to collect the majority of waste arisings and the proliferation of high rise accommodation limits the actions the council can take to stem the growth in Southwark's waste. For example, where in other areas of the UK, authorities may limit bin size and move to biweekly collections, this is unrealistic and unlikely to have any effect where residents are simply able to push full bags down a chute. (p. 25)

This quote suggests that people provided with communal, as opposed to individualized, waste collection services are not likely to take part in any kind of waste reduction strategy. Skeggs (2004) and others, following Bourdieu (1984), have argued that judgments to do with classifications tell us more about those doing the judging than about the ones they are supposed to be observed and regulated for. Talking specifically about recycling, it seems that estates residents are perceived and mis-represented by their own councils as being unconcerned with environmental issues, which in turn shapes the policies that are put in place around them.

I have argued above that waste behaviours are socially significant practices; moreover, I have posed the view that recycling can be seen as a socially agreed moral imperative to do with creating caring, valuable selves who are concerned with the environment and their area. The activities and rituals of recycling described by Hawkins (2006)—but essentially denied through policies to the Peckham tenants—serve to create a caring self which is the same as that identified by Skeggs (2004), able to accrue value onto themselves through correct engagement in the right sort of practices.

Valuations

The ethnography has shown that certain people and certain places—social tenants and housing estates—are routinely excluded from processes of value creation, such as recycling, by virtue of not having access to them, or having very restricted access compared to those who live in single dwellings like detached and terraced houses. The unregulated tenants on the estates—who are regulated in every other respect of their lives, of course—cannot take part in this circuit of value creation because of their positioning in spaces both physical and social that are not conducive to the accrual of value. If recycling is about adding value to waste and turning it into something useful, valuable again, it would make sense that those at the bottom of the social hierarchy would be represented—and created, through policies

—as unable to participate because lacking in value themselves, and therefore disrupting of the value creating process.

On the one hand, this can be seen just as another manifestation of the widespread framing of social problems, such as poverty, or in this case the incorrect processing of waste materials, whose causes are largely structural, as outcomes of individual failures, and symptomatic of some sort of moral lack on the part of the poor, usually a lack of middle class discipline. This aspect is undeniably true, but there are perhaps other layers that can be highlighted through theories of value specifically.

Talking about value means understanding people's cosmologies and their ideas about society at large, about who they consider to be part of it, as "the range of people who are willing to recognise certain forms of value constitutes the extent of what an actor considers a 'society' to consist of" (Graeber 2005, 452). This is an idea that social anthropologist David Graeber has developed from another anthropologist, Turner, who also had something very important to say about value and power. Turner (1979) argued that in every society the real context is not over value per se, but over the ability to define what value is. This insight is crucial to this article, and closely related to what Thompson (1979) argues about the role of rubbish, as we have seen above. By defining waste as the dynamic category that mediates value between durables—such as antiques—that are liable to increase their value over time, and transients—such as cars—that are liable to lose value, Thompson shows how it is always those at the top of their societies' hierarchies that are in a position to name and define objects as durable, therefore effectively establishing what value is.

This article is therefore about the tensions generated when different groups of people and their values—what they consider valuable amongst themselves—clash with each other. It is about the complex situations created by groups generating value at one level—of the individual household through "correct" recycling practices, for example,—clashing with other groups trying to change an area by generating different types of values—economic, fiscal (more council tax and less benefits) and social. These issues are to do with what people value, how this value is expressed and produced always in a social context (Graeber 2001) vis-à-vis a hierarchical power structure that allows only certain types of individuals to accrue value onto themselves (Skeggs 2004) and therefore name value as they define it (Turner 1979; Thompson 1979).

Ultimately, valuing and wasting are always interlinked and complementary processes: in order to value something, something is devalued; whenever we add value to something, something else is wasted. The regeneration of the estates in Peckham rested on a narrative that said that what was wasted did not matter. Symbolic devaluation—the narrative of the bid created by the LBS—aided and

allowed the physical destruction to take place, in fact it was instrumental and implicated in it. It was only by symbolically devaluing working class people and their homes that it was possible for "redevelopments" to take place: if they did not matter, if they were like waste already, then it was acceptable—morally right, even—to demolish the estates, and also, crucially, it was not important to consider where the people would end up. To "regenerate them out," as Mary said. What the ethnography did now was showing how through exclusion from specific value producing processes—recycling in this case—people, estates, homes, communities were practically and symbolically devalued. Decanting and expulsion from the area were the logical outcome of a process of cleansing of people and communities that were deemed to be beyond improving, and whose only contribution to the betterment of the area was moving away.

Conclusion

The article began with the statement "We *was* regenerated out," made by a woman who lived through the regeneration of Peckham in the early nineties, explicitly bringing together the apparently separate issues waste recycling and urban regeneration. I have tried to make sense of this connection by exploring parallels and contradictions between these two processes, moving from the macro level of wastage of the urban environment to the micro-level of waste disposal inside of people's homes, through dirty corridors and down smelly chutes. I have juxtaposed the story of Mary, who lost her home in the process, to the practices of other residents who couldn't deal "appropriately" with their waste, and to the accounts of officers and politicians who regulated, in an institutional capacity, both processes of regeneration and recycling.

The ethnography explored the ways in which estates inhabitants were routinely excluded from practices such as recycling, because they were not deemed disciplined enough to be able to take part, or possibly because their extremely low positioning in the social hierarchy prevented them from taking part in a morally loaded practice that involves adding value to both materials and human selves. At the same time, it also showed how the estates that were demolished had to be symbolically remade as waste in order to attract government funding, and then be purged of their own original inhabitants so that regeneration could be effectively achieved.

This analysis positions the article clearly in the field of critical urban studies, responding to the call of Slater (2006) and Allen (2008) for a more critical appraisal of processes of urban gentrification, and follows in the footsteps of Lees' (2007) work on gentrification and social mixing on the nearby Aylesbury estate. Indeed, the hypothesis that the process that took place in Peckham was about changing the

population rather than improving their housing is supported by the latest plans the council has approved for those areas.

The original plans for regenerating the Five Estates in the nineties relied heavily on reducing density in order to turn the area into a "desirable" residential location. The predicted outcome of the process was to reduce density from 350 h.r.h (habitable rooms per hectare) to 270 h.r.h (Peckham SRB Bid, p. 15). This meant the loss of 1,363 individual homes, which by a conservative estimate would mean at least 2,000 people had to move without the possibility of returning to the area. As we have seen previously, density reduction was one of the main reasons—together with changes in tenure and dwelling sizes—why people could not go back to their homes, even when they wanted to, which many did.

By 2011, however, density policies had changed, and the area covered by this research, Peckham, has been designated as an "action area" within an "urban zone." Density targets for "urban zones" vary between 200 and 700 h.r.h, and within "action areas" "the maximum densities may be exceeded when developments are of an exemplary standard of design" (Southwark Residential Design Standards 2011, p. 8). This means standard developments in Peckham can be as dense as 700 h.r.h, which is twice as much as the original density in the nineties, and potentially could go higher if the council deems the development to be of a high enough standard.

This outcome, the displacement of low-income citizens to be replaced by the young, affluent middle classes, is clearly in line with the aims of the SRB (Single Regeneration Budget) funding that supported the scheme, which as we saw at the beginning of this article was part of a much larger series of programs that aimed to foster regeneration through the development of "mixed communities." This was also not simply a UK phenomenon. In Chicago, for example, Betancur (2002, 794) has shown how in the area of West Town these ideas had very real impacts on the people they are supposed to "help," including "highly destructive processes of class, race, ethnicity and alienation involved in gentrification." Lipman (2012), strengthened this argument for Chicago by showing, for example, that the supposed nexus between educational achievement of African American students and their residential location and/or segregation was negligible, and that the dislocation of families and school age children caused much more harm than any supposed disadvantage they suffered from living in "non-mixed communities." Bridge, Butler and Lees (2012) have thoroughly buried, under the staggering weight of comparative evidence they collected from across the globe, the notion that the various "mixed communities" policies were ever anything but harmful to the dwellers they were bestowed upon, regardless of the stated aims of the individual programs.

Within this context the statement "we *was* regenerated out" is no longer far fetched, but can be read as a rational explanation for a phenomenon experienced by a respondent whose home and neighbourhood had been put through an enormous amount of change, stress, physical and social disruption. Mary understood perfectly well that what had happened was not for her benefit, nor for her children or grandchildren. The area that she managed, only just, to remain in, certainly looks better now, but this was not done for her: her shattered community was the by-product of regeneration, which far from being similar to recycling simply wasted what was there in the first place—poor, inner-city, diverse communities—to import, or buy in, a new population of middle class, home-owning professionals.

Acknowledgements. It would have not been possible to carry out the research for this article without the generous financial support of the EPSRC (Engineering and Physical Sciences Research Council), secured with the help and assistance of my PhD supervisor, Catherine Alexander. Goldsmiths also offered further financial support in the form of a Departmental Bursary from the Anthropology Department. To these bodies I am indebted and immensely grateful. My immense thanks and gratitude go to the people of Peckham, residents, officers and local politicians, who have been extremely generous and kind to me, donating their time, company, support and at times even friendship. I will not name them here as they have asked to remain anonymous, but I will remember them always. The dedication that some of them showed to their communities and their area was a great source of inspiration to me.

References

Alexander, Catherine. 2005. "Value: Economic Valuations and Environmental Policy." In *A Handbook of Economic Anthropology*, edited by James G. Carrier, 455–471. Cheltenham: Edward Elgar.

Alexander, Catherine, and Josh Reno, eds. 2012. *Economies of Recycling: The Global Transformation of Materials, Values and Social Relations*. London: Zed Books.

Allen, Chris. 2008. *Housing Market Renewal and Social Class*. Oxon: Routledge.

Back, Les. 1996 *New Ethnicities and Urban Culture: Racisms and Multiculture in Young Lives*. London: UCL Press.

Betancur, John J. 2002. "The Politics of Gentrification: The Case of West Town in Chicago." *Urban Affairs Review* 37 (6): 780–814.

Bridge, Gary, Tim Butler, and Loretta Lees, eds. 2012. *Mixed Communities: Gentrification by Stealth?* Bristol: Policy Press.

Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgment of Taste*. London: Routledge and Kegan Paul.

Darling, Eliza. 2009. "O Sister! Sarah Palin and the Parlous Politics of Poor White Trash." *Dialectical Anthropology* 33 (1): 15–27.

Douglas, Mary. 1966. *Purity and Danger.* London: Routledge.

Evans, Gillian. 2006. *Educational Failure and Working Class White Children in Britain*. Oxford: Palgrave Macmillan.

Glass, Ruth, et al., eds. (1964) *London: Aspects of Change*. London: McGibbon & Kee.

Graeber, David. 2001. *Toward an Anthropological Theory of Value*. New York: Palgrave.

Graeber, David. 2005 "Value: Anthropological Theories of Value." In *A Handbook of Economic Anthropology*, edited by James G. Carrier , 439–454. Cheltenham: Edward Elgar.

Graham, Steven, ed. 2010. *Disrupted Cities: When Infrastructure Fails*. London: Routledge.

Graham, Steven, and Nigel Thrift. 2007 "Out of Order: Understanding Repair and Maintenance." *Theory, Culture & Society* 24 (3): 1–25.

Gregson, Nicky, and Mike Crang. Materiality and Waste: Inorganic Vitality in a Networked World. *Environment & Planning A* 42 (5): 1026–1032.

Hanley, Lindsay. 2007. *Estates: An Intimate History*. London: Granta.

Hart, Keith. 2001. *Money in an Unequal World: Keith Hart and his Memory Bank*. London: Textere.

Hawkins, Gail. 2006. *The Ethics of Waste: How We Relate to Rubbish*. Oxford: Rowman & Littlefield.

Hickman, Leo. 2009. "The Truth about Recycling." *The Guardian*, February, 26, p. 6.

Jensen, Tracey. 2013 "Creating Distinction: Middle Class Viewers of Supernanny UK." In *Parenting in Global Perspective: Negotiating Ideologies of Kinship, Self and Politics*, edited by Charlotte Faircloth, Diane M. Hoffman and Linda L. Layne. Oxon: Routledge.

Lees, Loretta., 2008. "Gentrification and Social Mixing: Towards an Inclusive Urban Renaissance." *Urban Studies* 45 (12): 2449–2470.

Ley, David. 1994 "Gentrification and the Politics of the New Middle Class." In *Environment and Planning D* 12 (1): 53–74.

Lipman, Pauline. 2012. "Mixed-Income Schools and Housing Policy in Chicago: A Critical Examination of the Gentrification/Education/Exclusion Nexus." In *Mixed Communities. Gentrification by Stealth?* edited by Gary Bridge, Tim Butler and Loretta Lees. 95–114. Bristol: The Policy Press.

Luke, Timothy W. 1993 "Green Consumerism: Ecology and the Ruse of Recycling." In *The Nature of Things: Language, Politics and the Environment*, edited by Jane Bennett and William Chaloupka, 154–172. Minneapolis MN: University of Minnesota Press.

Madigan, Ruth, and Moira Munro. 1996. "House Beautiful: Style and Consumption in the Home." *Sociology* 30 (1): 41–57.

Mckenzie, Lisa. 2012. "A Narrative from the Inside, Studying St Anns in Nottingham: Belonging, Continuity and Change." *The Sociological Review* 60 (3): 457–475.

O'Brien, Martin. 2007. *A Crisis of Waste? Understanding the Rubbish Society*. London: Routledge.

Peckham Partnership. 1994. "A Bid for Single Regeneration Budget Funding." London: Southwark Council.

Reno, Josh. 2009. "Your Trash Is Someone's Treasure: The Politics of Value at a Michigan Landfill." *Journal of Material Culture* 14: 29–46.

Skeggs, Beverley. 1997. *Formations of Class and Gender: Becoming Respectable*. London: Sage Publications.

———. 2004. *Class, Self, Culture*. London: Routledge.

Skeggs, Beverley, and Helen Wood. 2012. *Reacting to Reality Television: Performance, Audience and Value*. Abingdon: Routledge.

Slater, Tom. 2006 "The Eviction of Critical Perspectives from Gentrification Research." In *International Journal of Urban and Regional Research* 30 (4): 737–757.

Smith, Katherine. 2012. *Fairness, Class and Belonging in Contemporary England*. New York: Palgrave Macmillan.

Smith, Neil. 1979. "Toward a Theory of Gentrification: A Back to the City Movement by Capital, Not People." *Journal of the American Planning Association* 45 (4): 538–548.

Smith, Neil, and Peter Williams. 1986 "Alternatives to Orthodoxy: Invitation to a Debate." In *Gentrification of the City*, edited by Neil Smith and Peter Williams, 1–3. Boston: Allen and Unwin.

Southwark Council. Environmental Team. 2003. "Waste Management Strategy 2003–2021." Available at www.southwark.gov.uk/downloads/download/1786/southwark_waste_management_strategy_2003-2021

———. Planning Policy and Research Team. 2011. "Residential Design Standards: Supplementary Planning Document." Available at: www.southwark.gov.uk/yourservices/planningandbuildingcontrol/localdevelopmentframework/SPD.html

Strasser, Susan. 1999. *Waste and Want: A Social History of Trash*. New York: Metropolitan Books.

Tarlo, Emma. 2003. *Unsettling Memories: Narratives of the Emergency in Delhi*. London: Hurst.

Thompson, Michael. 1979. *Rubbish Theory: The Creation and Destruction of Value*. Oxford: Oxford University Press.

Trouillot, Michel-Rolph. 1995. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press.

Trundle, Catherine, and Christopher Kaplonski. 2011. "Tracing the Political Lives of Archival Documents." *History and Anthropology* 22 (4): 407–414.

Turner, Terence. 1979. "Kinship, Household and Community Structure among the Kayapo" In *Dialectical Societies*, edited by David Maybury-Ewis, 179–217. Cambridge MA: Harward University Press.

Tyler, Imogen. 2013 *Revolting Subjects: Social Abjection and Resistance in Neoliberal Britain*. London: Zed Books.

Veblen, Thorstein. 1899. *The Theory of the Leisure Class*. Toronto: Dover.

Luna Glucksberg is a research associate at the Centre for Urban and Community Research, based in the Department of Sociology at Goldsmiths, University of London. She is an urban ethnographer and her work spans the entire spectrum of the British class system, from the inner-city estates of London to the elite neighbourhoods of the "Alpha Territories," where she is currently conducting ethnographic research in the lives of the "super-rich" in Chelsea, Mayfair and South Kensington, amongst others. Her main interests are in class, space, housing, and the reproduction of inequality.

Valuation Studies 2 (2) 2014: 119–151

Contingencies of Value: Devices and Conventions at a Design School Admission Test

Sara Malou Strandvad

Abstract

Based on a study of the admission test at a design school, this paper investigates the contingencies of aesthetic values as these become visible in assessment practices. Theoretically, the paper takes its starting point in Herrnstein Smith's notion of 'contingencies of values' and outlines a pragmatist ground where cultural sociology and economic sociology meet. Informed by the literature on cultural intermediaries, the paper discusses the role of evaluators and the devices which accompany them. Whereas studies of cultural intermediaries traditionally apply a Bourdieusian perspective, recent developments within this field of literature draws inspiration from the so-called 'new new economic sociology,' which this paper adds to. While the admission test is easily described as a matter of overcoming "subjective" aesthetic evaluations by means of "objective" and standardized assessment criteria, the paper does not accept this storyline. As an alternative, the paper outlines the contingencies of values which are at play at the admission test, composed of official assessment criteria and scoring devices together with conventions within the world of design, and set in motion by interactions with the objects that applicants submit.

Key words: aesthetic valuations; cultural intermediaries; post-Bourdieusian; pragmatism; admission test

Aesthetic valuations, though often considered as non-utilitarian, may have crucial effects. As the American literary theorist Barbara Herrnstein Smith suggests, aesthetic valuations produce the value of artworks and thus artists' reputations (1988). Hence, for aspiring

Sara Malou Strandvad, Department of Communication, Business and Information Technologies, Roskilde University, malou@ruc.dk

LiU Electronic Press, DOI 10.3384/vs.2001-5992.1422119
http://valuationstudies.liu.se

artists valuations of their work compose important moments in the transition from hopeful aspiration to manifestations of an artistic career. In that way, the act of valuation consists in considering a reality while provoking it (Muniesa 2012, 32; see also Michael 2000), as valuators' decisions play a part in composing the future for hopeful candidates.

Admission tests at art and design schools exemplify one of the places where aesthetic valuations take place and become observable. However, quite little is known about how assessment criteria at art and design schools are developed and applied (Harland and Sawdon 2011). To consider these issues about the formation and employment of assessment criteria the paper looks into a case of the admission test at a prominent design school in Denmark. To enter the school applicants go through a two-tier test. During the first round of the test applicants make a home assignment on a set subject where they remain anonymous. During the second round of the test a number of applicants are invited to interviews based on their results from the first round. Over the last years, the school has worked at standardizing and explicating its assessment criteria to make them transparent and non-subjective. Thus, the paper looks into the scoring mechanisms that the school is elaborating on and investigates how assessments are carried out in practice.

To conceptualize the role of evaluators at the admission test, the paper employs the notion of cultural intermediaries. Cultural intermediaries mediate between production and consumption, and the term thus includes a broad and diverse group of professions involved in qualifying cultural goods (Matthews and Maguire 2012; Nixon and du Gay 2002). A subsection of cultural intermediaries are characterized by their actions as decision-makers, and evaluators fall under this category. As the term 'cultural intermediaries' stems from Bourdieu (1984), there is a well-established tradition for analyzing the role that cultural intermediaries play with a Bourdieusian framework highlighting habitus. Some of the empirical material from the admission test at the design school can be interpreted in a way that fits this framework very well. However, there seems to be more to the story than this as the school actively strives to professionalize and standardize its evaluations and evaluators operate with a clear set of conventions.

To open up and reconsider the Bourdieusian definition of cultural intermediaries, the paper draws inspiration from developments of the concept informed by the 'new new economic sociology' inspired by actor-network theory (ANT) (McFall 2009; see also Callon et al. 2002; Cronin 2004; Moor 2012). Based on this new approach studies have been focusing on the plurality of devices which cultural intermediaries employ, turning attention from dispositions to devices (du Gay 2004). In line with this approach, the paper considers the design school's

attempt to standardize its evaluations by means of three devices: a list of official assessment criteria and two scoring mechanisms based on these criteria.

However, when the paper inquires how these devices are employed in practice, it turns out that assessments do neither start from nor center on the official criteria. Sporadically, evaluators emphasize an official criterion during discussions. Yet, most frequently scoring mechanisms are not introduced until after assessments have been made. That means evaluators do not found their assessments on the official criteria but rather translate their assessments into the official criteria subsequently. When making assessments evaluators rely on a set of parameters that can be seen as conventions in the design world (Becker 1982). That is, as evaluators are met with piles of submissions they employ a repertoire of practical and operational valuation principles based in their professional expertise. The paper outlines this set of parameters that evaluators use in making assessments, discussing how they are translated into official criteria and measurable entities.

To consider this situation of mobilizing several assessment criteria in the forms of both devices and conventions the paper subscribes to a pragmatist approach. Pragmatism constitutes a theoretical foundation where economic sociology and cultural sociology meet, as pragmatist scholars within both sub-disciplines have suggested seeing valuations as contingent (Herrnstein Smith 1988; Muniesa 2012; 2014). The pragmatist approach suggests that objects of valuations can act in many ways, yet these ways are traceable and based on affordances of the objects. This means that in contrast to the Bourdieusian tradition where aesthetic valuations are seen as deriving from habitus, which makes the objects secondary and risks portraying assessments as subjective, the pragmatist approach turns attention to the specific contingencies that form values.

Structurally, the first section of the paper explicates the theoretical underpinnings of the analysis. Following after that, the admission test and the study which the paper builds on are presented. Subsequently, the analysis falls in three parts: The first part presents a Bourdieusian interpretation of assessments made during the test which is in line with the traditional view on cultural intermediaries. Yet, this section also introduces the evaluators' objections to the Bourdieusian analysis of their work, thus indicating the need for alternative approaches. Accordingly, the second part considers the devices of standardized assessment criteria and two scoring mechanisms which the school introduces to overcome personal bias. This section follows the 'new new economic sociology' as an alternative approach to studying the work of cultural intermediaries. Yet, in the third part, the analysis outlines the set of operational parameters which evaluators rely on when making assessments. These parameters represent conventions within the design world, rather than criteria implemented by the

school. To conclude with, the paper suggests seeing assessments made during the admission test as an exercise in contingencies of values.

Theoretical Inspirations: Cultural Intermediaries and Quantification of Aesthetic Qualities

Rather than seeing aesthetic value as something that belongs only to its own sphere, governed by its own set of rules, Herrnstein Smith suggests that aesthetic valuations pertain to valuations in general (1988). Thus, investigations of aesthetic evaluations may contribute to a general rethinking of the concept of value (ibid., 28). As an alternative to seeing aesthetic valuations as pure, non-utilitarian, and interest-free, deriving from intellectual, sensory or perceptual activities, Herrnstein Smith proposes tracing the continuity and stability, as well as shifts and diversities, of aesthetic values (ibid., 33ff.). To pursue this alternative route, Herrnstein Smith calls for studies that investigate the contingencies of value:

> If we realize that literary value is 'relative' in the sense of *contingent* (that is, a changing function of multiple variables) rather than *subjective* (that is, personally whimsical, locked into the consciousness of individual subjects and/or without interest or value for other people), then we may begin to investigate the dynamics of that relativity. (1988, 11, emphasis in the original)

Following Herrnstein Smith's approach, this paper illustrates how a design school aims to transcend subjective evaluations by introducing standardized assessment criteria. To consider this situation, the notion of devices from economic sociology is useful as it calls attention to mechanisms that aim to stabilize valuations (Muniesa et al. 2007). In the case of the admission test, the introduction of a list of official assessment criteria accompanied by two scoring mechanisms can be seen exactly as an attempt to stabilize valuations by means of these devices. However, the paper suggests that it is not a simple matter to employ these devices in assessment practices. The devices which the school has introduced do not structure assessments in-the-making. Rather, evaluators use the devices of the official assessment criteria and scoring mechanisms after making their assessments. While being in the process of assessing, evaluators focus on the work in question, considering its specifics. To assess these specifics evaluators rely on a set of parameters that can be seen as conventions within the world of design (Becker 1982). Although these conventions are not written down they constitute a shared repertoire that is used by all evaluators during the admission test. Accordingly, the paper suggests that the contingencies of values at the admission test depend not on the devices which the school introduces but also the conventions that evaluators rely on.

Pragmatism constitutes the theoretical foundation for this paper and its agenda of looking into contingencies of values. Moreover, this

theoretical foundation presents a shared ground between cultural sociology and economic sociology. In recent developments economic sociology has turned to pragmatism, in particular Dewey, to outline valuation as an action (Muniesa 2012). Conventionally, a binary opposition characterizes studies of value, as value is considered either as something that something has as a result of its own condition or as something that something has by virtue of how people consider it (ibid., 24). As an alternative, the pragmatist approach suggests seeing valuation as a form of mediation, a process of doing something to something else (ibid., 32). Seeing qualities of products as both intrinsic and extrinsic (Callon et al. 2002), the pragmatist approach thus suggests investigating actions of valuations where the value of something is considered and at the same time provoked (Muniesa 2012). In parallel to this new pragmatist approach within economic sociology, cultural sociology has undergone a material turn in recent years based on a growing interest in the active role of cultural products, which has produced a new, post-Bourdieusian approach (Born 2010), a strand of which may be described as pragmatist (Hennion 2004). Whereas cultural products have often been described either as a stimulus capable of working independently of its circumstances or as a result of social causes and thus a transmitter powers and meaning, the new cultural sociology suggests that cultural objects are at the same time constructed objects and generating various effects (DeNora 2000; Hennion and Grenier 2000). Thus, similar to the new pragmatist approach within economic sociology, the new pragmatist approach within cultural sociology proposes to move beyond seeing value either as inherent in the thing itself or constructed by users. Rather, the pragmatist approach sets out to investigate the co-production of cultural products and their users (Hennion 2001), looking into how cultural products enable actions and simultaneously become constructed by these actions. While Herrnstein Smith's book on aesthetic value *Contingencies of Value* (1988) has not formed part of the new pragmatist strand within cultural sociology, it may provide a useful furtherance of this strand of research. Arguing that aesthetic value is neither solely intrinsic nor extrinsic but a function of contingent relations, Herrnstein Smith's pragmatist approach, inspired by Dewey, corresponds well with the pragmatist strands within both economic sociology and cultural sociology.

Cultural Intermediaries

As cultural sociologists have described with notions such as *the decision chain model* (Ryan and Peterson 1982), *series of mediations* (Hennion 1997), and *regimes of mediation* (Cronin 2004), cultural products undergo a number of alterations during production and distribution—and various cultural intermediaries take part in defining these alterations. At each stage in the processes of creation and

dissemination do new cultural intermediaries encounter and form cultural products.

Compared to a Latourian terminology, the concept of cultural intermediaries may cause confusion as Latour distinguishes mediators from intermediaries, suggesting that intermediaries do not transform that which they transport (2005, 37ff.). Yet, cultural intermediaries function precisely as mediators, connecting while altering that which they connect. In opposition to traditional gatekeepers, who can be seen as intermediaries in the Latourian sense, Negus suggests that cultural intermediaries become involved when cultural products are still unfinished and thus play a part in shaping products (2002a).

However, the admission test can be described as gatekeeping in the most traditional sense: choosing between products that candidates have aimed to finish and regulating access by being in power to decide who is in and who is out (DiMaggio and Hirsch 1976; see also Crane 1992; Peterson 1994). Whereas the evaluators work as lecturers at the design school and illustrate one type of cultural intermediaries during the school year, when they initiate, guide and supervise the work of students, their role changes into gatekeeping at the admission test when they select products and candidates. Here, the lecturers' primary task is to decide which applicants to accept; their valorizations are means to reach this end, and for that reason they are spoken of as evaluators during the test. In this capacity, the lecturers illustrate a specific type of intermediaries whose core activity consists in producing evaluations, rankings and selections (Bessy and Chauvin 2013, 101).

As they assess and select candidates, evaluators are in a powerful position that can be compared to other decision-making cultural intermediaries. As Beckert and Aspers suggest:

> Aesthetic markets (Aspers 2001, 1) generally have no objective standards by which quality could be measured and compared. Instead, quality is constructed from the judgments of the participating actors. As gallery owners, museum curators, art critics, collectors, or professors at art schools, these experts shape the evaluation on art works through their opinions, reviews, purchasing decisions, and exhibition policies. These authorities are carefully watched by the other actors in the field, who deduce the quality of an artist through the judgments of professionals. (2011, 20)

Like critics, whose expert-opinions may become self-fulfilling prophecies; evaluators verbalize their judgments and invent criteria that decide the fate of candidates (Hutters 2011; Karpik 2010). Also similar to high-status editors in the world of fashion, whose promotion of chosen models and photographers is decisive, evaluators assign value to and stabilize value of candidates (Aspers 2001; Mears 2011).

The Bourdieusian Approach to Cultural Intermediaries

The term cultural intermediary originates from Bourdieu and was presented in his legendary book *Distinction* to characterize a growing group of professions, a new petite bourgeoisie, covering a broad range of occupations involved in providing symbolic goods and services:

> The new petite bourgeoisie comes into its own in all the occupations involving presentation and representation (sales, marketing, advertising, public relations, fashion, decoration and so forth) and in all the institutions providing symbolic goods and services . . . and in cultural production and organization which have expanded considerably in recent years. (1984, 359)

A characteristic feature of this new class fraction is a relative openness in terms of entry qualifications. Blurring the line between high art and popular culture, and bridging the gap between personal taste and professional judgment (Negus 2002a, 503) these new occupations signal heterogeneity. As Nixon explains it:

> For Bourdieu, then, these occupations stand out in being composed of a mixture of *déclassé* middle-class individuals and socially aspirational individuals from lower middle-class and, particularly, working-class backgrounds. It is this social mix that gives these occupations much of their distinctive character. (Nixon 2003, 60)

Based on their stirring of social stratification, jobs in media and cultural industries "are popularly regarded as cool, creative and egalitarian" (Gill 2002, 70). As iconic manifestations of a fuse between leisure and work, cultural work has come to signal a new creative era (Featherstone 1991; Florida 2002). Yet, as an alternative to formal entry qualifications, recruitment to these jobs depends on network which makes social and cultural capital decisive (Lee 2013). Hence, despite their cool and egalitarian image, the flexibility and informality of these occupations reproduce inequalities (Gill 2002). As studies of the advertising industry suggest, a "taken-for-granted middle class nature" subsists (Cronin 2004, 353; Nixon 2003).

To empirically ground the claims about the role of cultural intermediaries a number of studies have investigated how cultural intermediaries carry out their jobs. For example, Negus demonstrates, in a study of music production companies in the UK and the USA, how studio executives make choices about which artists to promote depending on their own cultural dispositions. As the senior executives are predominantly white, middle-aged, middle-class, males who were young in the 60s when rock bands gained ground, they choose rock bands at the expense of pop, soul and r'n'b artists, despite the preferences of the market in the 90s (2002a; 2002b). In that way, habitus is confirmed as the most important factor behind aesthetic valuations.

Characteristically, the Bourdieusian perspective proposes a critical approach. In this perspective, taste is not neutral but a central feature of the power struggle to occupy constitutive positions within a field (Bourdieu 1993). Cultural capital in the Bourdieusian sense means familiarity with the dominant culture in society and, similar to other educational institutions, art and design schools may reproduce social differences by assuming the possession of cultural capital (Zimdars et al. 2009). Thus, evaluators' preferences as well as candidates' abilities to identify and fulfill these at admission tests may be interpreted as a matter of cultural capital.

A New Approach to Cultural Intermediaries Inspired by the 'New New Economic Sociology'

A relatively new approach to cultural intermediaries has been developed inspired by what McFall calls the 'new new economic sociology' informed by ANT (McFall 2009). Although relatively few studies have pursued this alternative route (Cronin 2004 and Moor 2012 are important examples), it has been described as promising for revitalizing and progressing the concept of cultural intermediaries (du Gay 2004; Matthews and Maguire 2012). A central question within the 'new new economic sociology' is how market designs influence processes of qualification (Cochoy 2008; 2010; MacKenzie 2009, Muniesa 2007). When this question is transported to studies of cultural intermediaries it widens the scope of study, suggesting that several other factors than cultural intermediaries themselves may be relevant to address to understand their actions and influence. As Cronin describes it (2004), the 'new new economic sociology' has been studying how market actors are involved in the qualification of products (Callon et al. 2002), which parallels the discussion about how cultural intermediaries carry out mediations. Yet, in contrast to studies of cultural intermediaries, which have focused on the habitus of cultural intermediaries, studies within the 'new new economic sociology' have been highlighting the active role of devices such as measurement techniques, pricing models and merchandising tools (Muniesa et al. 2007, 2). Inspired by this, attention has been turned to devices that accompany cultural intermediaries (see for example Moor 2012).

Adding to this new perspective on cultural intermediaries, the analysis in this paper considers the quantification of qualitative features of aesthetic products. By investigating the official assessment criteria that the school operates with, and the two ranking systems that accompany it, the analysis looks into the school's taxonomy of qualities and how it is employed as a calculative device to rank applicants. Investigating the translation from aesthetic products to scores, the paper illustrates the production of data; how candidates are produced by the evaluators' assessment practices assisted by the

official assessment criteria and ranking systems that the school has invented (Ruppert 2011). In that way, the paper exemplifies what a ranking system does by studying how aesthetic products, that are meant to be unique and singular, are equated and compared at the test (Didier 2010; Karpik 2010). Based on this, that analysis raises the question about how to classify and count aesthetic qualities (Desrosières 1998).

Introducing the Study: The Case of the Admission Test

A study of the admission test composes the basis for the paper. I conducted this study in 2010. Access to the admission test was given to me by the school's head of study program. I followed the admission test primarily by means of non-participant observations. Observations were carried out throughout a week in April when evaluators reviewed submitted folders and over three days in May when evaluators interviewed selected applicants. Evaluators were split into teams that worked alongside each other, and I followed a different team of evaluators each day. This means that the study entails only a part of the assessments that were made during the test, but nevertheless assessments performed by a variety of evaluators. During my observations I noted down exchange of words between evaluators alongside brief descriptions of the works that evaluators were looking at. As I had not gained permission from all applicants I was not allowed to photograph the submitted folders although it would have been a highly useful method of documentation. In addition to my observations, I talked to evaluators in breaks when they asked me about my study and I asked them to clarify things for me. Moreover, in June, I presented my observations to the lecturers and administration at the school at their internal evaluation of the test.

Evaluators gave me access to a confidential situation where they make numerous decisions in a short time, often stated in quite few and frank words. Similar to discussions of grades after examinations at other educational institutions, evaluations at the admission test did not dance around the issue but were to the point. This means that transcriptions of the evaluations when taken out of their original setting may sound harsher than when spoken in the moment of making the decision. Transcripts of specific evaluations constitute a particular type of empirical material which is quite different from, for example, interviews with evaluators about their practices in general. For this reason the name of the school has been anonymized.

About the Test

Every year before March fifteen candidates can register for the admission test via the Coordinated Enrolment System, which is used for accessing all higher education institutions in Denmark. Admittance into all higher education programs, including programs at the design school in question, requires a General Certificate of Secondary Education. If candidates meet this requirement, they receive an applicant number from the Coordinated Enrolment System, and this number is used to track applicants throughout the admission test.

At the beginning of April, the admission test is launched on the school webpage, and candidates have two weeks to produce their answers. The school makes a new assignment each year. Submissions should be between fifteen and twenty-five pages. Submissions can be handed in analogue or digital versions. The format of analogue submissions is optional but maximum size A3. The format of digital submissions is pdf and a maximum of twenty-five megabytes. Together with the response to the set assignment applicants can include up to three examples of their previous work. A full submission is referred to as a folder because submissions are traditionally delivered bound in a folder.

One week is set aside for going through all the submissions at the school. This takes place in April, right after the deadline for submissions. About ten lecturers participate each day, and they are split into teams of two. The teams are formed so that they consist of lecturers from different fields such as fashion design, interaction design and industrial design. Moreover, current students at the school participate as observers of the assessments. During the week in 2010 when I followed the test there were about as many students as lecturers participating on the first day and they contributed enthusiastically to the discussions. However, on the morning on the second day the school administration stressed that the students' role was only to observe assessments. After this reminder the participation of students declined; there were fewer students present at the assessments and they only took part in the discussions sporadically.

Generally, evaluators spend between five and fifteen minutes on each folder. How much time they spend depends on the quality of the folder. If the submission is judged to be very poor the evaluation is often done in a couple of minutes. Conversely, if the submission is considered competent and thorough, or difficult to assess, the assessment can take up to fifteen minutes. Most of the evaluations that I observed took a little less than ten minutes. On the first day only one hundred and twenty folders were evaluated, meaning that the evaluators had to speed up, assessing around two hundred folders each day for the next four days.

In May, selected applicants are invited to interviews. Similar to the process of reviewing folders, the interviews take place over a week

with lecturers working as evaluators in teams of two. At the interview sessions, evaluators do not know how folders have been evaluated beforehand, and it is only by coincidence if an evaluator meets the same folder during the first and second round. Interviews take approximately twenty minutes. First, applicants present their submissions. Afterwards, evaluators inquire about previous schooling and work experiences, interests, and future plans, based on a set of standardized questions. After the interview, evaluators grade the applicant. The grading at the interview makes the final score at the test.

In 2010, 1257 candidates signed up for the admission test via the Coordinated Enrolment System, 703 handed in answers to the home assignment, 199 were selected for interviews, 150 applicants passed the test at the interview, and 105 were chosen to start at the school.

Cultural Capital Stands the Test: The Bourdieusian Approach

Without doubt, a number of empirical examples from the admission test suit a Bourdieusian analysis about social exclusion perfectly. Lecturers at the design school can be observed choosing applicants who possess the required cultural capital and excluding those who do not. Showing how evaluators' choices may support the Bourdieusian argument that cultural capital is decisive, two examples from the interview sessions will serve as illustrations.

Assessments of Two Interviewees

> A chubby Greenlandic guy comes in. He has a crew cut, wears a hoodie and speaks with a Jutlandic dialect. He explains that he has had a brief education in design from a technical school and has been self-employed in advertising for some years, but currently he is employed at a convenience store and would like to return to school to develop his skills. His assignment consists in clothing equipment for expat aid workers in conflict and disaster zones. The clothing is meant to be comfortable, warm and at the same time signal "authority in a non-threatening way," the applicant explains. At the evaluation, after a remarkably short interview, the first evaluator begins: "It left me speechless. He is good enough, but kind of stiff." The second evaluator adds: "Really shy also, right. I'll write 'nerd'." The first evaluator returns to the assignment: "It's supposed to be non-frightening and then comes *Terminator* [a heavy piece of clothing that the evaluators associate with science-fiction and militarism]." They each give their grades and the candidate

receives 17 points in total. The first evaluator concludes: "17—then he won't get in. Last year the [cutoff] line went at 18."

Two days later, when I follow a different team of evaluators, a tall, lean guy with slicked back hair comes in. He is wearing laced boots and a white shirt with a beige V-Neck sweater. He explains that he has been attending the Scandinavian Design College over the past half year, after finishing high school. Asked which subject he is interested in, he answers: "Industrial design, I have told myself. My mum also works for a graphic design company." His assignment consists in a re-design of a pavilion for the Roskilde Festival made of biodegradable materials. He also shows a couple of assignments he has produced at the design college. Asked what he is inspired by, he answers: "I've just seen the exhibition on green architecture at Louisiana [Louisiana Museum of Modern Art, which is the most visited art museum in Denmark]." The evaluator follows up: "Are you interested in that [green architecture]?" The applicant responds: "Louisiana is SUCH a great place; I just cannot go there often enough! Sustainability interests me, but it can also get too much." After the interview the applicant begins rolling down the sleeves of his shirt, buttoning them and rolling down the sleeves of his sweater over the sleeves of the shirt. He takes his time, in contrast to the other applicants who have hurried out. At the evaluation the first evaluator starts: "He's a likely student . . . but lacks creativity . . . It's also the milieu he comes from, he's in the 7's [middle region]." The second evaluator agrees: "Definitely passed, he has something to offer, he's in the top section." The first evaluator hesitates: "He also had weak points, but he's used to talking." The second evaluator agrees: "It's not in the detail, not aesthetic considerations." The first evaluator decides: "But it's fascinating with someone who understands the context." The candidate gets 7 four times, which gives a total of 28 points. The first evaluator concludes: "Then it'll go right through."

What happens during these two instances of evaluation? According to the evaluators, the chubby applicant is "good enough," but obviously that is not sufficient to grant him access to the school. Technical qualifications become overruled by an estimation of the applicant's personality, which is deemed nerdy and shy. After they have reached their decision, I ask the evaluators whether they select students that fit into the school socially: if blending into the body of students at the school is a criterion. The first evaluator replies: "He would have a really hard time here." The second evaluator agrees.

On the other hand, the evaluators estimate that the applicant with the slicked back hair "lacks creativity," but he is accepted into the

school nevertheless. Despite his "weak points" and lack of "aesthetic considerations," he is "used to talking" and able to put things in "context" and that is apparently more important. As one of the evaluators point out, this applicant comes from a "milieu" that gives him an advantage: with a parent working in the industry, frequent visits to the most famous art museum in the country and having completed a course at one of the best pre-schools you get acquainted with the world of the school. In sharp contrast with the chubby applicant, the applicant with the slicked back hair demonstrates a great amount of confidence that is based solidly on his literacy of the field.

In these examples, assignments are interpreted as signs of whether the applicant is familiar with the design field. The first candidate's cultural references (military equipment, stories from a friend who has been working for Red Cross in Afghanistan during the war, *Terminator*) are not in line with the school's profile, and one of the evaluators asks him: "Are you kind of crazy about war?" (To which he answers: "No, not really.") Moreover, his design techniques, for example a mind-map, are considered simplistic, although the evaluators acknowledge: "It's okay. There are some ideas."

On the other hand, the assignment of the second candidate deals with a timely topic (sustainability), and is composed of elements that the school values, particularly several sketches that illustrate the design process. Also, the extra pieces of work, which this applicant shows at the interview session, prove that he knows how to work with design. For example, a piece consists in photos of a model made of acrylic, which has been cut out and scratched to get a frosted look. Although this model is an assignment from the design college, which has been made under the supervision of a teacher, it nevertheless demonstrates that the applicant knows how to make a design model correctly.

As these examples illustrate, cultural capital becomes decisive at the test. Class background and knowledge about dominant culture in society seem to translate into familiarity with the design field. Whereas the applicant who is born into a family with high cultural capital knows the codes of the field and is accepted into the school, the applicant whose social background is not as favorable is unfamiliar with the codes of the field, and thus he becomes excluded. Despite the chubby applicant's ideas and technical skills he is unable to formulate these successfully. In that way, the admission test seems to reproduce social inequality by valuing presentations that requires knowledge about the field, which presupposes cultural capital.

Evaluators' Reactions to the Bourdieusian Approach

When I ask one of the evaluators about the problematic about the importance of cultural capital during a break, he explains:

> Of course, it's a huge advantage to come from a home of architects with nice things, compared to coming from Ishøj [a suburb south of Copenhagen dominated by public housing] and having been told that "you're good at drawing so you should seek into the design school," and then having a dad who is warehouse keeper. But sometimes, earlier on, we have accepted students who were below level—when one of the applicants that we have first accepted has backed out—and they have turned out to become really good.

As this quote illustrates, the evaluators are perfectly aware of the important part which cultural capital plays at the test. However, the quote moreover points to an awareness of the potential which unlikely students may possess. Compared to students who know the codes of the field beforehand, those who do not may develop more at the school.

When I presented my observations to the evaluators and the administration at the school at an internal seminar we discussed my analysis. According to the evaluators, the Bourdieusian analysis is suspicious of their motives, holding out bleak prospects for whether they can make fair evaluations, and they felt misrepresented by the picture it gives of their actions. If social background, dispositions and habitus always sneak in and bias the valuations made by cultural intermediaries, then how could this be overcome, the evaluators wanted to know. Also, if this apparent bias is what creates not only one's personal but also one's professional foundation for evaluating work, then maybe it is indispensable and should not be attempted to be erased, the evaluators suggested.

According to the evaluators, it is necessary to select a rather homogenous group of students, who have some knowledge about the codes of the field, because it is a prerequisite for the teaching. However, if these codes that appear secret and invisible to outsides could be made visible and accessible, and if this knowledge could be distributed more widely, it would be an advantage for the school because it would give a larger pool of qualified candidates which could raise the standards, the evaluators argued. If some assignments are poor due to lack of knowledge about what is expected it raises the question if knowledge about the expectations of the school is something you can obtain. For that reason, the school has initiated a process of explicating and standardizing its assessment criteria.

Standardizing Valuations by Means of Devices: Official Criteria and Scoring Mechanisms

To further develop the concept of cultural intermediaries, Moor suggests investigating precisely how cultural intermediaries enact their influence. In Moor's words: "there remains a tendency towards vague assertions of a 'shaping' role and reluctance to be more specific" (2012, 570). As an alternative to the Bourdieusian approach, Moor outlines an approach inspired by ANT, which draws attention to the networks that cultural intermediaries form part of. As ANT classically proposes, networks are composed and stabilized as heterogeneous actors become enrolled (Callon 1986). Hence, not only human actors but also non-human agency can be central for defining and upholding a network. For studies of cultural intermediaries, Moor suggests that ANT has potential to expand the scope of empirical investigation considerably, taking into consideration anything that acts as a mediator (Moor 2012, 570). Hence, in contrast to focusing solely on cultural intermediaries (and their habitus), ANT opens up a much wider perspective, where agency is seen as distributed and various types and levels of agency need to be defined empirically.

In the case of the admission test this means that it is not only relevant to study evaluators, their actions and dispositions, but also the institutional set-up which the school provides. Three devices in particular, invented by the school's administration to structure evaluators' assessments, seem relevant to consider: a list of official assessment criteria and two scoring mechanisms based on these criteria. Following Moor, who builds on studies within the 'new new economic sociology,' the two scoring mechanisms may be seen as performative measurement techniques which make some qualities visible while leaving others in the background (Moor 2012, 571; see also Didier 2007). In other words, the scoring mechanisms may be considered as measurement devices as they produce numbers which order applicants that seek into the school. Particularly the second scoring mechanism, which most directly relates to the official criteria, constitutes an attempt to order, standardize and stabilize the assessments that evaluators make.

Official Assessment Criteria

Over the last years, the school has been working to make the admission process transparent by explicating and standardizing its assessment criteria. The school strives to make valuations at the admission test based in a uniform list of criteria to avoid subjective and opaque parameters. As one of the evaluators replies, when an applicant at an interview asks what they think about her work: "We are not going to tell you that. We evaluate you according to these criteria [shows her the list of official criteria]." On the school's website

a manual for the admission test can be found, which includes a list of four official assessment criteria. On the webpage it says:

> We assess your professional talent as a designer and your potential for development. We do this by assessing your abilities to: explore and document. Produce and develop ideas. Treat and develop form, function, materials and digital tools. Disseminate and communicate.

To rank applicants on the foundation of these standardized assessment criteria, the school operates with two scoring mechanisms, one which is used for folders and one for interviews. In that way, the school aims to make evaluators put their qualitative valuations into an ordered system to make their valuations calculable and comparable.

The Scoring Mechanism for Folders

After reviewing folders, evaluators fill out a form for each folder. On this form, the four criteria (see table 1) are restated to draw evaluators' attention to these criteria. Evaluators fill in the date, the number of the applicant, put a cross at either the box 'yes' or the box 'no' as to whether the applicant should be invited to an interview, and give the signatures from both evaluators (see table 2.a). However, in previous years this procedure has resulted in too few interviewees, and the evaluators have had to look through the huge pile of submissions given a 'no' again to find further interview candidates. For that reason the category 'maybe' was invented a few years before this study (see table 2.b). Nevertheless, this category has grown so that it has become a major task to look through this pile of 'maybe' again to find a limited number of extra candidates for the interviews. About two hundred candidates should be invited to the interview sessions, the school has decided. This number is considered small enough to be manageable and large enough to ensure that there is also a selection happening during this second part of the test.

1. Ability to explore and document
2. Ability to produce and develop ideas
3. Ability to treat and develop form, function, materials and digital tools
4. Ability to disseminate and communicate

Table 1. The school's four official assessment criteria.

Hence, at the first day of the review of folders, a new ranking system is introduced by a secretary from the school administration together with a representative of the evaluators. In 2010, 'maybe' is divided into three sub-categories: 'good maybe,' 'middle maybe' and

'poor maybe' (see table 2.c). However, these categories cannot be marked on the form (which only contains the boxes 'yes' and 'no'), and for that reason differently colored post-it-notes are introduced to signal the ranking of the folders. Each form should be supplemented with a colored post-it-note to signal if it is a 'yes' (purple), a 'good maybe' (pink), a 'middle maybe' (yellow), a 'poor maybe' (green) or a 'no' (orange). With this grading system it will be easier to find the two hundred interview candidates.

One of the student observers suggests that the color ranking system should be substituted with numerical ranking, which will be easier to understand. As a compromise, the color ranking system is supplemented with a numerical system: 1 is 'yes' (purple), 2 is 'good maybe' (pink), 3 is 'middle maybe' (yellow), 4 is 'poor maybe' (green) and 5 is 'no' (orange). One of the evaluators objects that with this new grading system it will be the new middle categories that will be used all the time. As the central question concerns the dividing line between 'yes' and 'no,' the sub-categories of 'maybe' only displaces this. In other words, the maybe category accentuates the difficulties of drawing a clear dividing line and can be seen as an attempt to introduce nuance in the process of categorization.

Yes	No

A. The original tick off boxes on the assessment form.

Yes	Maybe	No

B. Introducing a middle category.

Yes (1)	Good maybe (2)	Middle maybe (3)	Poor maybe (4)	No (5)

C. Introducing further middle categories.

Table 2 (A, B, C). Illustration of the development of the scoring mechanism for ranking folder.

The Scoring Mechanism for Interviewees

At the interview sessions, another form is to be filled out, which introduces a different scoring mechanism. Again, the four official criteria are stated on the form: 1) ability to explore and document 2) ability to produce and develop ideas 3) ability to treat and develop form, function, material and digital tools and 4) ability to disseminate and communicate. Yet, during this round of the test each criterion is to be given a grade from the 7-step grading scale (–2, 0, 2, 4, 7, 10, 12).

	Grades
1. Ability to explore and document	
2. Ability to produce and develop ideas	
3. Ability to treat and develop form, function, materials and digital tools	
4. Ability to disseminate and communicate	
Total score	

Table 3. Illustration of scoring mechanism for ranking interviewees.

Thus, based on their abilities to explore, produce ideas, develop form, and communicate, applicants receive a total score of up to 48, where 8 means that they have passed the test. With this grading system the school can rank candidates on a longer scale (than the scales used for reviews of folders with only 2, 3 or 5 categories) and select the best sequentially. Based on the total score from the interview sessions the school finds its 105 new students.

After having graded applicants at the interview sessions, one question recurs among the evaluators. Namely, what the total score of the candidate is: if it is too high or low to possibly entering the school. The examples above with the two candidates who have designed clothing for expat workers and a pavilion in sustainable materials illustrate this point. Based on the number that constituted the demarcation line last year, the evaluators discuss if it is likely for the candidates to become accepted into the school. Thus, despite the scale ranging from 0 to 48 points, the crucial question is where the dividing line will be drawn. This means that evaluators pay more attention to the overall score than to each of the four sub-scores, and sometimes sub-scores are altered to adjust the overall score and thus make candidates' chances to get into the school better (or worse).

In 2009, the dividing line was drawn at 18 and accordingly evaluators used this number as a point of reference the subsequent

year. However, in 2010, the lowest graded candidate to be offered a position had a score of 21. On the other hand, the best candidate scored 48. Applicants are not informed about their scores; they are only told whether they have passed—and whether they are offered a position at the school.

Valuations Principles in Practice: Conventions and Evaluators' Parameters

What happens at the specific instances of valuation during the admission test is not a deductive operation of enacting the official criteria, quite the contrary. As the examples of assessments of two interviewees in the above section on the Bourdieusian approach illustrated, evaluators do not slavishly follow the official criteria. Instead, evaluators discuss the work of candidates and center their discussions on the specifics of the work in case. Sometimes an official criterion is brought into the discussion. Most often, however, it is not until after the assessment has been made that evaluators turn attention to the list of official criteria and the scoring mechanism. While assessing pieces of work, evaluators are either quiet or making comments on the work. In that way, evaluators' bring inductive arguments into the discussion, relating their assessments directly to features of the work in question.

In this section, I present the parameters that evaluators used to make the assessments that I observed. Based on my observation notes, I have made a condensation of evaluators' spoken arguments, grouping these into categories (see table 4). To validate whether these categories formed adequate descriptions of evaluators' valuation principles I presented my overview of evaluators' parameters at an internal meeting at the school. At this meeting evaluators confirmed that these parameters could be seen as the foundation which their assessments were based on. Hence, although evaluators' more specific and tangible principles of valuating are not formalized as the official criteria, they were nevertheless persistent and uniform across the groups of evaluators that I followed, and confirmed by the evaluators.

To describe evaluators' assessment parameters, I use the notion of conventions from Becker (1982). In his book *Art Worlds* (ibid.), Becker portrays a number of standards within various art forms—such as the number of musicians in symphony orchestras, length of movies, size of canvases in art museums, etc.—and he suggests that these conventions lay the foundation for interactions within the arts. Accordingly, Becker underlines that the division of labor in art worlds is also coordinated by means of conventions. Thus, according to Becker, although art worlds may seem non-formalized and in pursuit of uniqueness, these worlds are characterized by sets of standardized ways of doing things and uniqueness is defined in relation to these shared standards. Hence,

conventions are crucial and shared among participants in art worlds. Becker's concept of *art worlds* resemble Bourdieu's notion of *field* as it calls attention to the socially defined norms that make up a domain (Becker 2008). However, the concept of art worlds also differs from Bourdieu's approach in important ways. Arguing that art can be seen as work and collective activity, Becker focuses on division of labor, coordination and conventions. On the other hand, Bourdieu views the field as constituted by power struggles over central positions. Hence, Bourdieu's concept offers a critical approach while Becker's concept outlines an empirical and descriptive approach. Accordingly, Becker's concept of art worlds has been criticized by Bourdieu who characterized it as "pure descriptive, even enumerative" (Bourdieu 1996, 205). Thus, whereas Bourdieu's critical perspective can be used to portray evaluators' actions as problematic, as has been illustrated above, Becker's interactionist view consists in describing art worlds empirically. In the case of the admission test this means that the study becomes a study of critique rather than a critical study.

Becker's interactionism is in line with pragmatism, not only because the two traditions share philosophical roots but also because their ethnographic methodologies overlap and they share an interest in studying how people do things and thus how values and conventions become installed and maintained. By giving Becker a twist in a socio-material direction (Hennion 1997), his approach to studying art as collective action may fall under the category of pragmatism (Heinich 2014). Accordingly, Becker's proposal for studying art as work may resonate with the pragmatist idea of seeing valuation as an action (Muniesa 2012), and his focus on conventions may be one way of tracing the contingencies of values (Herrnstein Smith 1988). To follow this route, let us look at the assessment parameters which evaluators at the design school operate with (table 4).

Parameter	*Positive response*	*Negative response*
Materials of the packaging	A3 Cardboard folders Thick paper	A4 Office envelopes Thin paper
Basic skills	Drawing abilities	Cannot draw—or Too schooled
Several approaches	Demonstrating various techniques and disciplines Using computer as a tool	Proposals too similar One-dimensional

Table 4. Overview of evaluators' parameters (continued on page 139).

Parameter	*Positive response*	*Negative response*
Visualization	Compositional ability Overview Communicating clearly and graphically	(Too much) text Describing the process in words Over-explaining
Ideas	Basic idea/purpose Actual problem Unusual theme Additional/alternative ideas Relating to user group	Why? What is the problem? Inventing a problem Lack of consideration
Process and development	Investigating and slowly approaching Making experiments Working with ideas Sketching Intermediate steps: showing the steps Evaluating one's own proposals	No development Same form throughout—or Sudden jumps/huge leaps Reaching goal too quickly
Rigour	Systematic Worked-through Completed	No common thread Weak connections Errors and omissions
Ingenious solutions	Originality Interested in telling stories	Start is better than the result No design but a product No solution Seen a million times before
Aesthetic sense	Sense of form and color Beautiful Capturing an atmosphere Fresh, fun, full of vitality Balls, exciting, has a nerve Tangible, physical	Intensive Banal, predictable Lacking power Decorative Ordinary Uninteresting—or Art
Potential	Raw material Searching person Seems teachable	Need to learn to be creative
Personality	Impression of the person	Impersonal Not having oneself on board Not taking a stance—or Being to close to the problem Personal emotions

Table 4. Overview of evaluators' parameters.

Materials of the Packaging

First of all, materials of the packaging of the folder are important:

> Digging in the pile, the first evaluator states: "Now comes the envelopes. Five envelopes. This will be fast." Pointing at the envelopes, the lecturer explains to me: "It means something. Size matters. They haven't used A3 although they have the possibility to do so. [The five folders are made on A4 printer paper packed in office envelopes]. That shows how important you think it is. That means you ask to be excluded." Flicking through the pages, the lecturers access the first envelope-folder in two minutes, categorizing it as a clear "no."

Nowhere in the instructions for applicants does it say that the packaging of the submission is crucial, but evidently it is. As heaps of submissions are reviewed it becomes obvious that large folders in cardboard, filled with thick A3 pages, produce much higher expectations than thin A4 envelopes on printer paper. The importance of packaging and paper is considered too difficult, or unnecessary, to put into words.

Basic Skills

Secondly, basic skills, particularly drawing skills, are essential:

> Pointing at a drawing, the first evaluator comments: "I think everything has been copied." The second evaluator agrees: "Yes, here, for example, the feet have not been included in the drawing." [Some square-looking sneakers serve as feet in the drawing]. The first evaluator continues: "It's only things that have been copied using tracing paper, right." Nuancing their negative assessment, the second evaluator suggests: "Yes, but there's a certain compositional ability and it's staged delicately, right?" Turning a page to see examples of the candidate's previous works, the first evaluator exclaims: "WHAT!? I say 5 [see table 2.c]. We can say 4 if you…" Unsure, the second evaluator deliberates: "I'm… You got a sourdough [a central ingredient for baking your own traditional Danish rye bread] from me this morning." Nevertheless, the first evaluator holds on to the negative evaluation: "How Copenhagians look? That's what it ends with." Trying to emphasize a more positive element, the second evaluator argues: "But it's someone using the medium." Disagreeing, the first evaluator continues: "But it points in all directions. It's not my distaste for it as such, but that it's taken from something else, it's sampling. [Pause] I have gotten a sourdough, but tell me, do you really want to go up to 3? Then you'll need some arguments." Trying to formulate an

> argument, the second evaluator suggests: "Sampling is one of the ways to move forward." Looking at the drawings the first evaluator is not convinced, but outlines a compromise: "You can have a 4." Reluctantly, the second evaluator accepts: "Then you'll have to return half of the sourdough." While recording the score, the first evaluator comments: "It's nothing personal." Still, the second evaluator rounds off: "I need a moment to collect myself."

As the discussion in this example illustrates, it is difficult to convince evaluators of other qualities in the work if it lacks basic skills. In other words, basic skills are hard to compensate for, and drawing abilities are seen as an indication of basic skills. Drawing abilities constitute a starting point, which the first evaluator in this example is unwilling to look behind. If applicants demonstrate a classical drawing style it is considered a good starting point. If, on the other hand, applicants have drawn clumsily it is seen as a clear sign of weakness as this example illustrates. However, it is also considered a weakness if the drawing skills are too schooled; if an acquired style stands in the way of the applicant's own expression.

Several Approaches

In continuation of basic skills, working with several approaches to design is valued:

> Puzzled by a submission, the first evaluator asks: "If I buy it then what can I spray? My armpits? My bicycle chain? It's an imaginary product for a campaign." The second evaluator moderates: "Yes, the basic idea is not exactly obvious, but it gets through all the disciplines."

As the example illustrates, regardless of the idea behind the design, mastering a breadth of disciplines; demonstrating different techniques, is seen as a good sign. One-dimensional assignments are criticized exactly for their one-dimensionality, even though they may excel in the one discipline which they embody. If the entire folder is created in the same style, or if the works in the folder are too similar, it is valued negatively. Also, if applicants work digitally it is crucial to use the computer as a tool, instead of using computer programs to standardize works.

To illustrate how crucial skills and abilities in a range of disciplines are, the interview with the applicant who achieves the highest score at the test may serve as an example:

> Before the candidate comes in, the evaluators scroll through the assignment on the computer. The assignment is about refugee tents. "On the face of it this looks quite promising. At least it's someone who can draw" the first evaluator states. The candidate comes in. He is a guy in his mid-twenties in Converse shoes. Immediately, when he begins introducing the assignment, the evaluators start asking questions about the technicalities of his work: are the drawings based on photos, are they marker drawings, which drawings are made digitally. Asked about his background, the candidate describes attending a drawing course many years ago and having worked abroad in the computer game industry for several years. "Can you work in 3D?" one of the evaluators asks. "Yes, you name it," the applicant replies. After the interview, the first evaluator affirms: "He would make a fine student." The second evaluator continues: "I was thinking if he has too much energy." The first evaluator takes over: "He draws brilliantly." "10–12?" the second evaluator asks [see table 3]. "Yes, clearly," the first evaluator replies. The applicant achieves the highest possible score: 48 points.

What is exemplified in this case is that drawing abilities and abilities in diverse approaches are highly valued at the test. Basic skills together with mastering of several disciplines make the candidate in question strong and impossible to disagree on. In this case, the evaluators' only doubt is whether the candidate "has too much energy" for the school. His qualifications are absolutely adequate.

Visualization

A further tangible parameter is visualization, in contrast to verbalization:

> Reviewing a folder, the first evaluator states disapprovingly: "The process is in words." The second evaluator agrees: "If you want to make something like this it has to be explained graphically with arrows and such."

Visualization is central. Visual presentation, compositional ability and layout are paramount for evaluators. That is, the submission should work graphically and present itself visually. Submissions that entail too much text are unable to do this, according to the evaluators. Explaining the process in words is considered a weakness.

Ideas

Moreover, as several of the above examples have already touched upon, ideas are important:

> Opening a folder, the first evaluator proposes: "It's the beginning of a turban." Correcting him, the second evaluator states: "That's not what it's called, it's a headscarf." They continue reading. After a short while, the first evaluator gets bored: "Here we go again. A hoodie-poncho-scarf. That's a giant zipper [points at a zip on the drawing of a scarf]." Agreeing with this critical assessment, the second evaluator expands: "That won't work [points at the covering of the face on another picture]. It's still a hooded coat. [Looking at more pictures] Buttons or zipper… If you wear a hijab you will definitely not put these on. And it's even meant to be for older women. She starts out with an intention, but hasn't understood the problem. And zipper or buttons?! 5 [see table 2.c]."

First of all, the basic idea in the submission should be clear and relevant. Preferably, the idea should concern an actual problem and if it is related to a user group it is considered a plus. Conversely, if the evaluators do not get the point of the submission, if there is no problem to be solved or if a problem is invented, then it counts against. In the above example, the candidate designs an alternative scarf in relation to the debate over the hijab. By doing so, the candidate locates a problem, which is considered relevant because it is topical. As this exemplifies, ideas are often connected to a zeitgeist. On the last day of reviewing folders, an evaluator comments: "Soon we'll have an assignment with stressed homeless people in burquas."

Yet, it is not enough to locate an actual problem. As the above example illustrates, candidates should also be able to design something that treats the identified problem. In the above case, the intention to make an alternative headscarf turns into a design of something else, namely a hood. In that way the idea is not developed properly. Throughout the test, development of the design idea constitutes one of the most commonly raised objections to candidates' work. Particularly, submissions should contain several ideas, which show alternatives to the idea that is in focus. But often, candidates do not live up to this criterion of outlining multiple ideas:

> Reviewing a submission that consists in a battery for iPhones one of the evaluators announces: "There's not enough in it . . . There is an idea alright, but it's not developed very much. [Reads from the list of official criteria] 'Produce and develop

> ideas.' When you don't have your charger [pauses], but what about other alternatives, more ideas, for example a small dynamo on the bike or solar cells?"

Process and Development

As the above example with the iPhone battery illustrates, ideas should be multiple and thus demonstrate development. In other words, locating a problem and coming up with an idea should be followed by an outline of a process. Accounting for the design process is a feature of assignments that is highly valued by the evaluators:

> Unpacking a submission, the first evaluator bursts out: "Look at this! This is our result!" [Laughs] The second evaluator responds: "You are kidding me! God damn it! Reverse! Reverse the process! It should have proceeded from here to here" [pointing from the last to the first picture]. "She has a fantastic process and then she kills her project and makes a product for IKEA," the first evaluator agrees.

Process and development are essential for the evaluators. Applicants should experiment and investigate, slowly approaching the subject. Ideas should be worked out and the steps in the process should be demonstrated. To show the gradual development and intermediate steps, submissions should contain sketches, preferably originals. Applicants may fall into two pitfalls when they do not include sketches, either making submissions with no development or making submissions with sudden jumps or giant leaps. Both lack of sketches and sudden jumps are considered to be severe weaknesses. Ideally, assignments should include a detailed, varied and rich account of considerations and steps during the entire process of developing a design.

Rigour, Ingenious Solutions, Aesthetic Sense, Potential and Personality

Besides these principles of looking for materials of the packaging, basic skills, a scope of disciplines, visualization, ideas, process and development, the evaluators also value rigour, ingenious solutions and aesthetic sense. Last but not least, evaluators seek potential and personality. Potential means that the submission should show raw material and indicate being made by a searching, teachable person. Personality means that the submission should give an impression of the person behind it. On the contrary, if a submission is impersonal, or if it is too absorbed in personal emotions, it is valued negatively.

Concluding Remarks

To address the evaluations made at the admission test at the design school, the paper has outlined a pragmatist position as its theoretical foundation. Pragmatism not only constitutes a common ground between economic sociology and cultural sociology, it moreover offers a way of addressing values as contingent. Thus, a starting point for this paper has been Barbara Herrnstein Smith's notion of contingencies of values. In opposition to seeing aesthetic value as subjective, Herrnstein Smith suggests that values are contingent: "*contingent* in the sense that it is a function . . . of the states of numerous particular systems interacting at a particular time and place" (1988, 183, emphasis in the original). Subscribing to this view, the paper has suggested investigating the admission test as an exercise in contingencies of values where official devices and professional conventions meet in the makings of assessments.

Moreover, the paper has employed theoretical inspiration from the literature on cultural intermediaries to describe the role of evaluators at the test. Whereas the concept of cultural intermediaries originates from Bourdieu, a new strand within this line of research suggests turning attention to ANT in the form of the 'new new economic sociology' and thus pragmatism. Adding to this body of literature, the paper has demonstrated how evaluators at the admission test make assessments that are based in other variables than their own habitus. That is, rather than suggesting that the evaluators make subjectively biased assessments, as the critical Bourdieusian approach proposes, this paper has shown that evaluators make assessments based on official devices, conventions of the design world and impressions of candidates and their works.

Yet, as the first part of the analysis has illustrated, it is indeed possible to apply a traditional Bourdieusian framework to evaluations at the admission test, which makes visible a form of social stratification at the test. With this perspective, applicants are seen to be selected because of their cultural capital, or excluded because of their lack of cultural capital. Whereas this story is fascinating because of its critical edge, it makes the test seem highly problematical, and the evaluators do not find this story do them justice. Moreover, whereas the Bourdieusian perspective is sensitive to power struggles and reproduction of cultural preferences, this perspective does not take into account that the school actively strives to make its assessments standardized and non-subjective.

Hence, the second part of analysis has looked into the school's attempt to overcome what is perceived as subjective bias in aesthetic valuations by introducing a standardized set of assessment criteria and ranking systems. With four official criteria, the school explicitly aims to make its evaluations formal, uniform and ideally objective. Turning

attention to these criteria and the two ranking systems that they are accompanied by, this part of the analysis has considered the quantification of qualitative, aesthetic features. Informed by the 'new new economic sociology' as it has been taken up in relation to cultural intermediaries this part of the analysis has focused on the performative effects of devices.

In the third part, the analysis has shown that in the actual practices of valuating applicants' work, evaluators do not employ the devices that the school has introduced. Rather, evaluators rely on a set of conventions based in their professional expertise, which the analysis describes with reference to Becker's work on conventions within art worlds. Although these valuation principles are not as formalized as the official criteria, they are nevertheless uniform across the group of evaluators, and they make good sense in practice. Evaluators at the test do not employ the devices of the official criteria and the scoring mechanisms which are used to rank applicants until *after* assessments have been made. When making their assessments evaluators rely on a set of conventions which allows them to address the specifics of the unique objects they encounter. Once assessments have been made and a grade is to be given evaluators turn attention to the official criteria and the related scoring mechanisms.

As the analysis shows, evaluations made at the test are not a simple matter of overcoming subjective bias by means of objective criteria and measurement devices. Rather, evaluations are contingent as they compose the functions of multiple variables. That is, the pragmatist approach does not accept the common storyline about the test: that evaluators' subjective assessments biased by cultural capital, habitus and personal preferences can be substituted with objective assessments by implementing standardized assessment criteria and devises for scoring candidates in accordance with these criteria. Instead, the pragmatist approach to seeing values as contingent suggests that these two competing logics co-exist at the test, together with several other evaluative principles. Hence, the two competing logics of standardizing assessments to avoid what is believed to be subjective bias could be described in terms of the multiple orders of worth literature as an industrial logic of measuring professional capabilities and an inspirational logic of valuing the unique that "eludes measure" (Boltanski and Thévenot 2006, 159; see also Stark 2008). In the words of Herrnstein Smith the co-existence of multiple orders of worth is exactly what contingencies of values are about, as she describes this as "numerous particular systems interacting at a particular time and place" (1988, 183).

In the case of the admission test, the analysis has proposed seeing evaluators' assessments as based in and maintaining conventions within the world of design, rather than a reflection of evaluators' own habitus. As the third part of the analysis has shown, evaluators'

assessment parameters are numerous, uniform across the group of evaluators and employed when relevant. Hence, evaluators' parameters present a whole set of conventions whereas the school's official criteria are differentiated and thus made comparable (Didier 2010). This means that the translation of assessments into a grading based in this formal apparatus risk taking the focus away from what evaluators are actually looking at when assessing the work of candidates. While evaluators are guided by a wide repertoire of design conventions when assessing unique, singular products, the devices that the school introduces becomes effective in expressing a certain characterization of what they describe (Didier 2007).

Thus, values as expressed in evaluations at the admission test are contingent because they employ standardized assessment criteria and measurement devices while being founded on conventions within the world of design and initiated by the specifics of the objects that are being evaluated. In that way, evaluations can be described as interactions not only between various contingent background factors, but also between these factors and the pieces of work which are being tested. By testing the effects of the works, in relation to multiple factors of conventions and devices, contingencies of value at the admission test is not a social game but a game of matching works with ever contingent aesthetic values.

Acknowledgements. The author would like to thank the editors of *Valuation Studies*, two anonymous reviewers, Julie Sommerlund, Satu Reijonen and the participants at the FIC/Fiction workshop; co-organized by Bruno Latour and Antoine Hennion, at the IKKM, Bauhaus-Universität, Weimar, June 2013; for their helpful and inspiring comments on previous versions of the paper.

References

Aspers, Patrik. 2001. *Markets in Fashion: A Phenomenological Approach*. London: Routledge.

Becker, Howard. 1982. *Art Worlds*. Berkeley: University of California Press.

———. 2008. *Art Worlds: 25th Anniversary edition*. Berkeley: University of California Press.

Beckert, Jens, and Patrik Aspers. 2011. "Value in Markets." In *The Worth of Goods: Valuation & Pricing in the Economy*, edited by Jens Beckert and Patrik Aspers, 3–40. Oxford: Oxford University Press.

Bessy, Christian, and Pierre-Marie Chauvin. 2013. "The Power of Market Intermediaries: From Information to Valuation Processes." *Valuation Studies* 1 (1): 83–117.

Boltanski, Luc, and Laurent Thévenot. 2006. *On Justification: The Economies of Worth*. Princeton: Princeton University Press.

Born, Georgina. 2010. "The Social and the Aesthetic: For a Post-Bourdieuian Theory of Cultural Production." *Cultural Sociology* 4 (2): 171–208.

Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgment of Taste*. London: Routledge & Kegan Paul.

———. 1993. "The Field of Cultural Production, or: The Economic World Reversed." In *The Field of Cultural Production*, 29–74. London: Polity Press.

———. 1996. *The Rules of Art, Genesis and Structure of the Literary Field*. Cornwall: Stanford University Press.

Callon, Michel. 1986. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." In *Power, Action, and Belief: A New Sociology of Knowledge?* edited by John Law, 196–223. London: Routledge.

Callon, Michel, Cécile Méadel, and Vololona Rabeharisoa. 2002. "The Economy of Qualities." *Economy and Society* 31 (2): 184–217.

Cochoy, Franck. 2008. "Calculation, Qualculation, Calqulation: Shopping Cart Arithmetic, Equipped Cognition and the Clustered Consumer." *Marketing Theory* 8 (1): 15–44.

———. 2010. "Reconnecting Marketing to 'Market-Things': How Grocery Equipments Drove Modern Consumption." In *Reconnecting Marketing to Markets: Practice-Based Approaches*, edited by Luis Araujo and Hans Kjellberg, 29–49. Oxford: Oxford University Press.

Crane, Diana. 1992. *The Production of Culture: Media and the Urban Arts*. Newbury Park, CA: Sage.

Cronin, Anne. 2004. "Regimes of Mediation: Advertising Practitioners as Cultural Intermediaries?" *Consumption, Markets and Culture* 7 (4): 349–369.

DeNora, Tia. 2000. *Music in Everyday Life*. Cambridge: Cambridge University Press.

Desrosières, Alain. 1998. *The Politics of Large Numbers: A History of Statistical Reasoning*. Cambridge: Harvard University Press.

Didier, Emmanuel. 2007. "Do Statistics 'Perform' the Economy?" In *Do Economists Make Markets? On the Performativity of Economics*, edited by Donald MacKenzie, Fabian Muniesa, and Lucia Siu, 276–310. Princeton: Princeton University Press.

———. 2010. "Gabriel Tarde and Statistical Movement." In *The Social after Gabriel Tarde: Debates and Assessments*, edited by Matei Candea, 163–176. London: Routledge.

DiMaggio, Paul, and Paul M. Hirsch. 1976. "Production Organisations in the Arts." In *The Production of Culture*, edited by Richard A. Peterson, 73–90. Beverly Hills: Sage.

du Gay, Paul. 2004. "Devices and Dispositions: Promoting Consumption." *Consumption, Markets and Culture* 7 (2): 99–105.

Featherstone, Mike. 1991. *Consumer Culture and Postmodernism*. London: Sage.

Florida, Richard. 2002. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life*. New York: Basic Books.

Gill, Rosalind. 2002. "Cool, Creative and Egalitarian? Exploring Gender in Project-Based New Media Work in Europe." *Information, Communication & Society* 5(1): 70–89.

Harland, Robert, and Phil Sawdon. 2011. "From Fail to First: Revising Assessment Criteria in Art and Design." *Art, Design & Communication in Higher Education* 10 (1): 67–88.

Heinich, Nathalie. 2014. "Practices of Contemporary Art: A Pragmatic Approach to a New Artistic Paradigm." In *Artistic Practices: Social Interactions and Cultural Dynamics*, edited by Tasos Zembyla, 32–43. London: Routledge.

Hennion, Antoine. 1997. "Baroque and Rock: Music, Mediators and Musical Taste." *Poetics* 24: 415–435.

———. 2001. "Music Lovers: Taste as Performance." *Theory, Culture & Society* 18 (5): 1–22.

———. 2004. "Pragmatics of taste." In *The Blackwell Companion to the Sociology of Culture*, edited by Marc D. Jacobs and Nancy Hanrahan, 131–144. Oxford UK/Malden, MA: Blackwell.

Hennion, Antoine, and Line Grenier. 2000. "Sociology of Art: New Stakes in a Post-Critical Time." In *International Handbook of Sociology*, edited by Stella R. Quah and Arnaud Sales, 341–356. London: Sage.

Herrnstein Smith, Barbara. 1988. *Contingencies of Value: Alternative Perspectives for Critical Theory*. Harvard University Press: Cambridge/ London.

Hutters, Michael. 2011. "Infinite Surprises: On the Stabilization of Value in the Creative Industries." In *The Worth of Goods: Valuation & Pricing in the Economy*, edited by Jens Beckert and Patrik Aspers, 201–220. Oxford: Oxford University Press.

Karpik, Lucien. 2010. *Valuing the Unique: The Economics of Singularities*. Princeton: Princeton University Press.

Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Lee, David. 2013. "Creative Networks and Social Capital." In *Cultural Work and Higher Education*, edited by Daniel Ashton and Caitriona Noonan, 195–213. London: Palgrave Macmillan.

Mackenzie, Donald. 2009. *Material Markets: How Economic Agents Are Constructed*. Oxford & New York: Oxford University Press.

Maguire, Jennifer Smith, and Julian Matthews. 2012. "Are We All Cultural Intermediaries Now? An Introduction to Cultural Intermediaries in Context." *European Journal of Cultural Studies* 15 (5): 551–562.

McFall, Liz. 2009. "Devices and Desires: How Useful Is the 'New' New Economic Sociology for Understanding Market Attachment?" *Sociology Compass* 3 (2): 267–282.

Mears, Ashley. 2011: *Prizing Beauty: The Making of a Fashion Model*. Berkeley: University of California Press.

Michael, Mike. 2000. "Futures of the Present: From Performativity to Prehension." In *Contested Futures: A Sociology of Prospective Techno-Science*, edited by Nik Brown, Brian Rappert, and Andrew Webster, 21–39. Aldershot: Ashgate Publishing Group.

Moor, Liz. 2012. "Beyond Cultural Intermediaries? A Sociotechnical Perspective on the Market for Social Interventions." *European Journal of Cultural Studies* 15 (5): 563–580.

Muniesa, Fabian. 2007. "Market Technologies and the Pragmatics of Prices." *Economy and Society* 36 (3): 377–395.

———. 2012. "A Flank Movement in the Understanding of Valuation." In *Measure and Value*, edited by Lisa Adkins and Celia Lury, 24–38. Oxford: Wiley-Blackwell.

———. 2014. *The Provoked Economy: Economic Reality and the Performative Turn*. London: Routledge.

Muniesa, Fabian, Yuval Millo, and Michel Callon. 2007. "An Introduction to Market Devices." In *Market Devices*, edited by Michel Callon, Yuval Millo, and Fabian Muniesa, 1–12. Oxford & Malden: Blackwell.

Negus, Keith. 2002a. "The Work of Cultural Intermediaries and the Enduring Distance Between Production and Consumption." *Cultural Studies* 16 (4): 501–515.

———. 2002b. "Identities and Industries: The Cultural Formation of Aesthetic Economics." In *Cultural Economy: Cultural Analysis and Commercial life*, edited by Paul du Gay and Michael Pryke, 115–131. London: Sage.

Nixon, Sean. 2003. *Advertising Cultures: Gender, Commerce, Creativity*. London: Sage.

Nixon, Sean, and Paul du Gay. 2002. "Who Needs Cultural Intermediaries?" *Cultural Studies* 16 (4): 195–500.

Peterson, Richard A. 1994. "Cultural Studies Through the Production Perspective: Progress and Prospects." In *The Sociology of Culture: Emerging Theoretical Perspectives*, edited by Diana Crane, 163–190. Cambridge: Blackwell.

Ruppert, Evelyn 2011. "Becoming Peoples: 'Counting Heads in Northern Wilds.'" In *Assembling Culture*, edited by Tony Bennett and Chris Healy, 9–30. London: Routledge.

Ryan, John, and Richard A. Peterson. 1982. "The Product Image: The Fate of Creativity in Country Music Songwriting." *Annual Reviews of Communication Research* 10: 11–32.

Stark, David. 2008. *The Sense of Dissonance: Accounts of Worth in Economic Life*. Princeton: Princeton University Press.

Zimdars, Anna, Alice Sullivan, and Anthony Heath. 2009. "Elite Higher Education Admissions in the Arts and Sciences: Is Cultural Capital the Key?" *Sociology* 43 (4): 648–666.

Sara Malou Strandvad is associate professor at the program of Performance Design, Department of Communication, Business and Information Technologies, Roskilde University. She has authored several publications in the field of cultural sociology, considering a socio-material orientation within this field. Her publications include articles in *European Journal of Cultural Studies*, *Cultural Sociology* and *Cultural Studies*.

Valuation Studies 2 (2) 2014: 153–183

Weight, Density and Space in the Norwegian Reindeer Crisis—Notes Towards a Critique

Hugo Reinert

Abstract

For decades now, the dominant narrative about indigenous reindeer pastoralism in northern Norway has been that there is a crisis of excess: an oversized reindeer population, poorly held in check by poorly governed herders, is overgrazing the tundra, degrading the pasture grounds, spilling over into urban spaces and precipitating moral crises by starving to death "out there," on the tundra. Set against the background of this ongoing crisis, the present paper focuses on a set of particularly dense conceptual intersections that cluster around the notion of *weight*, and the manner in which weight functions both as a crisis indicator and a metric for assessment in contemporary Norwegian pastoral governance. Tracing the work and structure of the weight concept as applied to reindeer—against a dominant government narrative that parses numerical indicators as neutral, objective and apolitical—the paper outlines some of the erasures that the weight metric simultaneously carries out and occludes. The aim of the exercise is to specify and critically reframe certain core issues in the current management of Norwegian pastoralism, by problematising the supposedly neutral, scientific operation of quantitative metrics and assessment practices.

Key words: crisis; reindeer; pastoralism; space; indicators; assessment

Reindeer pastoralism is one of the key livelihoods of the indigenous Sámi population in northern Norway. Within the designated Sámi reindeer herding area, which extends from Røros in the south to the Russian border at Kirkenes in the north, reindeer are privately owned,

Hugo Reinert, Estonian Institute of Humanities, Tallinn University, and Noragric, Norwegian University of Life Sciences, hugo@tlu.ee

LiU Electronic Press, DOI 10.3384/vs.2001-5992.1422153
http://valuationstudies.liu.se

migrating between seasonal pastures under the supervision of herders, and are slaughtered primarily for meat (Reinert 2008). The practice is centuries old, quite possibly more, but has undergone tumultuous shifts over the last few decades: demographic and socioeconomic change, the advent of motorisation, orientation towards new markets, integration in the national infrastructure and, not least, a dramatic escalation in State involvement—particularly since the late 1970s, with the Reindeer Herding Act of 1978 and the first Reindeer Herding Agreement in 1976, both of which were pivotal junctures in Norwegian State-Sámi relations. Presently, there is a near-universal consensus among industry stakeholders—including politicians, government officials, biologists, journalists and many in the reindeer herding community itself—that Norwegian reindeer herding is in crisis. This crisis discourse circles primarily around the notion of a reindeer excess in the core herding areas of Finnmark, the northernmost district in Norway. The tale varies but depending on the teller, supernumerary reindeer populations threaten to graze down pasture areas to the point of desertification, alter and degrade local ecosystems, diminish biodiversity, invade urban space, generate suboptimal meat outputs, inconvenience other stakeholders and, ultimately, starve to death on the tundra, causing a national crisis of animal welfare. To prevent this, reindeer populations need to be reduced. This has been the "official" government line for decades, more or less independently of party politics—and traceable, some argue, as far back as the mid-nineteenth century (Bjørklund 1999a; 1999b; Strøm-Bull et al. 2001).

This ongoing crisis is a highly complex entity, a massive but diffuse juncture that functions as something of a "boundary object" (Star and Griesemer 1989)—forging links and a sense of shared agreement across a broad cross-sectional coalition of actors, disciplines, political positions and communities of discourse. Its circulation as a social reality depends simultaneously on an almost instantaneous, common-sensical apprehensibility—"everybody knows" there are too many reindeer in Finnmark—and on its consolidation and elaboration through the media, by political actors and in the expert technical discourse of a relatively small community of government-funded scientists, primarily biologists. Arguments concerning the nature, extent, causes and possible solutions of the crisis are extensive, and have been ongoing for decades (see e.g. Paine 1992; Bjørklund 1999a; Hausner et al. 2011; Benjaminsen, Reinert, et al., forthcoming). A full account would need to unravel its combination of transversal mobility and density, and capture as well how the "reindeer crisis" brings into intersection a range of political rationalities, technologies for control and surveillance, modalities of accumulation, normative models of growth and modernity, incentive systems and their ramifications, discourses of morality, productivity, citizenship and responsibility and

so on—an account, in short, of the crisis as a particular kind of "problematisation," an object *and* instrument of governance (cf. Foucault 2003; 2007; 2008; Li 2007).

The account I offer here is narrower than that, but it does form part of such an inquiry and goes some way towards it. Its principal aim is to develop a critical account of weight-based indicators in the management of Norwegian reindeer pastoralism: as instruments of assessment, control and regulation, but also of blame, manipulation and marginalization. Concretely, I am interested in deconstructing the normative microphysics of the weight concept, as applied to the bodies of slaughtered reindeer: both as a biopolitical metric, and as a kind of ontological determinant. Discussions of reindeer weight serve to structure debates, inform policy, reorganise practice and force into place certain kinds of herder–reindeer relations. Beyond that, however, I am also after the manner in which assessment practices in general—and here, perhaps quantitative metrics in particular—bring into existence certain kinds of world, and certain kinds of being, with certain kinds of attributes and qualities—and how, in the process, they may also occlude, preempt, erase and destroy others, rendering alternatives moot or counterfactual. I develop this point here by linking distinct modalities of reindeer assessment to the spatial logics they simultaneously entail and depend upon.

The main points of the argument are fairly easily summarised. In the dominant narrative of the Norwegian agricultural science–policy nexus, weight is pivotally implicated with a model of space as homogeneous, divisible, self-similar, persistent over time and predictable. This model of space profoundly contradicts another, pastoral logic of space, which for centuries has aligned reindeer and humans for survival across complex, heterogeneous, interdependent and continuously shifting terrains (see e.g. Mathiesen et al. 2013; Benjaminsen, Reinert, et al., forthcoming). Drawing out tensions between these two spatial logics, the argument explores how metrics, criteria and assessment practices simultaneously enmesh in and produce distinct kinds of space, with specific material properties and affordances. Condensed further, the gist here is familiar: indicators do not simply describe or evaluate—they can also erase, negate and render unviable, even unthinkable. Through valuation, certain things come into being; others may be preempted, foreclosed or destroyed. In the present case, this observation plays out in two ways: firstly, by bringing distinct forms of valuation into focus as differential ontological enactments, not just of the reindeer themselves but also of other entities entailed in the moment of assessment; and secondly, by drawing attention to the manner in which certain valuation practices may invalidate or preclude, not just alternative enactments of their object, but also *other forms of valuation*—effectively operating a kind of meta-valuation (and rejection) of valuation. This is one point of

contact between my argument and long-standing debates over the relationship between "traditional knowledge" and scientific and statist knowledge forms (see e.g. Hobart 1993). It is worth pointing out, however, that my argument here does not rest on assigning inherent value to "traditional" knowledge as a reified marker of authenticity, or of romantic alterity. The tensions I outline are eminently pragmatic, circling around issues of power, survival and adaptation to complex, unpredictable and frequently inhospitable environments.

The stance I adopt does raise some pertinent questions for the social study of valuation and valuation practices: what is the place of critique, given the commitments of valuation studies as an emerging field of inquiry (see e.g. Haywood et al. 2014)? My own position here aligns broadly with Stengers', when she defines pragmatics as a "care of the possible" (Stengers and Bordeleau 2011). I am interested in how analysis can lend substance, and support, to modes of practice and existence that may—in some way or other—hover on the edge of the possible. In this context, the analytical deconstruction of valuation as a complex composite practice involving multiple rationalities is not incompatible with a pre-analytical commitment to—for example—the survival of marginal worlds, or of "subaltern" values and modes of valuation in general. If anything, such deconstruction forms a vital element of critical practice thusly imagined: capable of rendering the given as relative and the dominant as contingent, substantiating the otherwise-possible, disaggregating and multiplying practices in the same gesture. This is particularly pertinent to the case of reindeer pastoralism in Norway, which finds itself in a highly asymmetrical situation—where the largely uncontested truth-claims of a relatively small cadre of government-funded scientists completely dominate media and policy narratives, while indigenous counter-representations and critiques remain mostly absent or disregarded (Benjaminsen, Reinert, et al., forthcoming; Benjaminsen, Eira, et al., forthcoming).

Given the functional invisibility (and invalidation) of herder claims, set against evaluative practices that systematically present themselves as unmarked, transparent and objective—as belonging, that is, to a higher order of facticity than the "subjective" evaluations of herders themselves—the present text is a first attempt to invert the situation and subject the terms of the dominant narrative to critical deconstruction. Throughout, I adopt the stylistic convention of capitalising the term "state" as State—both as an ongoing reminder of its complex and problematic ontology, a nod to relevant debates (see e.g. Taussig 1992; Hansen and Stepputat 2001; Hobart and Kapferer 2012), *and* as an analytical shorthand that helps define the coordinates (and limits) of my argument. The Norwegian State does involve itself to an extraordinary degree in the management of reindeer pastoralism within its borders, relative to other states in the circumpolar region (cf. Reinert 2006; Reinert 2008). Alert, however, to "the danger of always

being thought by a state that we believe we are thinking" (Bourdieu 1994, 1), my interest here is primarily with those forms and practices that inscribe State "action"—and that bring this involved, "active" State into being as pervasive, necessary, already-existent. The gist of my argument is to show how the evaluation of reindeer is implicated, ultimately, with conceptualisations not just of space, time and environments, but also of "proper" relations, governance, action and purpose. From this vantage point the State—and the world(s) it requires to exist—can appear as effects, as much as causes; their properties can be derived from the practices (including valuation) that compose them. Conversely, unpacking the hidden transcript of "other" valuations may well open up to us—as otherwise-possible, as possibly-real—the world(s) these practices belong to, and that they might yet bring into being.

The argument is based on ongoing ethnographic research with reindeer pastoralists in northern Norway (see e.g. Reinert 2008; 2012a; 2012b; 2014), and draws on interviews, participant observation and analysis of primary texts (speeches, government reports, grey literature and scientific publications) conducted over a number of years. Nearly all textual sources are in Norwegian; translations are my own. The argument is organised in sections. The next section briefly summarises the current role of weight in reindeer governance discourse, and in the ongoing reproduction of the crisis, based on a speech presented by the then-Minister of Agriculture to an audience in Karasjok, in the core inland herding areas of Finnmark in March 2012. The following two sections examine in more detail how weight functions in the context of density discourse and herd structure optimisation, both of which are key areas in the ongoing State effort to rationalise Norwegian reindeer pastoralism and bring it into the "present moment" of the State (Reinert 2012a). As a counterpoint to this material, drawing on a written account by a Sámi pastoralist, section five then sketches out an alternative modality of assessment, based on multidimensional criteria and complex, contingent interdependences. The penultimate section examines some issues that concern the relationship between spatial logics, "sustainability" and State power, while the final section draws together the argument and examines three questions that it opens up.

Weight and Failure

Weight matters. Particularly in recent years, the weight of reindeer has acquired almost totemic significance in Norwegian pastoral governance and administration. Along every axis—whether with regard to health, profit, productivity, welfare, survival rates or ethics—the official discourse treats high weights as an unconditional good, low weights as a purely negative deficit. This predominance has substantive

and far-reaching implications for herders and their practice, in large part because of the direct manner in which the State has since the late 1970s become enmeshed in nearly all aspects of indigenous pastoralism in Norway: from regulating the size and structure of herds, to controlling prices, to limiting recruitment, to restructuring work units and determining the internal organisation of the industry (Paine 1994; Bjørklund 1999b; 2004; Reinert 2006). Within this regime of saturating presence, weight data—gathered from slaughterhouses and published annually by the Reindeer Herding Administration (see e.g. Statens Reindriftsforvaltning 2014)—has consolidated itself as perhaps the principal metric by which pastoralists, and pastoralism itself, are assessed and regulated. The current forced "reindeer number reduction" [*reintallsreduksjonen*] in Finnmark, for example, is being carried out based on estimates concerning the "sustainability" of districts and individual herding units —estimates which are based primarily on the weight of individual reindeer, averaged by age and gender. Herding districts (or units) with weight averages above a certain weight threshold are considered "sustainable": those below this threshold are being forced to reduce their herds, often dramatically, or face sanctions in the form of fines, subsidy cuts or—as the ultimate but still hypothetical threat—culling and mass forced slaughter. Through their reindeer, the predominance (and universal aspirations) of weight as a quantitative metric thus touches herders at the heart of their livelihood. Part of my aim over the next few sections is to deconstruct this predominance, examining how it comes about and the work it performs.

In early 2012, laying out the new agricultural strategy of the current Norwegian government at a public meeting in Karasjok, then-minister for agriculture and food Lars Peder Brekk stated that an "adjusted reindeer population, good animal welfare and good productivity" were the key for herders to achieve "legitimacy" and a "better reputation"—"both in Parliament and in general society" (LMD 2012). All three factors, in his account, were directly linked to the problem of weight: *population*, through an ecological discourse of density that defined individual weight primarily as a result of competition over resources, and thus as a direct function of the ratio between a population and the space (and resources) available to it; *welfare*, because—in the absence of more complex understandings of reindeer well-being (see e.g. N. Oskal et al. 2003; Reinert 2014)—weight is operationalised as the principal indicator of reindeer condition, and therefore also their well-being (or suffering); and *productivity*, finally, because the weight of individual carcasses is also the primary measure of an efficient, optimally calibrated "herding system." The heavier the reindeer, the more optimally the available resources are being utilised and the more efficient production can be taken to be. The speech largely reproduced the familiar terms of

government discourse on the subject, without major surprises. Departing from the prepared script, however, Brekk also went on to berate the assembled herders, accusing them of "whining" and herding reindeer "the size of kittens"—sparking a minor Sámi media storm, and drawing some rather pointed political commentary. The rhetorical exaggerations stood out sharply against the sober, prepared facticities of his speech—an apparent rupture of affect that personalised the stakes, while remaining consistent with the position of previous administrations. Leaving aside the performative politics of this dramatisation, it is the facticities that interest me here.

Drawing on a series of well-rehearsed tropes and arguments, Brekk's speech rendered the "thin" reindeer of Finnmark as highly visible bodies, marked by the loss of control, physical suffering and economic inefficiency: exemplifying the complex indexicality of weight, as a supposedly objective indicator but also as an instrument for localising, and concentrating, blame. The chain of operations he drew on—and reproduced—can be described fairly simply. I discuss its elements in more detail over the next two sections. First, physical weight is emphasised to the exclusion of all other indicators. Then, this figure is linked to competition over pasture resources, while a complex array of other factors that may also influence weight are minimised or excluded. Through a direct causal link between weight and survival, the loss of reindeer—not an infrequent or entirely avoidable occurrence, in the context of Arctic pastoralism—is then reformulated, progressively, as a purely human failure and the fault of "irresponsible" or "inefficient" herders, who fail to ensure optimal nutrition for their herds and, through this, expose them to all the threats and risks that a high weight would supposedly shield them from: predation, environmental factors, disease and so on. Weight thus becomes a discourse of failure, not only social and economic, or financial, but also *moral*: first and foremost the failure of herders, derelict in their duties to society and to their reindeer, but also a failure of the State itself, as the body that supposedly regulates them. Understanding this inferential chain more clearly—how it functions, how it plays into the current climate of crisis, and (crucially) how one might begin to understand the situation otherwise—requires a certain amount of exposition.

Density

In some form or other, reindeer numbers in northern Norway have been a managerial concern of the Norwegian State for as long as its knowledge systems have engaged with the pastoralism inside national borders (Bjørklund 1999a; Strøm-Bull et al. 2001). The concern with weight has emerged more recently, as an aspect of populational management parsed through improving technologies, novel and

intensified modalities of surveillance, comparative productivity assessments and modernist discourses of rationalisation. Proximally at least, its current predominance derives in part from an influential report published in 2008 (LMD 2008a) by the Department of Agriculture and Food [*Landbruks- og Matdepartementet*, from now LMD]. This report was elicited by the most recent Reindeer Herding Act of 2007, which replaced the Herding Act of 1978 and outlined a new process for establishing appropriate resource management regimes, and maximal reindeer numbers, in the herding areas of Norway. As part of this process, the Act stipulated that individual reindeer herding districts were to develop their own "usage rules" [*bruksregler*] that ensured "ecological sustainability" (2008a, 3). To clarify what this requirement for "sustainability" entailed, in January 2008 LMD set up a working group—including representatives from herding districts, natural scientists, the herding administration and the government—to develop "objective" and "scientific" criteria for comparably and reliably assessing the sustainability of reindeer populations, ensuring a cohesive basis for governance of the total national reindeer population. The group delivered its report in June the same year, entitled "Criteria/Indicators for Ecologically Sustainable Reindeer Numbers" (LMD 2008a). This was then sent out for a three-month formal consultation from June to September. Based on the consultation responses, the final output of the process was a set of "Guidelines for Establishing Ecologically Sustainable Reindeer Numbers," published in December 2008 (LMD 2008b).

The report itself is brief, only fifteen pages—without pagination, and including also both a questionnaire and a dissenting minority opinion from one of the committee members (2008a, 15)—but it makes for interesting reading. The authors outline four basic criteria for "ecologically sustainable" herding: it should not degrade pastures; it should maintain the "diversity of plants and animals" on the various seasonal pastures; it should ensure good animal welfare; and it should deliver reindeer of "high quality" for slaughter (2008a, 4). The report describes itself as a milestone: the first time reindeer herders, scientists and authorities have been brought together collaboratively to produce "holistic" targets and norms for sustainability by negotiating between the "scientific" knowledge of researchers and administrators and the "experiential" knowledge of herders (2008a, 4). Emerging from this encounter, the authors describe a "shared understanding" concerning the overarching interconnection between pasture quality, reindeer density on these pastures, the physical condition of individuals and the overall productivity of herding. Based on this "consensus"—despite reservations articulated in the minority report by the dissenting committee member, himself a herder, and endorsed by many of the consultation stakeholders—the report concludes that assessment of the ecological sustainability of herding should be based primarily on

individual physical weight: specifically, the carcass mass of different age groups at the point of slaughter (2008a, 9). Where necessary, this primary indicator is to be supplemented by other numerical indicators, such as live weight, meat production per reindeer and stability over time of the calf percentage (the overall proportion of the herd made up of calfs) in spring herds (2008a, 9–10).

The principal line of reasoning behind the focus on carcass weight is that individual weight reflects whether a reindeer is able to secure sufficient resources for optimal growth, in competition with other reindeer that also occupy the same space. Weight, in this framing, is a density dependent effect—or rather, perhaps, an *inverse* of density: a figure that captures a particular relationship between bodies and the pastures that support them. The higher the populational density in a particular area, at least beyond a certain point, the lower the weight of individual animals. Insofar as it reflects resource competition, and consequently also grazing pressure on the pastures, this version of weight can implicitly also index the condition of the pasture grounds, and thus displace the need to assess the latter directly. If the reindeer are "too thin," the implication is that excessive pressure is being applied to the pastures, and that this will degrade them—but this inference is valid only insofar as the condition of pastures *can*, in fact, be inferred more or less directly from the weight and condition of the slaughtered reindeer. To render the coupling between weight, density and pasture conditions robust, other factors that might affect the weight of individual reindeer—factors such as illness, timing of migration and slaughter, snow cover on the winter pastures, variable climatic conditions, long-term breeding strategies—must be eliminated from the equation.

Along these lines, the authors of the report do acknowledge that inferring pasture quality from weight is an "indirect" method, that weight is susceptible also to factors other than available pastures, and that reindeer numbers are not in themselves sufficient to fully measure "resource adaptation" in the "pasture system of herding." "Despite this," as the authors put it, the report still recommends that "average weight" at the point of slaughter for different categories of animal be used as the principal indicator of "sustainability" (LMD 2008a, 9). Alternative indicators and criteria, rooted in the "professional knowledge" of herders, are considered briefly but ultimately dismissed —as subjective and "difficult to measure"—and consigned to a subsidiary, functionally invisible role in assessment. The weight indicator, on the other hand, is "simple, objective and controllable"—and therefore suitable for the purposes of the report. As the authors note:

> the problem with both the more scientific and the more pastoral professional knowledge criteria is . . . that they are affected also by oscillations in access to

> resources that are not caused by reindeer [population] density. This might be poor access to pastures because of weather conditions, ice on the autumn or winter pastures, significant rain and ice on the winter pastures, heat and insects in the summer and other disturbances caused by predators or human activity. As of today there are no fully adequate methods for measuring the effects of this on weight and on various production indicators. (LMD 2008a, 10)

This is problematic. Effectively, the authors are justifying the choice of carcass weight as the primary indicator of sustainability *because it is measurable*. Furthermore, because there are no "fully adequate" methods available to measure the complex interplay of factors that *also* influence weight—beyond density—weight is operationalised as a function of density. Criteria beyond weight—including assessment factors used by herders themselves, such as antler shape and thickness, pelt quality or overall body shape (2008a, 9)—are considered briefly, but almost immediately sidelined as "subjective," i.e. not sufficiently "objective" or generalisable to develop as standardised indicators for assessment or control. Complexities of assessment that resist transformation into numerical indicators, and which are therefore difficult to incorporate within a standardised framework, are simply defined away.

The report goes on to specify the norms associated with the weight indicator. For calves, for example, the prescribed minimum weight-range at the point of slaughter—the weight that defines the lower threshold of "sustainable herding"—is set at between 17 and 19 kg (2008a, 11). Crucially, however, these norms are specified *at the national level*. To qualify as "sustainably" herded, the body of a slaughtered calf must now weigh the same across the length of Norway: from the relatively rich forested areas a few hours north of Oslo, where the southernmost herding districts are located near Røros, to the tundra on the edge of the Barents Sea, 2000 km further north and on the other side of the Arctic Circle. During the public hearing, a number of respondents drew out problems with the approach and recommendations of the report. In the consultation response from District 16, for example (LMD 2008c), herders in western Karasjok—located in the inlands of Finnmark, some 300 km from Murmansk—argued that the optimal minimum calf weight in their district was between 15 and 18 kg, and went on to list a number of relevant factors. For one, their herds had a long migration route from the summer pastures to the autumn slaughtering sites, where the calfs would be slaughtered and weighed—much longer than the distances covered by reindeer in the south of the country, and entailing more significant weight losses for the young calves, who expended energy getting to the slaughtering site. They also pointed out that the climate in their area varied significantly from year to year, creating unpredictable oscillations in available pasture and therefore also in the weight of their reindeer. Transport bottlenecks, logistical problems and

limited slaughtering facilities in the north affected the timing of slaughter, influencing the weight of animals at the point of slaughter: the reindeer might have to go in the corral for extended periods of time, losing weight, or the slaughter might be postponed until later in winter, by which point the reindeer would have consumed more of the body mass they had built up on the summer pastures. Finally, they argued, herders in their district had also bred their own local lineages of reindeer that were smaller in size than the national average, but of "good quality" and well adapted to local conditions.

Such objections—and others, from reindeer herding districts as well as other bodies and authorities involved in the consultation—were simply disregarded in the final guidelines, which reiterated that a carcass weight for calves of 17 to 19 kg was the threshold for "sustainability" (2008b, 3). Over the course of the subsequent "adjustment process," this figure was then progressively modified by actors within the LMD—in a series of internal seminars, workshops and memorandums, without herder consultation—until it reached 20 kg by 2013. This modified figure became the basis for deciding which districts, *siidas* and individuals were to reduce their herds or face punitive measures—although forced reductions were also ordered in districts with average weights above that minimum. Despite a dominant policy narrative which asserts pastoralists possess a high degree of "self-determination" (Johnsen et al., forthcoming), the opaque and top-down process for establishing threshold numbers in the "adjustment process" raises serious questions about government claims concerning the ability of herding districts to establish their own "usage rules" (Johnsen, forthcoming). Here, however, I want to focus on another issue—namely how, in discounting locally significant conditions, these new norms established a standard of "optimal weight" at the national level, within a national space imagined as (functionally) homogeneous: erasing geographical, environmental and social differences across the highly heterogeneous terrains of herding.

As the objections from District 16 indicated, the idea of a normative standard weight at the national level eliminated pertinent differences in climate, topography, weather conditions, infrastructure, breeding strategies and social organisation—factors which might affect not only the weight of reindeer, but also their "optimal" weight *as an adaptation to local conditions*. Consider, for example, a northern district with summer pastures on islands along the Finnmark coast. Conditions during the summer for newborns may be peaceful and abundant, with little or no disturbance, producing relatively fat, heavy calves—possessed of an "optimal" physiognomy, at least as encoded in State directives. Once these calves migrate to the mainland, however, and encounter the harsher conditions on the winter pastures, they may fare worse, with lower survival rates, than calves who have spent their entire lives on the mainland. The latter may have lower weights, but

they may also be in better condition, resilient and accustomed to harsher conditions. Herder accounts suggest that despite being heavier, island-born calves often may succumb more easily to environmental conditions encountered on the mainland: low temperatures, exposure, predation, limited feed.

With predation, similarly, the official discourse of the Norwegian science–policy nexus presents high weight as a near-universal counter to losses, while herders themselves describe weight as playing out in a more complex, differentiated manner—depending on a host of other factors, including the type of predator involved, their hunting strategies, their favoured mode of attack, their preferences with regard to prey, environmental and seasonal conditions, terrain type, the structure of the herd, the experience of other nearby reindeer with fighting off that particular kind of predator, and so on. Across certain types of snow terrain, for example, a light calf might have the advantage over a heavier one—as the heavier calf may punch through layers of ice in the snow cover, sinking deeper into the snow and losing speed, while the lighter calf gets away. A large range of other examples could be adduced here: the short of it is that in herding practice, weight generally functions neither as a context-independent index for condition, nor as a universal predictor of survival. The link between weight and survival appears nowhere near as transparent, obvious or self-evident as the dominant discourses of the science–policy nexus indicate.

Structure

I will return to these issues shortly. For the moment, let me summon up another set of concerns that converge in the idea of weight. Consider this: the Norwegian reindeer (*rangifer tarandus*) gestates for an average of approximately 288 days, between the autumn breeding season and late spring of the following year. Dams usually birth only one calf a year, between April and early June—the seasons referred to as *Giđđa* (spring) and *Giđđageassi* (spring-summer) in northern Sámi. The life of a semi-domesticated reindeer makes the young calves highly vulnerable, certainly by the standards of more "conventional" livestock industries. In their first year they may succumb to accidents, environmental exposure, malnutrition, disease or predators such as lynx, wolves, wolverine and eagles. Of the majority that survives through the summer, most are taken out and slaughtered at their first or second seasonal round-up, when the herds are gathered up in corrals for husbandry operations (Paine 1994; Reinert 2014). This is also the point where most of the calves are marked as belonging to their human owners. Watching the animals closely, often from a distance, herders can identify which cow each calf follows, and assign (human) ownership according to (reindeer) descent. Each calf is

assigned the earmark of its human owner, as a pattern of cuts in its ears (Bjørklund and Eidheim 1999).

From birth to the start of the autumn slaughtering season, the reindeer calves grow very fast. As they age, the weight-gain slopes off, but it remains high through their second and third year, particularly for the males. The shape of this weight-gain curve has economic implications. The older a reindeer gets, the more pasture resources it consumes simply to maintain its body mass, rather than add to it. Rapid early growth thus makes calves a more efficient channel for converting available pasture resources into meat, and from there into economic value and profits. As a result of this, slaughtering the young has for some time been the primary focus of government strategies to maximise the meat output and "efficiency" of pastoral practice. Such slaughter strategies are well known from other agricultural sectors; in the Soviet Union, experiments with using them to rationalise reindeer herding date back as far as the 1930s (Holand 2007). In Scandinavia, models and principles for calf-based production strategies were methodically tested out and developed in the Røros area from the 1970s, as part of a modernisation strategy to "improve" herding practice, rendering it more profitable and efficient (Reinert 2006; Borgenvik 2014; Benjaminsen, Eira, et al., forthcoming).

This "rationalisation" played out mostly along lines made familiar by other "development" interventions of that period, elsewhere in the world (Hobart 1993). Norwegian rationalisers interpreted the diversity of indigenous herd structures—in terms of age categories, animal types and sexes—as "irrational" and disorderly, and proceeded to design and implement "optimal" herd structures that would fulfil the objective of maximising meat production. Little or no attention was paid to existing principles of herd composition, or to the various objectives that diversified herd structures fulfilled—from defending against predators, to ensuring a diversity of inherited traits and resistances (e.g. to temperature, insects or disease), to the cultivation of aesthetic and moral values involved in maintaining a "beautiful" herd (N. Oskal 2000). Assumptions about herding as an indigenous practice—rooted, in no small part, in colonial discourses of race and ethnicity (Reinert 2012a)—enabled these existing adaptations to be dismissed out of hand: as inefficient at best, at worst as ignorant, primitive or irrational (Bjørklund 1991). According to a 1982 article by Dag Lenvik, a leading architect of the so-called "structural rationalisation" [*struktur-rasjonalisering*], the objective of the new "rational" herd was to:

> improve gender structure, age structure and growth structure in the reindeer herd. All these structures must be ordered and optimised if one is to take out maximal meat production per spatial unit of grazing land through reindeer herding (Lenvik et al. 1982, 62).

The overall mandate here—to "take out" the maximal amount of meat per unit of grazed land—was beyond question. In line with this goal, the new principles of scientific rationalisation required significant changes in herd structure: the new, "scientific" herds were to be constructed according to "rational" principles, supported by empirical studies. Meat production was to be based on a continuous turnover of calves, "produced" and "harvested" each year in the highest possible numbers. To ensure maximum production of calfs, herds were now to be composed mostly of heavy and highly fertile females, selected for early and consistent breeding, with a minimal complement of males, as required to fertilise them. Young females should breed by their second year, ideally, and continue to "produce" annual calfs until their fertility dropped off and they could be slaughtered. Calves should be as heavy as possible, of course, to optimise the meat yield per living animal.

In pursuit of efficient structure and optimal resource utilisation, the so-called "Lenvik model"—also known as the "Røros model"—castigated and tried to eliminate supposedly "irrational" elements of traditional herd structure (Borgenvik 2014). Lenvik himself, for example, judged sternly the traditional practice of maintaining herds with more reproductive males than necessary for reproduction:

> Within normal sheep rearing, meat production based on old non-castrated rams is unthinkable. No sheep farmer would use the winter feed—the marginal factor—on a herd of rams that produce less meat than the ewes can produce through the yield of lambs. Today, the line of thinking should be the same in reindeer herding. Male animals that are superfluous from the point of view of procreation occupy grazing grounds that could be better utilised for cows (Lenvik 1990, 31–32).

Within the parameters of this model, male reindeer were reduced entirely to their reproductive function. Beyond the minimum complement required to fertilise the females of the herd next year, males were framed as an unproductive and irrational surplus: excess bodies that consumed vital resources on the scarce winter pastures, without generating returns in meat. In order for the males to be reconstructed this way, however, all possible variables and events that might have rendered them useful or valuable on the winter pastures first had to be bracketed off and eliminated: their greater ability to fight off predators, for example, or other skills and patterns of behaviour that might otherwise facilitate the survival of the herd. One might say this reduction of males to their reproductive value was tautological: valid in practice only if, or as long as, the herd was maintained in an environment where such pressures did not obtain. As soon as relevant environmental pressures are introduced and taken into account, the pragmatic value of males begins to exceed mere reproduction; and this is leaving aside the wide range of other factors—such as aesthetic preference, herding strategy, behavioural control

over the herd, terrain types along the migration route, available manpower for herding—that might also influence their role in herd composition. I return to these in the next section.

Clearly, the Lenvik model forms parts of a wider movement in the twentieth century, towards the reorganisation of agriculture along the lines of industrial mass production. Nationally, its implementation also aligns with a very strong emphasis on centralisation and standardisation in Norwegian agricultural planning, throughout the second half of the century (Reinert 2006). As Lenvik's comparisons to sheep rearing indicate, its advocates and developers also relied to a significant degree on models (and concepts) imported from Norwegian agricultural and livestock management traditions. Importantly, the model was based on experiments and data from the southern herding areas, located in the temperate mid-country. In part, its local successes there can be ascribed precisely to local conditions: the climate there was far milder, the vegetation richer, surveillance easier, the density of herders lower than in the northern territories. The open-air "experimental" environment in which the model was developed supported its abstractions, offering limited resistance and tending to produce the desired results on a fairly consistent basis. The model fit its environment, and vice versa. Lifted to the national level however, and transformed into a kind of "immutable mobile" (Latour 1987), the Lenvik model encountered a range of novel conditions—particularly as it moved north. Faced with these, the model continued to sustain the experimental invisibility of its original conditions. To this day, proponents of the model still generally disregard the specificities of climate, economic and social context, spatial logics, predator distributions, cultural forms, local stakeholder and inter-ethnic relations and so on that enabled its assumptions to work (while also remaining unstated) in their original setting. Rather than adapting and taking into account local variables elsewhere, the model and its projections generate comparative assessments of pastoralism in these other environments as "inefficient," or "irrational." The question becomes not how the model could be adapted to different environments, generating alternative models of "optimal" herd structure, but rather why local practices elsewhere fall short of the model.

Reframing Assessment

In short, then, the Norwegian statist discourse on reindeer assessment tends—very strongly—towards highly simplified, single-indicator management, based on comparabilities established through numbers and quantification (Porter 1995; Scott 1998). This narrow focus affects pastoral practice directly, e.g. through the structuring effect of subsidy schemes, and indirectly, insofar as it reorganises the strategies and

priorities of herders within a field that is in large part defined—and dominated—by the State. Effectively, it redefines the parameters of relevant knowledge. Attempts to render the messy complexities of pastoral practice in qualitative terms are generally disregarded, treated as inferior or anecdotal rather than valid representations of practice in challenging, complex and frequently inhospitable environments; the "rationalisation" of herding operates simultaneously across multiple domains, simplifying more than just herd structures and terminology. Of course, one basic problem of rationalisation discourse, as amply documented in critiques of development interventions elsewhere around the world, is that it redefines existing knowledge, traditions and institutions as "irrational," as forms of ignorance or underdevelopment (Hobart 1993). In rejecting indigenous criteria, the authors of the 2008 report (LMD 2008a) played into a complex and well-documented history of indigenous knowledge being displaced and erased in the administration of Norwegian herding (Bjørklund and Brantenberg 1981; Paine 1994; Bjørklund 1999b). Beyond this however, the mandate of the report also predetermined a particular sort of simplification: a sacrifice, or erasure, of certain kinds of empirical complexity, in the pursuit of governability, operationalisation and standardisation.

Part of the problem with the predominance of weight is thus that its quantitative "objectivity" enables the dismissal of alternative forms and principles of assessment—including what proponents call "indigenous" or "traditional" knowledge—as irrelevant: a dismissal which then tends to confirm itself, as herders pragmatically orient their own practice towards requirements encoded (for example) in the subsidy systems they depend on. But what are these "traditional" modalities of assessment? How do they function, and how do they contrast with numerical indicators such as weight?

Herders themselves assess (and value) their reindeer using a bewildering array of technical terms, for a wide range of purposes, in highly context-dependent ways. The complexities of traditional pastoral description and selection practices have been documented in some detail elsewhere (see e.g. Paine 1964; 1971; 1994; Sara 2001). Here, for clarity, I will limit myself to discussing a representative textual source. Speaking at a 1998 conference in Tromsø, in a lecture entitled "Traditional assessment of animals for slaughter," the reindeer herder Anders Isak Oskal outlined some of the criteria traditionally used by herders to select reindeer for slaughter (A. I. Oskal 1999). His lecture was informal in tone, based on his own experiences as a herder and chairman of the reindeer herder association in Kautokeino. Oskal began by outlining three principal modalities of pastoral assessment: based on genealogy or descent [*avstamning*]; on behaviour, or personality; and on appearance, i.e. morphology. "Appearance," as Oskal used it, might include such factors as the quality, pattern and

colour of the pelt; the size and physical appearance of the reindeer (small, large, magnificent, thin); and the shape or quality of the antlers. Assessment based on "behaviour" might include determining whether the reindeer was tame or shy, flighty, passive, responsive, uncontrollable, dominant or easily led, gregarious, solitary, curious or docile or aggressive, as well as assessing the role and position that it usually adopted within the herd, at rest or in motion: did it keep to the front, to the back, to the middle, to the edges or flanks of the herd? How far did it range from the herd when at rest—or, conversely, when the herd was moving? How did it interact with other reindeer? Assessment by appearance and behaviour in turn overlapped with a third mode of assessment, "descent," which could be evidenced in either of the others: in traits of appearance or of personality that were passed on from generation to generation, enabling a knowledgeable herder to identify the genealogy of an individual reindeer through recognition, and to select reindeer for slaughter based on an intimate, familiar knowledge of lineages, as well as of the various traits represented in the herd, balancing their desirability against each other over time.

Such understanding of individual traits, and of the herd as a complex living aggregate, was required to manage the herd across the range of particular terrains it would encounter. Composition and herd structuring here figured as a complex, intuitive and context-dependent art: a matter of skill, insight, experience and aesthetic sensibility, put to work with specific reindeer in specific environments. Experienced herders might recognise the shifting quality of a whole herd at a glance, assessing its relationship to its surroundings and discerning the entirety of traits and relations that made it up, then using this knowledge to "shape the herd using every living animal in it" (A. I. Oskal 1999, 123). A range of technical expressions were available to describe the qualities of a reindeer herd as a whole: it might be "beautiful" (*cappa*; good reindeer and appropriate structure), or "thin" (*skarba*; few bulls, or none), or "tame" (*lojes*; needs little herding), or "shy" (*skirce*; skittish, easily scattered), or "willing to wander" (*mannis*; easily moved, e.g. during migrations). Individual traits impacted in complex ways on the behaviour of the herd as a whole—through their interaction, their balance and the proportion in which they were present within the herd. Skittish or shy reindeer might be difficult to handle, say, but as long as they were not predominant—making the herd difficult to control—they could also be important for moving the herd, as they tended to lead the more sedate reindeer in the centre and make them move on.

While brief, the Oskal lecture draws out an overwhelming richness of terminology, a body of multi-dimensional assessment criteria that informed the composition of the herd as a complex and internally differentiated living entity, in constant interaction with a specific range

of dynamic, continuously shifting environments. Of course, what Oskal describes here is not a comprehensive or reified "system of knowledge" shared by all herders: herding strategies and herd composition principles vary from district to district, family to family, individual to individual. What his account does make clear, however, is the manner in which the complexity of these assessment criteria mirrored—and was oriented towards—the spatial complexity and heterogeneity of *specific* material environments: an observation that strongly dovetails with accounts given by other herders, both published (see e.g. Sara 2001) and in conversation (Reinert 2008). As a key instrument for controlling the structure of the herd and guiding its growth, slaughter selection must take into account every aspect of the life of the herd, and those of the herders that depended on it. How far did the herd have to travel between the summer and grazing grounds? What sort of terrains did it have to cross on its migration routes, what were conditions like along these routes, what difficulties was the herd likely to encounter this year, next year, the year after? What qualities did the herd as a whole require to thrive, to survive what would happen—and not succumb to what *might* happen? Different types and age categories, present in different proportions, would alter its behaviour, supporting different strategies of control. The presence of visually distinctive reindeer for example, say with clear markings or unusual features, made the herd easier to recognise at a glance, facilitating the work of management—particularly on the summer grazing grounds, where herds were generally more dispersed. Slaughter selection served to eliminate undesirable individuals, to control the survival and transmission of traits, to regulate the ratios and proportions of different classes of reindeer within the herd and, ultimately, to manage, modify and control the herd itself: as a living aggregate, irreducible to the qualities of particular individuals. Selection for slaughter was thus a highly skilled, entrained aspect of herd composition, refined over centuries of practice, that took the structure of the herd into account as a weighed, negotiated compromise between a range of concerns, priorities and considerations. The complexity of assessment criteria, practices and terminology reflected this directly.

It is difficult today to estimate the overall distribution of assessment practices such as those Oskal describes: in part, because strategies and traditions have always varied from district to district, within families, between individuals. As a whole, there is little doubt that herders have adapted in a pragmatic manner to the parameters set (and reset) by government policy—to various degrees, and with mixed results. Some districts report successfully improving their economic situation by adopting government recommendations concerning herd size and structure. Many others, particularly in the northern core herding areas, describe unrealistic government mandates and interventions disrupting

the material, social and economic basis for their herding practice, making life impossible. Concern for the future of the industry is marked, and growing. An underlying question here—there are many others—is whether adaptation to government parameters may be jeopardising the much longer-standing adaptation of pastoralism to its own material environments: environments which are complex, heterogeneous, unstable and poorly accounted for within the spatial paradigm that underpins most administrative interventions (Scott 1998; Benjaminsen, Reinert, et al., forthcoming).

Space

As I discussed above, standardised national norms render weight as a quality that can be optimised, to the same specifications, *independently of local conditions*. Through this, it seems fair to say that the notion of weight also participates in a reproduction of space as homogeneous, within the familiar spatial imaginaries of nation and State (see e.g. Anderson 2006 [1983]). Let me develop this point a bit further, and connect it to some of the other issues raised in the previous three sections.

Through a series of visual and mathematical operations, density discourse transforms the complex terrains of herding into a featureless, internally undifferentiated expanse—divisible to infinity, into fungible and undifferentiated fractions. Within this model of space, lost pasture-grounds figure simply as deductions from a more or less undifferentiated total quantity: in other words, pastoral space is rendered as inherently subject to *arithmetical subtraction*. At the same time, and analogously, programmatic efforts to "rationalise" herd structure operate with an equally abstracted environment. "Environment" disappears in the Lenvik model, becoming invisible to the exact degree that it fails to make meaningful difference to issues such as herd structure. Decoupling herd structure from the local specificities of space, terrain and environments, State pastoral governance reflects an apex of de-specification: a multiple dematerialisation that gives us the imaginary "ideal" herd, moving through imaginary "ideal" environments located in an imaginary, featureless space; abstractions, mirroring each other to infinity. Inactive environments and undifferentiated terrain express, I suggest, the same underlying logic: a Cartesian model of space as an abstract, "empty" and domesticated medium—a "barnyard space" aligned, more or less impeccably, with the cadastral metageography of the State (Scott 1998; Reinert 2008; Benjaminsen, Reinert, et al., forthcoming).

This version of space—and implicitly, the versions of reindeer, herd and pastoralist that it entails—are at odds with the spatiality of herding and herding practice as described not just by Oskal, previously, but also by most herders. Reindeer rarely stay in one place

very long: with their herders, they make sequential use of highly differentiated seasonal pasture grounds, continuously shifting between pastures, and between microclimatic niches within each pasture area (Reinert et al. 2009; Reinert et al. 2010). The space that they constitute, through grazing and migration, is discontinuous, highly differentiated and unpredictable, potentially unstable: a patchwork of complex interrelated terrains with multiple shifting uses, depending on climate, environment, pasture conditions, the timing of seasons, predator pressure, insect presence, human disturbances, other factors expected and otherwise. Herders describe this space using terms like *jahkodat*—a term that captures the distinctive seasonal structure of any given year, as a composite of variable and interdependent factors with cumulative effects (Sara 2001; Benjaminsen, Reinert, et al., forthcoming)—and in proverbs or maxims such as "one year is not the brother of the next" ("*jahki ii leat jagi viellja*") (Tyler et al. 2007).

"Space" emerges here through the situated practice of humans and reindeer moving through territories that are complex, singular and highly differentiated—in which no simple identity or equivalence obtains between one terrain and another, and where the substitution of one specific territory for another is at best contingent, a compromise that becomes more difficult with each forced substitution, and at worst impossible (Bjørklund and Brantenberg 1981). Within spaces of this kind—variable, discontinuous and unpredictable—the loss of particular areas to developers, to roads or infrastructure, to windmill parks or mines or noise pollution can not be understood merely as subtractive. Rather, the impact of progressive encroachments is disruptive, wide-ranging, with knock-on effects that ramify through the entire "herding system" in ways that are hard, sometimes impossible to predict. This problematic disappears almost entirely in weight-centred crisis discourse—in no small part, because of the manner in which weight renders a particular understanding of space simultaneously axiomatic *and invisible*.

Countering the effects of such spatial assumptions—as manifest, for example, in the censures, restrictions and punitive measures of the ongoing "reindeer crisis"—places a continuous drain on the resources of herders, who are forced to commit substantive time, energy and critical efforts to the multiplying task of representing (and defending) the spatial logic of their practice. The putative reindeer excess exists as a surplus of bodies relative to the total grazing capacity of a given territory—a spatial totality which, from a pastoral perspective, appears "thin": homogeneous, abstract, disarticulated from its concrete specificity and use value as this varies over time, between seasons and according to unpredictable variables. Effectively, two quite distinct logics of space confront each other here: on the one hand, space as an abstract, stable Cartesian medium, indefinitely divisible into units of internally undifferentiated, fungible space—each possessed recursively

of the same basic (lack of) architecture; on the other, space as a fluid, extemporaneous practice; singular, specific and multiply differentiated, emergent in an ongoing, more-than-human interaction between heterogeneous agencies.

It is worth noting, at this point, that by articulating weight as a territorial problem—i.e. as a distribution of bodies in space—density discourse activates the State in a biopolitical modality, as a power that concerns itself, precisely, with issues such as the distribution of living bodies in space. The operation of the State in this modality, with an enforceable mandate to ensure "optimal" distributions of living bodies, is not itself in any way a neutral or value-free undertaking—however successfully it may present itself simply as a technical approach to a technical problem (Li 2007). "Sustainability" is a key term in the discursive universe of the reindeer crisis–but in the argot of current government missives, reports, conference presentations and speeches, the concept is subsumed, more or less entirely, within the long-standing government project to "fix" the reindeer population, by calibrating it to available pastures: specifically, for the purpose of generating the maximum amount of meat, and thus maximal revenue, while still also ensuring the maximal regenerative productivity of available pastures. In other words, the notion of "sustainable" is coupled to an imagined point of maximal productivity, conceived as an ideal, perfectly calibrated juncture between weight gain, birth rates and the regeneration potential of pasture resources. High profits become, effectively, *an expression* of sustainable herding; sustainable means not just profitable, but maximally profitable.

At first glance at least, this seems to disarticulate "sustainability" from concerns such as preserving the livelihood of future generations (WCED 1987)—or rather, one might say, it articulates the future survival of pastoralism in very narrow terms, as contingent (often in unclear ways) on maintaining its maximised economic profitability in the present. With this, "sustainability" is emptied of critical valence, reduced to a formalisation of productivist logic that encodes the drive to maximise resource exploitation. The complex realities of pastoralism as a traditional indigenous livelihood, with its own language, customs, traditions, ethics and pedagogy, fall outside the scope of intentional sustainment: at best, their survival is treated as an automatic byproduct of economic optimisation. Mirroring the transformation of the herd operated by the Lenvik model, pastoral practice itself is re-imagined as a kind of machine—more or less efficient, more or less optimised—whose purpose and objective is to transform pastures into meat. The legitimacy of this "machine" stands or falls on its ability to generate optimal economic value from available territories. Production levels that fall short of the theoretically "ideal" level are penalised as "unsustainable" and serve as the basis for public chiding and denunciations, as well as threats of

violent intervention—such as mass culls and forced slaughter–to "correct" productivity, supposedly for the sake of future generations. This coupling between sustainability, revenue maximisation and State power is troubling, complex and—at least in the context of Norwegian pastoralism—highly under-analysed.

Judging from the current tenor of conference presentations, strategy documents, speeches and media interventions by "official" actors, there seems to be a shift taking place in the public rationales for State intervention into pastoralism: from a long-standing rhetoric of ecological disaster, towards a range of economic arguments that focus on inefficiency and maximising revenue. Through these, the State appears to be investing itself progressively with the justified power to intervene when, for whatever reason, the productivity of pastoralism is not "optimal." In this light, the issue of reindeer weight presents a crisis for the State in a very particular capacity—that is, as an agent responsible for ensuring *the maximal generation of wealth*, from available resources within its territory. This version of the State, and the mandate that flows from it, forms a vital but still poorly described dimension of pastoral governance in Norway—one with complex historical roots, linked in part to the ideals of the post-WWII reconstruction, the rise of the Norwegian welfare state in the 1950s and the links that were forged at the time between notions of material wealth, living standards and welfare (see e.g. LMD 2002, 36). In a broader historical sense, of course, the imperative to maximise yields from a given territory forms part of a logic of governance that is traceable back to John Locke, to the earliest colonial ventures of European states and to the moral theories that justified the expropriation of native land (Kolers 2000). Across the world, this logic of territorial optimisation has functioned to displace indigenous livelihoods, justifying their elimination in favour of activities that generate higher yields—and which therefore appear more profitable, more efficient and also more valid (N. Oskal 2001). This problematic extends beyond my present remit, but it is nonetheless worth asking how practices of assessment, quantification and spatialisation may articulate with *and extend* historical patterns of State power and colonial violence—and whether the profitability of space should really serve, today, as the prime metric for indigenous policy in a State that positions itself as a signatory to international treaties such as ILO Convention 169.

Conclusion

As others have observed for decades (see e.g. Bjørklund and Brantenberg 1981; Paine 1994; Bjørklund 2004), the field of reindeer management in Norway remains defined, in large part, by an enduring disjunction between administrative theory and pastoral practice—a disjunction that is represented, frequently, as a simple deficit of

information (or rationality) on the part of herders. Against the grain of this, my argument here re-inscribes the disjunction as a point of articulation between ontologically distinct spatial logics, and explores the role of assessment practices and criteria in reproducing it. Using material drawn from interviews, literature analysis and ongoing ethnographic fieldwork, I have tried to illuminate the present-day microphysics of this disjunction, as they play out against the backdrop of the ongoing "crisis," and sketch out some of the ways in which weight intersects—as a metric, indicator and attribute—with differential imaginaries of space, biopolitical rationalities, histories of systemic erasure and invisibility.

In the context of the reindeer crisis, "weight" is first and foremost the most recent iteration of a persistent pattern—a concept of excess that has structured Norwegian reindeer policy since the middle of the nineteenth century, enduring through successive governments and changing regimes, redrawn national borders, the advent of electricity and fossil fuels, motorisation, one World War and the next… Arguments and justifications have shifted over time, variously framing the "problem" of herding as a matter of geopolitical security, nation-building and national integration, economic development, welfare reform, ecological ruin and desertification (Bjørklund 2000). A key common thread, through these iterations, has been the notion of "too many reindeer"—a ghostly refrain, persisting in the amber of policy. The present essay has been an initial effort to describe some of the ways in which disjunction and excess alike are produced, and constituted, through indicators and structured practices of evaluation. Let me close with three questions.

Firstly: what *is* "weight," and what is the work that it does? Based on what I have outlined here, I suggest that the metric of weight operates in at least three distinct modalities. Disaggregating these may help clarify the question. One modality is spatial, treating weight as an inverse of density—as a relationship between bodies and space—and seeks to perfect it through an optimal distribution of bodies in space. A second modality is eugenic, insofar as it "optimises" weight as an effect of human genetic selection and control exercised over time, from generation to generation. In contrast with the first, this second modality perfects weight *in time*, through the iterative, genealogical manipulation of bodies with the aim of fostering "improved genotypes"—understood as bodies that yield an ever higher output of meat. Of course, as Oskal indicated above, eugenic selection has also been a key instrument of pastoral control—but in the context of traditional pastoral selection, such control functioned with a much larger set of criteria (and objectives) than it does within the productivist parameters of the current governance paradigm. From a pastoral point of view, both modalities—density discourse and productivist eugenics—operate through dramatic simplifications: of

space, environments, value *and* of the reindeer themselves, transformed from complex, adaptive, more or less autonomous beings—possessed not only of multiple possible values and uses, but also of a fairly complex ethical personhood (N. Oskal et al. 2003; Reinert 2014)—to ciphers in a mathematical calculus of maximised production. A third modality, supplementary to the other two, manipulates weight at the aggregate level: seeking to optimise the total, "harvestable" weight through structural recompositions of the herd as an aggregate body. Ensuring the maximal weight of individuals, in this framing, depends on ensuring a maximally efficient herd structure—that is to say, a herd without "surplus" individuals, such as non-reproductive males, who consume the scarce resources of the winter pastures without transforming them into meat output for the market. Weight is thus maximised *through structure*, set against the available resource base—mediated by a spectral model of the "ideal herd," as an abstract machine that maximises its own total mass by transforming available pasture resources into meat as efficiently as possible. Taken together, these three overlapping logics mark out a set of biopolitical parameters, rooted in a particular model of human–animal productivity, of optimisation and (implicitly) of relation—a model that depends, among other things, on a certain understanding of space as "empty," homogeneous, fungible, indefinitely divisible and predictable: a totalising frame, within which alternative, less-quantifiable forms of life, relation and assessment can be erased—or, at the very least, rendered irrelevant. Needless to say, again from a pastoral perspective, these simplifications—of lived practice, environments and relationships—are dramatic, bordering on the brutal: the ghost of a herd, repetitively moving through a featureless and unchanging terrain, forever.

A second question, then: what is a reindeer, and to whom?[1] What can it be? One of the key issues here—in the context of weight discourse but also more generally, in the rendering-legible of Norwegian reindeer husbandry as an object of governing knowledge—is simplification (Scott 1998; Li 2007). Attuned as they were to the situated contingencies of continuous interaction with complex, dynamic and heterogeneous environments, pastoral assessment practices traditionally accounted for reindeer with dozens of relevant traits: lineages and biography, dispositions, abilities, individual personalities. The new "optimal" reindeer, on the other hand, possesses only a handful of significant traits—age, gender, weight, fertility and (in aggregation) density—all of which are ultimately compressible to the issue of maximised meat production: *weight*, as the input and output of slaughter; *fertility*, as the ability to regularly and predictably

[1] I have been addressing this question in different ways for a while now (Reinert 2008; 2012b; 2014). For a comparative formulation, see Vitebsky and Alekseyev (2014).

generate more bodies with high weights; and *density*, which derives weight as a function of the distribution of these bodies in space. Through the lens of the "new reindeer," as one element in a "production system" for meat, the herd and pastoral practice alike are re-conceptualised as a highly simplified aggregate, moving through highly simplified environments and defined via a small number of quantified variables—all balanced against each other, in a system of calculable tradeoffs and optimisation. This is pastoralism and the herd within a logic of the total system, of calculative State biopolitics and the synoptic god-trick view "from nowhere" (Haraway 1988)—as an economic abstraction, stripped of "cultural" specificity, worlds removed from the concrete complexities of day-to-day survival in the challenging, continuously shifting environments of the Arctic.[2] At the same time, other forms of complexity—from mathematical projections of risk or growth, to the predictions of ecological population models—inform, substantiate and support not only this "simplified" herd, but also the assessment and valuation practices that reproduce it. In one sense, moving beyond simplification, the weight issue opens onto what one might call the political economy of complexity—that is to say, the manner in which different forms of complexity are privileged (or dismissed) through their alignment with social, legal, political, economic and institutional factors.

A third and final question, then: what is *at stake*, in the question of assessment? I have sketched out some provisional answers to this already; allow me, in closing, to focus the issue more narrowly. Beyond numbers and rhetoric, the reindeer crisis in Norway is fundamentally a problem of space: the progressive, inexorable bleed of pasture areas lost piecemeal to competing spatial interests; the opening, and increased availability, of pasture grounds to a growing population of stakeholders, old and new, equipped with rapidly improving technologies that enable new forms of access, utilisation and value extraction; the long-standing disconnect between pastoral practice and administrative understandings of the pastoral space through which herders move, and that they occupy with their herds; shifting global patterns of resource use and availability, which are transforming and reorganising the spaces of herding as the focus of international attention (Johnsen 2014). These are all matters of increasing and cumulative urgency for herders, with tangible day-to-day effects. To put it in the simplest terms: a modality of assessment that dismisses or

[2] Of course, over time, these simplified models have modified the practices they regulate. As Oskal argues, for example (A. I. Oskal 1999, 123), decades of government interventions and regulatory schemes have forced herders to modify their herds and practice, leading to "poor herds," with poor composition—designed only to meet official production requirements, without taking into account the behaviour of the herd, its relation to local environments or other qualities that might otherwise be important.

disregards the spatial complexities of Arctic pastoralism, rendering invisible its specific affordances, is—necessarily—*inimical to the survival of pastoralism*, both as a practice and a mode of life. I have argued here that the assessment metrics of the Norwegian science–policy nexus depend on (and reproduce) an understanding of space that is almost entirely foreign to the spatial logic of Arctic pastoralism, and which is in fact antagonistic to it. Over time, the effects of this disjunction are making themselves increasingly felt.

A more general point to be made here concerns the manner in which assessment practices simultaneously specify *and* make invisible their own context and conditions of possibility: erasing what falls outside and rendering as given the worlds they describe, worlds which also make them intelligible in turn. This double move can amount to a foreclosure, an invisible colonisation of the unseen, a short-circuit of the inexplicit, of the difficult and subjective—no less so, certainly, when put to work in the service of dominant interests. Framed in this way, assessment presents itself as a problem at the intersection between power and ontology, or *ontologies* in the plural (Holbraad and Pedersen 2014): not just a matter of measuring, of "better" or "worse," of more or less "accurate," but of what can exist, what *should* exist, of how and on what terms it should be allowed to do so. Thus understood, issues of assessment and valuation compel attention not only to power, but also to givenness and absence, facticity and retroaction: to "common sense," to unnoticed absences and unmourned eliminations—to the worlds being made, and unmade, in the moment of assessment.

Conjured in the rationalising calculus of productivist State discourse, the "ideal herd" occupies an abstract ideal space, largely free of predators, within which disturbances occur as occasional disruptions in an otherwise stable environment. Factors that vitally and unpredictably determine the lives of pastoralists and their herds are either assumed absent, or assumed subject to human agency and control—and when these factors do appear, manifesting their disruptive agency, human control is invariably assumed to have failed. This is the blank, homogeneous space of density discourse: a Cartesian space, given as fully known to its (supposed) human masters. At its most basic level, I think, this is also the space of the State's dream of itself, of its own sovereignty over space—seamless, unbroken, featureless and internally undifferentiated, coherent from border to border, all the way. Power dreams the spaces it creates as if untouched, as a pre-existing medium, uniform and empty: a homogeneity extending through space as it does through time. In an age of tumults and accelerating change, as the planet shifts under our feet and the heating air thickens with ash, we might well ask how long such a fable can last. Already the ground shifts, conditions become hard to predict. This year, as they say, may not be the brother of the next.

Acknowledgments
The article is based on research supported by the Research Council of Norway (RCN) and the Estonian Research Agency (ETAG), most recently through the RCN-funded project "Dávggas: The Economic and Land-Use Conflicts of Sámi Reindeer Herding in Finnmark." I would like to thank the anonymous reviewers and editorial team of *Valuation Studies* for helpful and substantive engagements with the text.

References

Anderson, Benedict. 2006 [1983]. *Imagined Communities*. London: Verso.

Benjaminsen, Tor A., Hugo Reinert, Mikkel Nils Sara, and Espen Sjaastad. Forthcoming. "Misreading the Arctic Landscape." *Norwegian Journal of Geography*.

Benjaminsen, Tor A., Inger Marie Gaup Eira, and Mikkel Nils Sara, eds. Forthcoming. *Samisk reindrift, norske myter*. Trondheim: Fagbokforlaget.

Bjørklund, Ivar. 1991. "Samisk reindrift som pastoral tilpasningsform." In *Forvaltning av våre fellesressurser*, edited by Nils C. Stenseth, Nina Trandem and Gørill Kristiansen, 181–188. Oslo: Ad Notam.

———, ed. 1999a. *Norsk ressursforvaltning og samiske rettsforhold*. Oslo: Ad Notam.

———. 1999b. "Den nasjonale integrasjon av det samiske reindrifts-samfunn." In *Norsk Ressursforvaltning og Samiske Rettsforhold*, edited by Ivar Bjørklund, 52–65. Oslo: Ad Notam.

———. 2000. "Norges Ansvar." *Dagbladet* March 15.

———. 2004. "Saami Pastoral Society in Northern Norway: The national Integration of an Indigenous Management System." In *Cultivating Arctic Landscapes*, edited by David Anderson and Mark Nuttall, 124–135. Oxford: Berghahn.

Bjørklund, Ivar, and Odd Brantenberg. 1981. *Samisk reindrift—norske inngrep*. Tromsø: Universitetsforlaget.

Bjørklund, Ivar, and Harald Eidheim. 1999. "Om reinmerker—Kulturelle sammenhenger og norsk jus i Sapmi." In *Norsk ressursforvaltning og samiske rettsforhold,* edited by Ivar Bjørklund, 143–157. Oslo: Ad Notam.

Borgenvik, Erik Johan. 2014. "When You Think Like the State—The Political Ecology of Pastoral Modernization in Finnmark, Norway." Master's thesis, Norwegian University of Life Sciences.

Bourdieu, Pierre. 1994. "Rethinking the State: On the Genesis and Structure of the Bureaucratic Field." *Sociological Theory* 12 (1): 1–19.

Foucault, Michel. 2003. *Society Must Be Defended*. New York: Picador.

———. 2007. *Security, Territory, Population*. New York: Palgrave Macmillan.

———. 2008. *The Birth of Biopolitics*. New York: Palgrave Macmillan.

Hansen, Thomas, and Finn Stepputat, eds. 2001. *States of Imagination*. London: Duke University Press.

Haraway, Donna. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575–599.

Hausner, Vera, Per Fauchald, Torkild Tveraa, Elisabeth Pedersen, Johnny-Leo Jernsletten, Birgitte Ulvevadet, Rolf Ims, Nigel Yoccoz, and Kari Bråthen. 2011. "The Ghost of Development Past." *Ecology and Society* 16 (3): 4.

Haywood, Gordon, Johan Nilsson, Michael Franklin, Paul Gilbert, Linus Johansson Krafve, Lisa Linden, Mark MacGillivray, and Robert Meckin. 2014. "Valuation Studies: A Collaborative Valuation in Practice." *Valuation Studies* 2 (1): 71–85.

Hobart, Angela, and Bruce Kapferer. 2012. *Contesting the State*. Wantage: Sean Kingston Press.

Hobart, Mark. 1993. *An Anthropological Critique of Development*. London: Routledge.

Holand, Øystein. 2007. "Herd Composition and Slaughtering Strategy in Reindeer Husbandry—Revisited." *Rangifer* 27 (3): 123–124.

Holbraad, Martin, and Morten Axel Pedersen. 2014. "The Politics of Ontology," *Fieldsights—Cultural Anthropology Online* January 13.

Johnsen, Kathrine Ivsett. 2014. "The Paradox of Reindeer Pasture Management in Finnmark, Norway." Online feature, *Strategic Environmental Impact Assessment of Development of the Arctic*. www.arcticinfo.eu/en/features/112-the-paradox-of-reindeer-pasture-management-in-finnmark-norway, accessed October 1, 2014.

———. Forthcoming. "Medbestemmelse, makt og mistillit i reindrifts-forvaltningen." In *Samisk reindrift, norske myter*, edited by Tor Benjaminsen, Inger Marie Gaup Eira, and Mikkel Nils Sara. Oslo: Akademika.

Johnsen, Kathrine Ivsett, Tor Benjaminsen, and Inger Marie Gaup Eira. Forthcoming. "Seeing Like the State—Or Like Pastoralists? Conflicting Narratives on the Governance of Sámi Reindeer Husbandry in Finnmark, Norway." *Norwegian Journal of Geography*.

Kolers, Avery. 2000. "The Lockean Efficiency Argument and Aboriginal Land Rights." *Australasian Journal of Philosophy* 78 (3): 391–404.

Lenvik, Dag. 1990. "Flokkstrukturering—Tiltak for lønnsom og ressurs-tilpasset reindrift." *Rangifer* 4: 21–35.

Lenvik, Dag, Ole Grannefjell, and Johannes Tamnes. 1982. "Kalvetap fra en ny synsvinkel." *Rangifer* 2 (App 1): 62–74.

Li, Tania. 2007. *The Will to Improve*. London: Duke University Press.

LMD [Department of Agriculture and Food]. 2002. "Om dyrehold og dyrevelferd." Stortingsmelding Nr. 12 (2002–2003) www.regjeringen.no/Rpub/STM/20022003/012/PDFS/STM200220030012000DDDPDFS.pdf

———. 2008a. "Kriterier/indikatorer på økologisk bærekraftig reintall." www.regjeringen.no/upload/LMD/Vedlegg/Brosjyrer_veiledere_rapporter/Rapport_okologisk_reintallskriterier.pdf

———. 2008b. "Veileder for fastsetting av økologisk bærekraftig reintall." www.regjeringen.no/upload/LMD/Vedlegg/Brosjyrer_veiledere_rapporter/Veileder_fastsetting_okologisk_baerekraftig_reintall_des_2008.pdf

———. 2008c. "Høring: Rapport om kriterier/indikatorer for økologisk bærekraftig reindrift." Høringsuttalelse Reinbeitedistrikt 16—Karasjok Vest. www.regjeringen.no/upload/LMD/Vedlegg/Horinger/Okol_reindrift_012_Reinbeitedistrikt16.pdf

———. 2012. "Tale: Velkommen til Bords!" Archived speech. www.regjeringen.no/nb/dokumentarkiv/stoltenberg-ii/lmd/taler-og-artikler/2012/tale-velkommen-til-bords-1.html

Mathiesen, Svein, Bjørn Alfthan, Robert Corell, Ravdna Eira, Inger Marie Eira, Anna Degteva, Kathrine Johnsen, Anders Oskal, Marie Roué, Mikkel Nils Sara, Eli Ristin Skum, Ellen Inga Turi, and Johan Mathis Turi. 2013. "Strategies to enhance the resilience of Sami reindeer husbandry to rapid changes in the Arctic." In *Arctic Council: Arctic Resilience Interim Report*, 109–112. Stockholm: Stockholm Environment Institute and Stockholm Resilience Centre.

Oskal, Anders Isak. 1999. "Tradisjonelle vurderinger av livdyr." *Rangifer Report* 3: 121–124.

Oskal, Nils. 2000. "On Nature and Reindeer Luck." *Rangifer* 20 (2–3): 175–180.

———. 2001. "Political Inclusion of the Sámi as Indigenous Peoples in Norway." *International Journal of Minority and Group Rights* 8: 235–261.

Oskal, Nils, Ole-Henrik Magga, and Mikkel-Nils Sara. 2003. "Dyrevelferd i samisk kultur." Report to LMD, published with Samisk Høgskole. www.regjeringen.no/upload/kilde/ld/rap/2001/0017/ddd/pdfv/151133-utredning_dyrevelferd_samisk.pdf

Paine, Robert. 1964. "Herding and Husbandry: Two Basic Distinctions in the Analysis of Reindeer Management." *Folk* 6 (1): 83–88.

———. 1971. "Animals as Capital: Comparisons Among Northern Nomadic Herders and Hunters." *Anthropological Quarterly* 44 (3): 157–172.

———, ed. 1977. *The White Arctic—Anthropological Essays on Tutelage and Ethnicity*. Toronto: University of Toronto Press.

———. 1992. "Social Construction of the 'Tragedy of the Commons' and Saami Reindeer Pastoralism." *Acta Borealia* 2: 3–20.

———. 1994. *Herds of the Tundra*. London: Smithsonian Institution Press.

———. 2004. "Saami Reindeer Pastoralism: Quo vadis?" *Ethnos* 69 (1): 23–42.

Porter, Theodore. 1995. *Trust in Numbers*. New Jersey: Princeton University Press.

Reinert, Erik. 2006. "The Economics of Reindeer Herding: Saami Entrepreneurship Between Cyclical Sustainability and the Powers of State and Oligopolies." *British Food Journal* 108 (7): 522–540.

Reinert, Erik, Iulie Aslaksen, Inger-Marie Gaup Eira, Svein Mathiesen, Hugo Reinert, and Ellen-Inga Turi. 2009. "Adapting to Climate Change in Reindeer Herding—The Nation-State as Problem and Solution." In *Adapting to Climate Change*, edited by W. Neil Adger, Irene Lorenzoni & Karen O'Brien, 417–432. Cambridge: Cambridge University Press.

Reinert, Hugo. 2008. *The Corral and the Slaughterhouse*. PhD diss., University of Cambridge.

———. 2012a. "Knives for the Slaughter." *Acta Borealia* 29 (1): 35–55.

———. 2012b. "The Disposable Surplus—Notes on Waste, Reindeer and Biopolitics." *Laboratorium* 4 (3): 67–83.

———. 2014. "Entanglements—Intimacy and Nonhuman Ethics." *Society & Animals* 22 (1): 42–56.

Reinert, Hugo, Svein Mathiesen, and Erik Reinert. 2010. "Climate Change and Pastoral Flexibility." In *Political Economy of Northern Regional Development*, vol. 1, edited by Gorm Winther, 189–204. Copenhagen: Nordic Council of Ministers.

Sara, Mikkel-Nils. 2001. *Reinen—Et Gode fra Vinden*. Karasjok: Davvi Girji.

Scott, James. 1998. *Seeing like a State*. London: Yale University Press.

Star, Susan Leigh, and James Griesemer. 1989. "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39." *Social Studies of Science* 19 (3): 387–420.

Statens Reindriftsforvaltning. 2014. *Ressursregnskap for reindriftsnæringen*. Alta: Statens Reindriftsforvaltning.

Stengers, Isabel, and Erik Bordeleau. 2011. "The Care of the Possible: Isabelle Stengers interviewed by Erik Bordeleau." *Scapegoat* Iss. 1: 12–17, 27.

Strøm-Bull, Kirsti, Nils Oskal, and Mikkel Nils Sara. 2001. *Reindriften i Finnmark—Rettshistorie 1852–1960*. Oslo: Cappelen.

Taussig, Michael. 1992. *The Nervous System*. London: Routledge.

Tyler, N., J. M. Turi, M. A. Sundset, K. Strøm Bull, M. N. Sara, E. Reinert, N. Oskal, C. Nelleman, J. McCarthy, S. Mathiesen, M. Martello, O. H. Magga, G. Hovelsrud, I. Hanssen-Bauer, N. I. Eira, I.-M. Gaup Eira, and R. Corell. 2007. "Saami Reindeer Pastoralism under Climate Change: Applying a Generalized Framework for Vulnerability Studies to a Sub-Arctic Social-Ecological System." *Global Environmental Change* 17: 191–206.

Vitebsky, Piers, and Anatoly Alekseyev. 2014. "What Is a Reindeer? Indigenous Perspectives from Northeast Siberia." *Polar Record*, first view article: 1–9.

WCED (World Commission on Environment and Development). 1987. *Our Common Future*. Oxford University Press: Oxford.

Hugo Reinert is a senior researcher at the Estonian Institute of Humanities, Tallinn University, and a research fellow at the Department of International Environment and Development Studies (Noragric), Norwegian University of Life Sciences. He has worked on a number of projects in the areas of environmental anthropology and geography, including studies of pastoralism, bird conservation and climate change policy. His current research examines the emergence of "sacrifice zones" in the context of the new Arctic mining boom.