


Valuation Studies

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Editorial Note:

A Note on Transitions

Claes-Fredrik Helgesson

New careers in New Towns

It has become time for me to step down from my leading editorial role for *Valuation Studies*. We on the board of editors have for some time worked on a transformation and move of offices to Copenhagen Business School. Apart from the necessary reformulation discussed in a previous editorial note (Board of Editors 2020), this transition also relates to me when in 2019 I took on ‘a new career in a new town’. The publication of this issue therefore marks an important further step in this process by concluding my leading editorial role for this journal.


I want to take this final opportunity to pen an editorial note to reflect briefly on the evolution of *Valuation Studies*. This exercise will touch on how both ideas and practices evolved. This means revisiting some of the thinking and doing over the past ten years.

Beginnings: Starting and expanding conversations

Most work I become engaged with begins with indeterminate and meandering conversations. It may take some shape in mind maps that outline questions, issues, and possible actions. Yet, the key in sustaining the realisation is gradually more focused conversations that outline plans and actions. The early conversations that developed into *Valuation Studies* were with Fabian Muniesa in early 2011, possibly even earlier. (There are records of earlier conversations involving

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others pointing in similar directions.) Soon, more entities became engaged in the still exploratory endeavour. This included staff at Linköping University Library, most notably David Lawrence and Peter Berkesand, who had routines on how to set up electronic open access journals. It further included a number of our colleagues who had expressed an interest in promoting the endeavour. I sent an application to support the creation of the journal to the Swedish Research Council in August 2011 indicating a proto-editorial advisory board including Patrik Aspers, Peter Karnøe, Hans Kjellberg, Andrea Mennicken, and Ebba Sjögren. The ambition of the endeavour was in the application phrased in terms that would sound broadly familiar to those who have followed the journal over the years:

This application concerns funding for establishing a new open access journal that will bring together several vibrant research fields ... The aim of the journal is to be a hub for work relating to the study of valuation as a social practice. More specifically, the journal will provide a space for the assessment and diffusion of research that is produced at the interface of a variety of approaches from several disciplines: new economic sociology, science and technology studies, organizational science, cultural anthropology, market studies, institutional perspectives in economics and economic history, accounting studies, cultural geography, philosophy ... The journal finds its primary niche not in a clear-cut disciplinary community but in the emerging network of sociologists, management scientists and economists, and others who meet and discuss valuation in multidisciplinary conferences (such as EGOS, SASE, and 4S), exchange ideas and read each other.

Notice that the grant application had been awarded funding for 2012 came in October or November 2011. The grant of €10,000 for 2012 stimulated much activity in actually realising the idea of the journal. What had been a possibility now had to take on a more realistic shape. Fabian and I took on roles as co-editors-in-chief. Members in the Values research programme in Linköping took on tasks in an emerging editorial office (Maria Eidskog, Karin Thoresson, and Lotta Björklund Larsen). Advisory boards were expanded. The article layout was figured out and the public website was set up. Gradually, we became further acquainted with the personality of the locally developed manuscript management system. A call for papers was drafted.

The call for papers and the site were launched in June 2012. Now the venture was made public. The website received some 1,200 unique visitors in June alone, which was nice confirmation that there could be broader interest in this journal. Soon we received the first submissions, kicking off the editorial process of reading, soliciting reviews, making judgements on manuscripts *and* the incoming reviews, drafting and discussing editorial decision letters. The first issue was subsequently published in April 2013. The journal had come into existence.

What was it that made us think that it could be meaningful to start a journal? We were thrilled when the home page saw many ‘unique visitors’, such as the more than 10,000 we had in 2013. Yet, the *raison d’être* of the journal was not tied to metrics. The scope and tone of the journal was invested in the core idea that meaningful scholarly work needed to be tied to a community of ongoing conversations. Important and exciting conversations are what makes scholarly work worthwhile and are necessary for fostering ideas. We live in an age of grand illusion that the meaningfulness of scholarly contributions can be valued with metrics such as citations, impact scores, and the like. We made a strong point neither to conflate the two, nor to think that the metrics was what ultimately mattered. What ultimately mattered to us was whether it could gather a community and start new conversations on valuations. As Fabian and I stated in our opening editorial:

The worth of the venture to start a new journal has to be assessed in how it engages to create new conversations and new ideas. (Helgesson and Muniesa 2013: 8)

I am satisfied to observe that the journal is part of a heterogenous community that contributes to it, reads it, and so on. There have been several workshops and conference sessions organised that more or less clearly related to the journal. A personally overwhelming moment was at 4S/EASST in Barcelona in 2016 where I co-organised a track of sessions together with Freyja Knapp, Kristin Asdal, Francis Lee, and Steve Woolgar. Titled ‘Valuation practices at the margins’, the open call attracted some 31 papers over seven sessions. Some of the contributions have appeared later as articles in the journal. I remember feeling that the venture felt anything but marginal.

Alongside the gradual emergence of a broader heterogenous community taking an interest in the journal, there also gradually emerged the tight-knit community known as the board of editors. This small group of fewer than ten scholars allowed us to distribute the caring for submissions across more pairs of hands. Yet, this group has never primarily been a mechanism for dividing up the workload. Not only are submissions discussed within the group, but the key feature of this collective lies in how we developed a style for working together, thinking and talking about the direction of the journal, where the conversations were going, and what care they and the journal needed. The ongoing conversations and the care this group displays have become the bedrock of *Valuation Studies*.

Plenty of opportunities for learning

There are more nuances to the many facets of academic publishing than I ever could have dreamed of when I began talking with Fabian about the possibility of starting a journal. Getting involved in the start-

up of a journal provides many opportunities for learning. There are many things to appreciate when trying to care for—not managing—the delicate process where promising manuscripts from authors can become part of published issues. It involves attending to manuscripts, authors, reviewers, fellow editors, and readers. There is the intricacy of determining when manuscripts are ready to become finished articles and part of the broader conversation. There are the nooks and crannies of manuscript management systems. (Somewhat upping that particular ante, we changed our system twice.) One thing I have come to appreciate in all this is how apparently practical and managerial matters often are tied in to more fundamental issues.

I can readily admit that at times it has been difficult to make it all work as we would have wanted. I have, for instance, at times failed to make prompt decisions on manuscripts, unnecessarily delaying the editorial process. Having an editorial role in a scholarly journal clearly provides opportunities to reflect on any inclination to procrastinate that you might have. The board of editors has been a key group of scholarly friends when things have not worked out as planned.

Being involved in setting up and operating a new scholarly journal further provided me with more detailed insights into the many tensions in the landscape of contemporary academic publishing. One set of such pertinent tensions centres around different publishing models. At one end of the spectrum there is the non-profit open access model, like *Valuation Studies*, and at the other you find the large-scale for-profit publication model. Our choice to develop *Valuation Studies* as a small-scale university-based and community oriented open access venture gave us a particular outlook. I gradually learned, for instance, that there are many ways you can talk about costs related to scholarly publishing. Sometimes colleagues in academia questioned whether government funds really should be used to support open access journals. In doing so, they conveniently ignored the massive amounts of government funds used to pay for institutional subscriptions of commercially operated journals. *Valuation Studies* has always operated on a shoestring budget, even more so in later years when support from the Swedish Research Council was ended. It is a publication model that is tough to operate. Yet, there are also benefits and it is much easier to align it with important ideas of what scholarly communication is all about.

Academic publishing is immersed in a plethora of valuation practices. It is therefore not strange that it recurrently has figured in notes I have authored and co-authored for this journal (Helgesson 2016; Helgesson and Muniesa 2013, 2014; Helgesson and Woolgar 2018). I still contend that the many facets of academic publishing practices, and of scholarly endeavours more broadly, provide a rich site for examining valuations; how they are done and what they do.

Care for the conversations!

Theodore Zeldin (2000) reminded us that conversation is more than exchanging facts:

When minds meet, they don't just exchange facts: they transform them, reshape them, draw different implications from them, engage in new trains of thought. Conversation doesn't just reshuffle the cards: it creates new cards. (Zeldin 2000: 50)

That it is why, I think, it is so important to care for the arenas where scholarly communities can meet and have meaningful conversations. It is further why it is key to keep that tricky balance of having a community open and evolving, while not losing sight of what keeps it together. It means keeping the conversation progressing rather than becoming repetitive and formulaic, which ties in to why the current reformulation of *Valuation Studies* is pertinent at this point. It is, as Zeldin put it '... up to us to decide on the kind of conversations we have' (Zeldin 2000: 50). I look forward to continuing to enjoy the conversations on pages of this journal and within this community.

Acknowledgment: Thanks to fellow editors José Ossandón, Trine Pallesen, and Fabian Muniesa for reading and commenting on an earlier version of this note. As I depart, I would furthermore like to thank other individuals and collectives that have been key in making *Valuation Studies*. First come the authors and reviewers. They are all key participants in the conversations that constitute the editorial process. It is easy to understand the importance for a new journal that there are authors who are willing to submit manuscripts to an uncertain new outlet. Thanks for your trust! The significance of dedicated reviewers is equally key, and their work often at best acknowledged by thanking 'two anonymous reviewers for their comments and suggestions'. Thanks! Then there is the invisible work of an editorial office where several individuals have filled key functions: Thanks to Lotta Björklund Larsen, Maria Eidenskog, Amelia Mutter, Johan Nilsson, Karin Thoresson, and Mella Köjs. Thanks to Rebecca Elfast for giving us the logo. Thanks to Pat Baxter for developing our style guide and consistent copy-editing. The dedicated staff at LiU e-press have also done immensely important, but largely invisible, work. Thanks David Lawrence, Peter Berkesand, and Edvin Erdtman. Thanks to the collectives on the advisory board. Your encouraging support has been key for reaching out. My final thanks go to my fellow members of the board of editors. Our collaboration over meetings and mails is at the heart of this and I am so happy that it is still ticking as I head off. And Fabian. Thanks for striking up this conversation and sticking with it.

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'It's not like any survey I've ever seen before': Discrete Choice Experiments as a Valuation Technology'

Vicki Macknight and Fabien Medvecky

Abstract

This paper unpacks what happened when members of the local community were invited to design and test a valuation tool – specifically a discrete choice experiment – to find a valuation for New Zealand's Otago Peninsula. We argue that the assumptions that lie within a discrete choice experiment are revealed when we look closely at *how* community participants react to the discrete choice experiment survey they have helped design. These assumptions, usually unnoticed, include the necessity of making trade-offs; what actions are possible; the 'reality' of one's preference structures; the need for abstraction; and the importance of big picture patterns. We also argue that how these assumptions are negotiated in practice depends on complex power relationships between researchers, participants, and the technology itself. While we might seek to 'empower' the community with knowledge of economic processes and valuation practices, this might not be the empowerment they seek. Participants find ways to be active negotiators in the face of valuation technologies.

Keywords: discrete choice experiment; Otago Peninsula; biodiversity management; environmental valuation; making economics public

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Introduction

I move along the back of the semi-circle of seats, giving out departmental iPads and paper for comments. Fabien is showing a slide of the list of choice attributes we have developed from this group's discussion two nights ago.

- Pest management
- Weed control
- Marine park
- Native ecosystems
- Support for private landowners
- Price.

The group look up at the screen, attentive but baffled. They are trying to understand; they know they are about to use this information as they test the survey. The software is already open on each iPad, ready for them to start trying it out. In practice, there are difficulties. The program keeps stalling, screens jump back to the iPad home and need to be set back to the survey. I wander around, sympathising and helping. Once they are settled, I sit again and watch the group. Lydia, an older woman heavily involved in community volunteering, is sitting back with her arms crossed defensively across her chest. Janet, a landowner and conservationist, has her hand on her head, fingers entwining her hair, deep in thought. Brian, sometime volunteer for the Department of Conservation, is frowning. Richard snorts as he reads; Karen purses her lips.¹

They are filling in a discrete choice survey (a stated preference valuation technique) about environmental management on the Otago Peninsula in the South Island of New Zealand. The Otago Peninsula is a narrow strip of land between harbour and ocean, boasting albatross, seals, penguins and scenic beauty, and plagued by introduced plant and animal pests. We have spent two hours on a previous evening with this group, attempting to give them a taste of environmental economics and the ways economists try to measure the value of environments and environmental outcomes. We have introduced some fundamental concepts in economics (such as trade-offs) and some techniques for assessing value (such as revealed preferences, contingent valuation methods and discrete choice models). We workshopped what they would like a valuation to do and what attributes would be important to ask about in a valuation survey. This was an attempt to make a genuinely community-based valuation tool to assess the value of the Otago Peninsula's biodiversity and its management.

Earlier that day, Fabien and I had sat down together with the discrete choice survey our group are currently filling in, which he had put together using software called 1000minds designed in the

¹All names have been changed to preserve the privacy of participants.

economics department of our university (Hansen and Ombler 2008).² This software has been highly successful both in New Zealand and internationally, used, for example, by the World Health Organisation to identify the most dangerous antibiotic resistant global diseases, as well as by major organisations and corporations including Google.³ I tried it out while Fabien timed me. I gave answers without too much thought, finding as I did so that my choices tended to emphasise the creation of a marine park and de-emphasise support for private landowners. I kept an eye on the completion bar. It seemed to stutter and go slowly at first as the program worked to put together a picture of my preferences, but as the picture clarified the bar filled itself in by leaps. Together we looked at the graphic the program had made of my preference structure, notably different from Fabien's preference structure. He, it turned out, cared about pests and not about marine parks. 'It's a really cool program', I said. 'And it makes the data so easy to analyse,' he agreed.

Why this story? Because it shows participants performing a valuation of the Otago Peninsula in a particular time and place, with particular computing technology, background knowledge and intention. More, it shows that what the group are filling in – a survey ultimately made by Fabien and me – has power to enable and constrain a specific set of responses. While we have 'empowered' citizens to participate in the ways Otago Peninsula nature is to be economically valued, we will suggest that 'empowerment' is not straightforward.

As has been shown, valuations are not only a thing, they are also a process (Helgesson and Muniesa 2013; Heuts and Mol 2013; Kjellberg et al. 2013; Vatin 2013). The valuation that our respondents come up with should not be thought of as simply a reflection of what they really think. Instead, it comes from the activity of filling in a survey, after sitting in a room being told about and discussing environmental valuation, and struggling with a particular and unfamiliar technology. As Peltola and Arpin (2017) have argued, 'Valuation studies have been argued to neglect the fact that values do not exist independently of valuation techniques but rather get formed, at least in part, during valuation processes' (Peltola and Arpin 2017: 19).

What we are interested in exploring here is how we can use the process of people doing a discrete choice experiment (DCE) to better understand the nature of DCE techniques and the resulting valuations. We ask: If we study the process of participants filling in a discrete choice experiment what is revealed about the assumptions of DCE

² <https://www.1000minds.com>, accessed 5 December 2011.

³ http://www.who.int/medicines/publications/WHO-PPL-Short_Summary_25Feb-ET_NM_WHO.pdf, accessed 11 December, 2017.

technology? What does studying the process tell us about how power is negotiated while doing valuation? (From now on, we'll simply refer to biodiversity management on the Otago Peninsula as the 'OP' as this is the aspect of the peninsula we are studying).

We need to ask these questions to do politically aware academic work. Knowing more about hidden aspects of particular valuation processes is important because valuations intervene in lives and environments. In effect, making a valuation for the OP means making two types of something that can impact the world. One is recognisable as a number inscribed in a report: it is the monetary value we find to apply to the OP (found for the OP, for example, by Tisdell 1988, 2007). Valuations presented only as numbers obscure the processes and assumptions involved in their making; but those numbers have power to change how people think and what people do. This number, and the report it is embedded in, might find their way into all sorts of circuits of knowledge and decision making, from city council to local media to volunteers' discussions while pulling weeds. We are concerned that valuation numbers intervene well; and part of this should be a concern about the commodification and economisation of nature.

The other type of intervention sits under the grandiose name of making economics public, something like an economics equivalent of the 'public engagement with science' movement. Our aim, broadly, is to 'empower' people by making economic tools accessible and showing how these are being used in the world around them. To do this we create a situation (the event of evaluating the OP), where interested people can learn about economics in practice by doing valuation. We hope to give them tools to speak into economics. These intentionally destabilise existing power relations and ask 'who has the right to say what things are worth and how that worth should be determined?'

When we watch how our participants fill in a DCE survey we are reminded that it is not the case that citizens are powerless until researchers empower them. Some citizens, at least, are already savvy about using tools in ways that are useful to their aims: in this case particular ways of protecting the OP.

We proceed as follows: first, in Section 1, we look at the sociological work done around valuing as a verb, as a process that involves particular technologies; in Section 2, we talk about DCE as a valuation technology, showing that it is widely used and trusted; then in Section 3 we describe our survey. In Section 4 we discuss our groups' responses to interacting with a DCE survey and what this reveals about the assumptions inherent in such valuation techniques. Section 5 closes the article, with an exploration of how our valuation intervenes in the future of the OP. Here we are interested in linking the local performance of DCE to broader theoretical themes around power relationships in environmental valuation.

Valuation technologies and environmental valuations

Marion Fourcade's 2011 paper 'Cents and Sensibility: Economic Valuation and the Nature of "Nature"' asks about the impact of valuation technologies upon the values given to natural environments. By comparing the valuation technologies used to decide compensation for two oil spills, one the 1978 sinking of the Amoco Cadiz off the coast of Brittany and the other the 1989 grounding of the Exxon Valdez in Alaska, she shows how what might seem to be dry economic tools for working out loss actually have major impacts on how we are able to value, maintain and manage natural environments. Whereas the calculation of 'how much profit did French fishermen miss out on' yielded a low number and a small compensation package, the calculation of 'how much would American people be willing to pay to know that the Alaskan wilderness has been restored to a pristine state' yielded a high number and a large compensation package. She asks 'How, and by which fantastic but very concrete operations, did people come to collapse different economies of worth applying to nature ... into dollars and cents' (Fourcade 2011: 1726).

Her work springs from a recognition that valuation is both a noun and a verb, a product of technologies and an ongoing social process. This perspective takes valuation away from only being about one (or multiple) already established value/s (often price), and towards questions of how values are negotiated, contested and come to rest. It is clear that noun and verb come together as people fill out contingent valuation surveys – Burrows et al. have shown that the price people choose is higher if a survey asks about higher prices (Burrows et al. 2017; McFadden and Train 2017). This suggests that people select a price in relation to what seems appropriate to survey designers rather than holding a predetermined price in their heads.

These scholars are demonstrating performativity. This term has come into social studies of economics with the work of Donald MacKenzie, Michel Callon and others, who use it to argue that economic ideas and theories are not reflections of the way the world is but actually work to remake the world (Callon 2007; MacKenzie 2008; Muniesa 2014). Here is how Ivan Boldyrev and Ekaterina Svetlova put it: 'economic ideas and models change, shape, and construct economic reality; they are both governing the behaviours of agents, and in many ways, conditioning the very existence of those behaviours' (Boldyrev and Svetlova 2016: 7). Often though, discussions of performativity are more about how economics is performed *upon* ordinary people by actors such the Chicago Board Options Exchange (MacKenzie and Millo 2003), wholesale electricity markets (Breslau 2013) or the New Zealand Reserve Bank (Holmes 2009, 2013). We argue that ordinary people too, perform economics,

and explicitly so when valuation devices such as DCE are placed in their hands.

A device is a tool built to achieve a specific purpose, and a valuation device is one that is meant to achieve certain valuation outcomes. But as it enters already active worlds where people are performing valuations, a device can become much more than intended. As Franck Cochoy argues, a supermarket trolley pushed past shelves becomes a tool for shopping by volume, not price; the end point of quality/price judgements; a space of negotiation between shopping partners; and a sign for self and others of one's identity and place in the world (Cochoy 2008). Like Cochoy, Amalie Hauge (2016) shows how valuation devices become embedded in an already active set of habits, needs and relationships. She discusses how a lean whiteboard works as a valuation device in the neonatal ward of a large hospital. We need to notice, she argues, how the lean whiteboard is used (and ignored) depending on the time frameworks, grammars, goals and tasks of users. It is a different type of valuation device for those who need to help a baby right now from those who want to check on the effect of administrative changes.

DCE is a valuation device too, a tool for achieving seemingly straightforward numerical valuations of complex entities like nature. But like shopping trolleys and whiteboards it enters an already active world. Things are already being performed as having value, and people are adroit at acting in relation to value. When we think of DCE as a valuation device we can easily see that it is a technical object – a mathematical and economic tool interacted with on a computer. But it is not only a technical device; it's an economic and social one too. As we see our participants struggling to do what they are being asked to do, we are seeing them temporarily enter the logic of DCE. They are acting in terms of trade-offs, in abstraction, in scarcity (and the particular scarcities that survey designers have specified); they are relating these concepts to the nature and society they live in; and they are actively questioning doing so.

Valuation is a focus of interest, and sometimes concern, for environmentalists. Valuation technologies, including DCEs, have come to play a large part in environmental and resource management research. However, this has not been without controversy, as Erik Gómez-Baggethun and Manuel Ruiz-Pérez (2011) argue, with some environmentalists seeing 'valuation and market solutions as core strategies to solve present environmental problems' while others reject the very idea of such utilitarian ways of considering the environment. However, how valuation devices are used and interpreted is a matter of power, of who can speak for 'nature' and how. 'We believe', conclude Gómez-Baggethun and Ruiz-Pérez, 'that economic framing of the environment and monetary valuation methods cannot be considered neutral tools' (2011: 614; see also Castree 2003; Redford and Adams

2009; Matulis 2014). DCEs, like other valuation devices, become part of political negotiations of how to think about and use 'nature'.

What does this look like in practice? We are interested in the ways DCEs are not neutral in their fantastic and concrete operations. The processes of doing DCEs has scarcely been wondered at. Rakotonarivo, Schaafsma and Hockley's comprehensive review of DCEs notes that while there was anecdotal evidence that some participants did not understand the task or found these surveys confusing, 'only one article used qualitative techniques' to study them (Rakotonarivo et al. 2016: 105). To begin to rectify this lack, we ask: what does the process of getting participants to take part in a DCE reveal about the assumptions of DCE technology? But first, an outline of what DCE actually is and how we used it.

Discrete choice experiments and environmental valuations

Techniques for assessing the economic value of non-market 'goods' (such as the environment and its management) fall into two main categories: revealed preferences and stated preferences. Revealed preferences methods derive the monetary value of an environment by looking at related market-traded goods, such as using tourism revenue to assess the value of a national park. On the other hand, stated preferences methods directly elicit a valuation from potentially affected citizens and other stake-holders, classically using a survey-based methodology (Medvecky 2014). As the name implies, one asks participants to state their preferences. Among the most commonly used stated preferences methods are the contingent valuation methods (CVM) and Discrete-Choice Experiments (DCE) (Freeman 2003). CVM allows for a 'whole system' valuation by directly asking participants about their willingness to pay (WTP) for a specific set of attributes or scenario of environmental output (hypothetical or real). For example, participants may be asked their willingness to pay for a defined marine park with a set number of species and a determined level of management. The specific attributes are set and the WTP is for the complete scenario: for example, how much extra would you be willing to pay in your rates for a 200-hectare marine park?

DCEs on the other hand look at the choices people make between various attributes of a non-market good, such as size of marine parks or the increase in yearly rates to residents or number of species protected. For example, a DCE may ask a series of questions: 'would you rather pay NZ\$50 per year extra on your rates and have a large marine park; OR pay NZ\$20 a year extra on your rates and have a small marine park?'; followed by 'would you rather pay NZ\$20 per year extra on your rates and protect three species; OR pay nothing extra on your rates and protect one species?'; and so on. By looking at the patterns in choices made by respondents, DCEs allow a ranking of

attributes relative to each other (Hoyos 2010). Incorporating a cost element as one of the attributes means a respondent's willingness to pay for each attribute can also be calibrated. The outcome of a DCE study provides decision makers with a measure of the economic value of the various attributes, which helps guide possible strategies and policy decisions – how much the community thinks undertaking a certain action is worth relative to other options – rather than provide an overall valuation. A DCE ranks people's preferences in order.

Historically, DCE – and its cousin, conjoint analysis – has been used in fields such as product development and marketing (to determine which attribute was deemed most desirable by consumers), health management and transport economics (Hanley et al. 1998; Alriksson and Öberg 2008a). DCE was first used in environmental economics by Adamowicz et al. (1994). Since then, DCE has been increasingly used in this space. The five most common environmental issues to have used DCE are recreational environmental uses, ecosystem management, environmental products, environmental valuations, and pollution. DCE has also been used for environmental issues around energy, land management, agriculture/forestry, waste management and risk management (Alriksson and Öberg 2008b). Due to an increasing number of issues raised about the methodological soundness of using other types of valuation devices (like CVM for WTP assessments) current economic assessments have increasingly moved towards using DCE (Johnston et al. 2017).

Our survey

We used a DCE to assess the economic value of various biodiversity management options for the OP, a particularly rich and beautiful stretch of land on the south-eastern end of New Zealand. 'We' are a pair working in a Science Communication department, one with a social science background and the other with a background in economics and philosophy. We share an interest in making economics more public, and a concern for doing so responsibly. We have particular vested interests, some that come from being employed under the umbrella of science communication (to communicate, to share, to 'empower'), and some that come from our own ethical frameworks (to slow down, to listen, to respect dissent). We wanted to both empower citizens with economic knowledge and shape our valuation device based on their opinions.

To do so, we ran two-workshops for members of the community to discuss environmental valuation. Our goal was to equip citizens with the skills to select an environmental valuation strategy (they chose DCE) and to determine the criteria the DCE would ask about. We used the first workshop to give participants an overview of environmental economics, including a review of the most common methods for valuing the environment in economics. Unlike standard practice with

focus groups who are only consulted for deciding attributes, we wanted to also engage our participants from the start in determining which valuation method we'd be using. For this, we drew on the ideas of public engagement with science, citizen/participatory science, and engaged research as a process (Irwin 1995; Grand 2015; Medvecky and Macknight 2017). This allowed our participants an opportunity to think about what could be counted as valuable and how we, as a group, might go about counting it. Following an open discussion, the participants came to a consensus for a DCE approach covering seven attributes (our preliminary review of the grey literature had identified most, but not all of these). Between the first and second workshop, we (the researchers) designed a draft survey based on the outcomes of the first workshop using a well-established DCE software, 1000minds. The 1000minds software is a choice modelling software that automatically creates question sets based on a preselected attribute (see Figure 1).

Question # 13

Which of these two options would you prefer?
(all else being equal)

Weed Management
Eradicate weeds from the Peninsula (as much as possible)

Costs
\$15 in targeted council rate per year for all Greater Dunedin residents for biodiversity management

this one

OR

Weed Management
No active management of weeds

Costs
No additional cost for managing the biodiversity of the Peninsula

this one

they are equal

< undo last decision

skip this question for now >

92% complete

Larger font for questions (easier to read)

Figure 1: Example of 'decision' question generated by 1000minds software. This is an image from the actual survey that participants saw and responded to. Source: Authors' work.

The participants completed the draft survey at the beginning of the second workshop (as described in the story that opens this paper) and gave feedback on a number of issues, from wording of attributes to the levels and values used. The group settled on seven attributes, each with two to three levels (see Appendix A for full details). Based on this, the

1000minds survey was revised and refined before being sent out across the broader community.

Importantly, the participants' testing of the DCE in the second workshop allowed us to witness the experience of responding to a DCE, a process often done remotely through a web browser. It is these observations that form the basis of this paper, as well as the feedback and comments provided by participants about their experience of filling in the DCE survey.

Our groups' responses – and what they suggest about DCE

The DCE survey garnered a range of responses from our group. What is interesting about these various responses to the DCE survey is what they suggest about the underlying assumptions that drive this valuation technology. DCE has received little sociological analysis, presumably in part because it is considered to measure already known things about economics and about people. Responses from our participants suggest that things are not so straight-forward. (In cases where respondents do not feel challenged by the technology, such as the healthcare, government, business sectors in which DCE has previously been used, the very familiarity and acceptance of this economic model might be cause for concern in itself.)

In the responses of our participants we are able to see the ways DCE technology performs with participants. For them DCEs, if not the whole world of economic valuations, are a new way of thinking about nature. As the DCE performs its logic on them, they react, sometimes to capitulate and sometimes to resist. This shows how the performativity of valuations can be simultaneously held back and pushed forwards in the grounded negotiations of a particular technology: we see how the valuation of nature is shaped in practices of valuing.

Unfamiliarity and frustration – one prevalent opinion is captured by this email from a respondent not present at the workshops:

Dear Lydia,

Although I am an ardent supporter of STOP [Save the Otago Peninsula], the survey I received today is the worst one I have ever seen and I gave up after about 10 mins when only 35% through.

Basically I am all for eradicating pests, increasing biodiversity, getting rid of weeds and having some financial council support.

Sorry!

Sarah

Sarah's reaction is clarified by that of her friend, Lydia, who was a participant:

Obviously Sarah had the same reaction that I did to that survey – extreme frustration!

This reaction seems linked to those of others during the workshops who express their surprise at how unfamiliar this type of survey is:

It's not like any survey I've ever seen before.

Partly this response might stem from the experience of the survey platform itself. This theory is re-enforced when we look at the numbers of respondents from the broader community who stopped filling in the survey before they had even answered the first question (65 per cent stopped before answering even one question while 10 per cent stopped part-way through). We can guess that some people, faced with figuring out the meaning of this unfamiliar type of survey, how to use it and how to answer, simply gave up. For others giving up may signal a rejection of trade-off thinking or a frustration with economic theory. Non-response is an important issue in survey research (Massey and Tourangeau 2013; Peytchev 2013; Burns and Medvecky 2018). In this case we do not have data about why people stopped or didn't start.

But there is more to notice about their unfamiliarity. DCE technology assumes that people are already schooled in 'can't have everything' economics. This imagines people already believing that economic and other management decisions are about trade-offs in an inherently finite world. Scarcity is a foundational premise of economics (Hubbard et al. 2012). This technology assumes the universality of this and simply enables decision makers to know how to prioritise spending, and to decide which problems to leave by the wayside. It does not question the necessity of prioritising some issues and abandoning other issues because this is imagined as already accepted by respondents.

However, the frustration our respondents feel around the activity of making trade-off decisions suggests that this is not part of how they think about management decisions in their own lives or in the running of voluntary environmental management groups. As Sarah says, 'I am all for eradicating pests, increasing biodiversity, getting rid of weeds

and having some financial council support'.⁴ What she does not also say is what she would be willing to give up, what trade-offs she would be willing to make for all these things to happen. How does she rank her preferences? Would she give up weed management for pest control? Her preference patterns do not focus on what she wants less (or most), only what she wants, and perhaps it is being asked to give something up that makes this so hard or so infuriating for people.

Impossibility – a number of respondents grapple with what they see as the impossibility of trade-offs when considered from a practical standpoint. Whereas we have not noticed any (logically) impossible trade-offs in the survey, our participants working as they do on practical management of the OP environment object to what they see as pragmatically impossible trade-offs.

One such impossibility comes in contestation between managing pests and supporting landowners. In practice, we are told by participants heavily involved in the actual trapping of possums, landowners often refuse to have traps laid on their land. Nor will they put down traps themselves. Supporting landowners and eradicating pests, it seems, do not go together in practice.

These contradictions serve to remind us of the already political character of DCE as a valuation device. Together with participants we decided upon categories of 'nature' to focus on: weeds, pests, native and invasive, biodiversity and ecosystems – all are human categorisations of the complex mesh of life. They are not only our terms, but ones performed by the policies of national and local government, and on-the-ground actors. When we include these in a DCE we are asking people to re-perform these categories as 'real'. The trade-offs they favour, as well as what they regard as possible and impossible, are products of the categories presented in the DCE. We write and fill in a DCE as if 'pest control' is possible, but sometimes it is not.

We could argue that the potential for finding impossibilities comes from the strength of DCE valuations. While willingness-to-pay can push us towards existence valuations for nature (we are willing to pay just to know it's there), and revealed preference valuations tend towards valuing what is already being paid for (by tourist dollars, for example), DCE valuations sit somewhere in-between, assuming that

⁴ We follow Sarah's lead in talking about some creatures as 'pests' (especially those that predate on NZ's indigenous birds, such as possums, rats and stoats). This is a term already used in conservation communities, both by experts and by local volunteers. It is a powerful word, making all members of these various species into the same thing: enemies. Its common usage reveals how comfortable we already are in abstracting certain species away from the ecosystems they are entangled with, making some good and some bad. As Fredriksen has argued, conservation biology itself is part of a performance of removing individual organisms from their lifeworlds in complex ecosystems to understand them instead as units in categories of life which can then be compared (Fredriksen 2017).

we are already and always interacting with 'nature' in complex ways. The challenge is not to let nature simply exist or to use it to attract more money, but to manage its usefulness as well as its problems. And this, especially when you ask people who interact with the 'nature' in question on a regular basis, can show up practical contradictions. These contradictions, it might turn out, are not issues with 'nature' itself, but with the categories we use to talk about it – in the DCE and beyond.

Uncertainty about what results 'really' say – a particularly interesting response is a fear of self-revelation. This is expressed twice during workshops, with importantly different nuances. Amber is worried that she is going to find out something about herself from the trade-off choices she enters. 'It feels funny to do,' she says, 'because you feel like it's going to tell you that you think something that you don't know you think.' For her, these revelations will be true, and disturbing because of it. For Janet by contrast, this feeling that one is being assessed by the trade-off choices you make is not so frightening because it won't be saying anything actually true. She compares it to a questionnaire that had been doing the rounds on social media meant to tell you who to vote for given the opinions you enter (the 2017 New Zealand national election was weeks away). She's worried because just as that questionnaire got wrong who she was planning to vote for, so this survey could likewise 'get wrong' what her true preferences were. The difference, of course, is that she retained the autonomy to vote as she wanted to, whereas by filling in a DCE survey her 'un-true' preferences were stabilised as data.

These participant responses led us to question the notion that people are comfortable with the idea that their 'true' preferences are revealed in their choices. This is an assumption that we also see in markets – the invisible hand is exactly the operation of hidden preferences aggregated up and supplied by a responsive producer. However, being confronted with a technology that itself performs people's preferences, sometimes in ways they have not previously been conscious of (and sometimes 'getting it wrong') leads to discomfort. Some might think, 'is that really who I am, a person who values that?' Others might think, 'is that really what I want to say, that this is valuable?'

Equal and neither – a further source of frustration discussed by the group is that while you can pick 'these are equal' many say that this does not express what they really feel – 'I'd prefer neither'. While logically these two are equivalent (neither just means 'the options are equally undesirable'), to respondents there is an important difference. With an 'equal' you tacitly endorse both, with a 'neither' answer you do not. While some surveys do give a 'neither' option, ours does not, and we found that this could not be changed in the software.

The supposed equivalence of ‘these are equal’ and ‘I’d prefer neither’ by software designers suggests a difference in the way economic and other analytic thinking performs preferences from the way more everyday thinking does. In economic thinking, equality can be negative or positive, and it doesn't matter much when ranking whether they are positive or negative because their standing will be worked out as part of the bigger picture. For respondents, however, it matters whether for each particular pair they are committing themselves to a positive or a negative stance because they are thinking about the concrete particulars not the big picture. For some it is frustrating to be given no choice about the way the choice is formatted. People thinking with economic logic are interested in the overall order of preferences produced by the preselected categories of the DCE, others are interested in expressing true feelings about real choices. A DCE hides these attitudes towards categories; order is important not feelings about each item.

Limits to context/detail – there are discussions also about the amount of information given in each choice. The methodology encourages setting each attribute at a few levels (commonly 2 or 3, with fairly brief descriptors such as high, medium and low). Amber tells me that she wants to be given more information about what high and low actually mean – what is high support for landowners as a dollar amount? Brian, sitting next to her, agrees. He wants more of the choices put into context. Not only should ‘high’ and ‘low’ be clarified, but these amounts should be framed in terms of what the Peninsula environment is already like – how much land is privately owned? Which weeds are problematic? Do we mean pest eradication or pest control, because the two are very different in practice?

Fabien and I talk about these issues later. Can we write more at the beginning to provide context? Can we give dollar amounts? The conclusion we come to is no. It is difficult to add a contextualising blurb at the start, and it is likely no one will read it. Adding context to each question makes the whole set-up dauntingly wordy. Being less vague than ‘high’/‘low’, or ‘manage’/‘eradicate’ (if fitting) would face us with the problem of how to work out reasonable amounts for each attribute that we would then have problems justifying.

Revealed by participants’ desire for more context lies a further gap between the thinking of researchers and their public. For researchers, it is normal that a certain amount of abstraction is necessary for data gathering. Too much context becomes messy and difficult to deal with (though a good case can be made for embracing that mess) (Law 2004). To add too much context would be problematic for the clarity of the survey. In this way of viewing the technology, it is not the specifics that matter but the overall picture of preferences. However, for participants the context is all-important – how do you know what you should claim to prefer if you don't have all the details? Here, the

informants' feeling is that the overall picture will be sullied if the details are not complete.

Respondents also react to the feeling that there are limited possibilities for answers. For each trade-off pair, there are only three possible answers – this one, that one, or equal. To some participants this seems too limiting. They would like to be able to give answers that show some more thought and nuance. What Daniel finds he is doing is picking each one that put high priority on pest management (something he is already heavily involved in) regardless of what the other part of the question asks. In other words, he feels driven to trade all other attributes off with little consideration because of his preference for high levels of pest control. Since he is a participant in a research group we are able to find this out – if he were just responding to this as an emailed survey we would not know. He reiterates this in a later email: 'I suspect there was a bias towards what would be good for my organization in the responses provided [by friends and colleagues]' In part, this is the DCE method working as it should because it is telling us that to him nothing matters as much as pests. However, for the other attributes this single-minded preference muddies the waters. We end up not really knowing how he feels about the other attributes, only that they are less important than pests.

Concern for results – politically savvy participants experience further concern in the unfamiliarity and performativity of the technology. Harrison comments that if he had to predict our motivation he would guess that we were pushing for higher support for landowners. This was not, in fact, our intention. Richard comments that he would like to see the results so that he 'could see what it's for.' Both these comments express a frustration at feeling that they do not really understand the role of the valuation technology in the context of environmental decision making. This matters when working out how to strategically fill in a valuation survey, depending on whether the aim is to inform government funding allocation or to help shape the strategic focus of a community group. This shows people are aware of themselves not just stating their values, but thinking about what they want a completed survey to tell others (council, funding bodies, researchers).

This reminds us that at least some participants are engaged in valuation as a political exercise, knowing that valuation technologies are not neutral tools, but unsure of how to best use them to send the message they want to send. This complex engagement is what we want to think about next.

Power – of valuation devices, methodologies and participants

In the previous section we explored some aspects of participants' actual experiences with DCE technology and suggested what these experiences tell us about the underlying assumptions of DCE. These ranged from expectations about the fundamentals of economics (we can't have everything); nature (some things are impossible in practice); markets (you might not know your own preferences but the market does); the reductionist tendency towards abstraction in research (not every detail can be included); and participants actively concerned with the messages they send (you need to understand the technology to make it come out as you want). Clearly DCE processes are not smooth, not neutral, but pulled by economic theory and practice, and by social, material and political flows.

In this section we want to link these concerns with wider questions of power. By this we mean the power of valuation devices to shape preferences and, in turn, 'nature.' We also mean the power of researchers to introduce valuation devices to publics, and the power the public have to react.

What troubles us is that the DCE carries with it a power that emanates from its source – the worlds of economics and universities. The DCE, and we, are attributed power by association with these institutional and discursive realms. When we carry that power into a social and research context, we researchers must accept that we have a responsibility for how our DCE shapes preference patterns and for what reports on these preferences might do in the world.

We acknowledge that part of our responsibility is to notice that methodology and power are intimately connected as they are performed. As Rodríguez-Labajos and Martínez-Alier put it: 'monetary valuation ... may be recognized as one legitimate perspective among several that reflects real power structures. But it is not the only legitimate perspective. Who then has the power to simplify complexity, imposing a particular standard and procedure of valuation?' (Rodríguez-Labajos and Martínez-Alier 2013: 340–341). Understanding that we had this power, we strove to use it responsibly. For us this meant taking two paths to reach our overall goal – to 'empower' citizens while making a valuation for the OP. This meant that we had two methodologies working in concert (and sometimes in tension): one aiming to find a preformed, technologically mediated valuation (as an economist might, and as is suitable for presentation to funding bodies) and the other aiming to engage with active participants and giving them new skills in the process of valorising and evaluating the OP (a goal more commonly aligned with anthropology, sociology or science and technology studies (STS) than economics). In this way we attempted to give participants a tool that would be useful for their future conservation work – a monetary valuation – while also giving

us and their skills to think about how valuations might be differently achieved.

In a more classic economic evaluation study it would be easy to group actors into two groups. On the one hand, you would have technology and researchers (this is our technology, our project: participants are one of our resources when they act as a focus group in first-round testing). And on the other you would have participants and nature (they live with nature, already value it and speak for it). This would obviously give much strength to researchers and technology, seemingly giving them the power to bring to light the latent preference structures of their nature-representing participants.

Researchers are paid to direct their time and energy this way; our participants are not (unless you count cups of tea, chocolate biscuits and enhanced skills in economics). In very practical terms, researchers and public are unequal in this sphere, and it would be an insult to those who give up valuable time and energy to claim otherwise. We want to empower citizens, but who says they want – or should want – to be empowered in this way?

'Empowerment' is a familiar trope, and usually signals good intentions: it is all too easy to say that we strove to 'empower' citizens with an enhanced knowledge of economic theory and economic valuation strategies. We have used this language in the paper, with scare quotes to show we are aware of its complexity. Because this language carries power relations within it, it implicitly puts researchers at the top, holders of valuable knowledge they can give to others. 'Nature', meanwhile, ends up at the bottom, an object just waiting for the tools of researchers, ready to be cut up into abstract categories.

But what if – as we notice when we look at the performances of DCE – citizens don't want the knowledge we claim to give? What if they resist the economic logic that is pulling in their much-loved OP? Or what if they don't much like it, but decide to play the game of economic valuation for the good of the volunteer organisations they work with?

This explains some of the quiet power negotiations that we see here. Sarah refuses to continue after she's done 35 per cent of the survey. Harrison tries to understand the consequences of each trade-off decision for the end results. Daniel notices that he trades everything off against pest control, a bias that is good for his volunteer pest control group.

Technology and power are intimately connected too, and it was also important for us to notice the power that our technology exerted upon participants. DCE exerts itself on participants by forcing them to choose one pre-framed good over another. It then tells them what their values are, making them into a person, say, who values native ecosystems over control of invasive species (Medvecky and Macknight 2018). Like a shopping trolley, the resulting preference graph holds up

a mirror to participants in which they may not recognise themselves. People are being pushed by a technology towards new ways of seeing themselves and their preferences that may fold into their future decision making (or just make them feel very uncomfortable with trade-off decisions). More, as they focus their eyes, hunch their shoulders and discipline their hands upon the devices supporting this technology, they are becoming interpellated into a regime of natural capital. They are called, by the technology itself, into the logic embedded within it, just as the man called by the policeman becomes embedded in the apparatus of the State (Law 2000, from Althusser). The technology forces them to accept the premises of the DCE and its trade-off logic (or at least pretend to) while they complete the survey.

Finally, the DCE exerts power on 'nature', by pulling it into a way of thinking that emphasises the finitism of our capacity to act, the time we have to act in, and the limits to money we have to help us. While we all know that time, energy and money are finite resources, DCE logic is based upon exactly this problem, asking people to 'trade-off' one good thing for another good thing. It embeds the trade-off choices that are supposedly possible, and which are not. The insight that life and resources are finite is a central tenet of economics, one of those that make it inherently dismal. However, it is not usually called upon so explicitly when people are considering whwhat, in their natural environment, they value. In this way, the OP, its attributes and the work they call for, are brought into this dismal but pragmatic and performative logic of economics. 'Pests', possums in particular, are performed as a greater scourge than weeds, and pest control work performed as more valuable than weed control work. We have the advantage of puzzled members of the public reacting in front of us and this serves to remind us that it is not 'natural' for people to believe that nature is fundamentally economic.

Luckily, though, people are not passive in the face of a valuation device like DCE but able to receive it in a range of ways. Some are pragmatic – willing to use the resulting DCE valuation if it seems useful to their conservation group. Others are cautious and questioning – they want more context (though the platform doesn't welcome it). Still others are resistant – 'I gave up after about 10 minutes.' It is an open question whether and how much the economic logic of the DCE valuation device embeds itself into their thinking when they are without its technological holder, the survey on the iPad.

Conclusion

At the start of this project we had the well-meaning belief that it is important for the public to engage with economic ideas, including about valuation, in order that they might choose whether to accept, debate or resist the encroachment of economics into yet more realms. By workshopping research design with participants, we hoped to bring

them closer not only to researchers but also to economic ideas and technologies. At the same time, we hoped to bring the nature they experience into the research. We wanted to give back to participants with a report written for volunteer environmental groups that showed how much the community values the OP.

Soon, we realised that these were more complex goals than we had anticipated. We learned to think about valuing as a verb as well as a noun. We learned to study this process with more thought to see what participants' responses could teach us about the assumptions of DCE as a valuation device. And we learned to think about the complex power relations that were embedded in the process between researchers and participants, participants and the DCE, and valuation devices and nature.

There were some ways in which our outcomes were simple: we produced a clean and competent report giving numerical values for various biodiversity management strategies. We gave this report to the local council and to volunteer groups working on the peninsula. Fabien presented this report to the Otago Peninsula Community Board, an arm of the Dunedin City Council, on 19 March 2019. The chairperson emailed, 'My thanks for coming to the Board meeting. I personally found your report very interesting and it will prove very helpful in the future' (pers. comm.). This was our valuation – as a noun – working in the community.

It is when we think about valuing as a verb that we begin to wonder about the meaning of the numbers we produced. If we watch and listen to participants while they fill in the DCE survey we are able to see them surprised, discomforted, frustrated, careful and wondering. These emotions were triggered by the ways the DCE technology exerted itself upon them, insisting that they perform their valuing of the OP biodiversity efforts in certain ways.

We have argued that their responses highlight the assumptions hiding within the DCE device: the necessity of making trade-offs; the actions that are possible; the 'reality' of one's preference structures; the need for abstraction; and the importance of big picture patterns. These are assumptions that drive economic thinking and much academic thinking too. Like shopping trolleys, lean whiteboards, and compensation calculations for oil spills, a DCE survey is a valuation device that exerts its logic on human users.

But like trolleys, whiteboards, and calculations, exactly how they are used by participants matters too. We argued that our participants were savvy in rejecting the assumptions of the DCE or in using the survey to further their own agendas: Daniel valued pest control above all, while Sarah gave up with only a third completed. Not only do these revelations impact how we should read valuation numbers, they also should remind us how complicated it can be to work out who can and should speak for nature.

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Appendix A

| Attribute | Levels |
|----------------------------------|---|
| Pest management | No active management of pest |
| | Manage pests that affect biodiversity to maintain current levels |
| | Eradicate pests from the Peninsula (as much as possible) |
| Weed management | No active management of weeds |
| | Manage weeds that affect biodiversity to maintain current levels |
| | Eradicate weeds from the Peninsula (as much as possible) |
| Support for private landowners | No special financial support for private landowners to help manage biodiversity |
| | Offer private landowners financial support and incentives to help manage biodiversity on their property |
| Native ecosystem | No special attention given to native ecosystems in biodiversity management |
| | Manage to maintain current levels of native ecosystems on the Peninsula |
| | Focus biodiversity management efforts to increase native ecosystems on the Peninsula |
| Focus of biodiversity management | Efforts for biodiversity management focused on tourism-related biodiversity only |
| | A focus on all the biodiversity of the Peninsula |
| Marine reserve | No marine reserve on the Otago Peninsula |
| | A marine reserve along southern coast of the Peninsula |

| | |
|-------|---|
| Costs | An additional council rate for all Greater Dunedin residents of NZ\$35 per year for biodiversity management |
| | NZ\$15 in targeted council rate per year for all Greater Dunedin residents for biodiversity management |
| | No additional cost for managing the biodiversity of the Peninsula |

Valuation Constellations

Désirée Waibel, Thorsten Peetz, and Frank Meier

Abstract

The focus on situated practices in current valuation studies becomes an obstacle when situations are too narrowly defined, when moments of valuation are treated as isolated events and especially when the interconnectedness of moments across situations and social fields is neglected. In order to overcome these limitations, we propose the concept of *valuation constellations* (Meier et al. 2016). Based on the literature on valuation the concept distinguishes *positions* and their *relations, rules, and infrastructures*. We present these three components of constellations and demonstrate the potential of the concept regarding three analytical puzzles of valuation analysis: historical change of valuation processes, the definition and solution of valuation problems, and the legitimacy of valuations. Each of the puzzles is illustrated with an empirical case, i.e. dating platforms and apps, higher education, and amateur reviewing. Going beyond situationalism, the valuation constellations perspective is key to understanding interconnected valuation processes.

Keywords: sociology of valuation; valuation constellations; linked valuations; positions; rules; infrastructures

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Introduction

Current research in valuation studies focuses on situated practices. While there are good reasons for this orientation it may also become an obstacle, especially when “moments of valuation” (Berthoin Antal et al. 2015) are treated in isolation, and when researchers neglect the interconnectedness of moments across situations and social fields. Thus, we propose the concept of valuation constellations (Meier et al. 2016) as a general tool for analyzing valuation phenomena. Our concept of valuation constellations highlights the role of positions and relations, rules, and infrastructures, and allows for analyzing interconnected valuations. The concept provides a novel perspective for both systematic and dynamic accounts of valuation processes.

Valuation studies is mainly driven by substantive empirical research. While most studies concentrate on specific social spheres, such as the economy or science, researchers have analyzed valuation processes across a wide spectrum of fields and social forms, e.g., in face-to-face interactions, in heterarchical organizations or in large-scale technological infrastructures (for an overview, see Lamont 2012). This research conceptualizes valuation predominantly as a *practice* where worth is attributed to persons, goods, and performances (e.g., Heuts and Mol 2013; Kalthoff 2013; Hennion 2015; Hirschauer 2015). Indeed, opening the black box of empirical valuation practices is the main task of this fast-growing academic field.

The focus on practice also results from theoretical assumptions. Valuation studies mostly takes a “situational” stance (Stark 2009: 32; Diaz-Bone 2015: 327 ff.; Hutter and Stark 2015: 3f.) which is anchored in pragmatist social theory. Focusing on situated practices allowed authors like John Dewey (1916, 1939) or Luc Boltanski and Laurent Thévenot (2006) to attack the predominant concepts of value judgments of their times. Dewey, for instance, confronted notions of *value* as either an ejaculatory expression or as an intrinsic quality of an object with the concept of *valuation* as a reflexive practice (1916: 225 ff., 1939). Boltanski and Thévenot (2000: 209; see also Hennion 2004) attacked Bourdieu’s (1984) notion of value judgments as determined by incorporated power relations with the concept of actors’ critical capacities. For both approaches, focusing on concrete “situations” is the solution to the theoretical problems at hand (Dewey 1939: 57; Boltanski 2011: 20 ff.).

Yet in valuation studies the concept of the situation has remained vague. This is not surprising given classical definitions of the “social situation.” In pragmatism, symbolic interactionism, and dramaturgical sociology, the concept of the “social situation” has a distinct empirical referent, namely interactions (Goffman 1959; Blumer 1966). Understood as interaction, the situation presents “a reality *sui generis*” (Goffman 1964: 134, emphasis in the original) defined by the co-presence of actors. Even though this is a precise definition, it is

methodologically problematic since scholars struggle to define the boundaries of the situation as the object of their observation. As Karin Knorr-Cetina (1981: 11) argues, “social situations may not have a natural beginning and an end, thus forcing the researcher to choose an arbitrary cutting point.”¹ Situations are also not independent from the participating actors involved in the “definition of the situation,” thereby making some aspects of the situation’s context relevant while neglecting others (McHugh 1968; Egloff 2015). In valuation studies, most authors refrain from specifying the boundaries of situations (e.g., Diaz-Bone 2015: 328; Hutter and Stark 2015: 4). Instead, they use the concept as an umbrella term that assembles heterogeneous studies on various practices (e.g., Berthoin Antal et al. 2015).

We concur with the basic theoretical concerns of situationalism and agree that valuation always takes place operatively – and is thus temporally and spatially situated. We also agree with the assumption that any valuation process is shaped by socially generated and negotiated definitions of the situation. However, in our approach, we highlight the risks of situationalism. We emphasize that valuations may be shaped by factors that are external to the observed situations. While such external factors are often implied in the analysis or addressed in the form of ad hoc explanations, they are often not theorized. This prevents the discovery of more general patterns of valuation processes as well as systematic comparisons between different valuation practices. Furthermore, without an analytical lens that sensitizes researchers to search for these factors, they may be overlooked, especially when they are taken for granted by the participants but also by the scientific observers. Finally, it is becoming increasingly apparent that valuation situations are linked in various ways. Recently, scholars highlighted the phenomena of linked valuations and developed novel notions such as “übercapital” (Fourcade and Healy 2017), “foldings” (Helgesson 2016), or “off-label use” (Rona-Tas 2017). In this article, we present analytical tools that enable scholars to study such links in a systematic fashion.

In developing the concept of valuation constellations, we begin from the triad of valuator, valuee, and audience. This triad of positions and relations, the first component of our concept, is at the core of every valuation (i.e., every act of attributing worth to an object). It is especially important for recognizing how multiple valuations are interconnected. Yet, in valuation studies, it tends to be implied rather than analyzed.

Building on this discussion we investigate how two additional components – rules and infrastructures – shape, enable, and restrict valuations and their interconnections. The idea that valuation practices

¹ This is especially true for mediated interactions in “synthetic situations” (Knorr Cetina and Brügger 2002; Knorr Cetina 2009).

are shaped by *rules* transcending the immediate situation has already been suggested by some situationalist theorists, particularly by Boltanski and Thévenot (2006). In their theory of orders of worth, Boltanski and Thévenot argue that actors situationally justify and criticize by using a limited number of universally available grammars of worth. Valuations are thus enabled and constrained by certain sets of rules that are valid beyond an immediate situation. Although they deliver a rigorous analysis of conflicts and compromises between orders of worth, they neglect the question of how valuation situations actually relate to each other. As we argue, taking positions and relations into account reveals how rules are embedded in specific social contexts and guide valuations not only in situations, but across social contexts as well.

Our discussion of valuation infrastructures draws on an existing body of work that uses the concept of technological infrastructures (Star and Ruhleder 1996; Star 1999) and applies it to the field of valuation (Kornberger et al. 2017). Since infrastructures provide the material context of valuations, they are apt to facilitate links between them.² Accordingly, valuation studies have focused on the novel capabilities of digital infrastructures to make, store, diffuse, and link valuations. To provide precise accounts of the interconnectedness of valuations, we argue that analyses of valuation infrastructures should be complemented by positions and relations as well as rules of valuations. Thus, the potential of infrastructures to connect valuations is realized in its interplay with manifold identities and rules.

In sum, we propose the concept of valuation constellations that integrates three components: positions and relations, rules, and infrastructures. We will demonstrate how these three components reveal links between moments of valuation. Moreover, we will demonstrate the usefulness of looking at these three components in concert. Because they are intricately linked, taking these components into account is key for understanding valuation and a pre-condition for transcending the limitations of situationalism.

We organize our discussion as follows: The next section introduces the general concept and its components and elaborates on the links between them. We then exemplify its analytical potential for three central problems of valuation studies: historical change of valuation processes, the definition and solution of valuation problems, and the legitimacy of valuations.

² Boltanski and Thévenot account for the materiality of valuations by conceptualizing objects as stabilizers that help to objectify worth within a certain order (2006: 142).

Valuation Constellations

In this section, we expand on the analytical concept of *valuation constellations* (Meier et al. 2016) as a theoretical tool that allows students of valuation to reflect on the interconnectedness of valuation phenomena. Throughout this article, we produce formal representations (Tilly 2004) of valuation constellations.³

A valuation constellation comprises three components that we distinguish analytically: *positions* – i.e., the valuator, the valuee, and the audience –, and their respective *relations*, *rules* of valuation, and *infrastructures* of valuation. The following discussion draws heavily on the valuation studies literature, where the three components are either explicitly discussed or at least implied. However, the first component, positions and relations, is more often assumed than systematically analyzed. For us, in contrast, it is the crucial starting point for every investigation into the worlds of valuation.

Positions and Relations

Any process or practice of valuation requires someone (or something) to articulate a valuation judgment as well as an object to which this judgment refers. Put formally, valuation establishes a relationship between two social positions – the *valuator* and the *valuee*. Positions, however, do not formulate judgments, social “identities” (Luhmann 1995; White 2008) do.⁴ Identities emerge from social relations (Abbott 1995; Ikegami 2000; Latour 2005). They are not bound to specific positions but may abandon and switch positions. The interplay between positions and relations on the one hand, and the movements and operations of identities on the other hand, constitutes the dynamics of any valuation process.

Most contributions to valuations studies are based on dyadic concepts of valuation. However, empirical evidence shows that the structure of valuation constellations tends to be more complex. In their study of media rankings of law schools, for example, Wendy Nelson Espeland and Michael Sauder (2007, 2016) demonstrate how media rankings reshaped the cultural understanding as well as the social structure of legal education in the United States – despite significant doubts regarding the appropriateness and accuracy of such assessments. The study reveals how, formally put, an object of valuation, or valuee (i.e., law schools), is forced to react to an external valuator (i.e., media ranking) to which it formerly had no important

³ Formally representing constellations “oblige[s] to spell out the argument, to check its logical implications, and to examine whether the evidence conforms to the argument.” It thus “promotes both visual acuity and intellectual responsibility.” (Tilly 2004: 597).

⁴ We are deliberately unspecific about what kinds of identities are amenable to occupying those positions, as this depends on the theoretical framing of the analysis.

relation.⁵ Law schools only started to take media rankings into account once they were taken seriously by relevant *audiences*, such as the board of trustees, students, or alumni (Espeland and Sauder 2016: 109). This example illustrates the significance of a third social position within valuation constellations: the audience that observes the value judgment and might base further actions and decisions on it (Sauder and Lancaster 2006).⁶ While valuation studies tends to focus on the dyadic relation between valuator and valuee, it is often the audience that stabilizes valuations as it forces the valuee to not only recognize the valuator's public judgment but to adapt to it.

Due to the importance of audiences, we conceptualize valuations as *triads*. As depicted in Figure 1, valuation constellations comprise three positions: the *valuee*, the *valuator*, and the *audience*. The relational structure between these positions is characterized by *valuation* (between valuator and valuee) and by *observation* (between audience and valuation judgment). Conceptualizing valuations this way also encourages the search for further relations relevant to the valuation which can only be established with regard to the specific identities populating the positions. For instance, some valued identities can observe their valutors (e.g., in interactions), while others cannot (e.g., on platforms); some identities' relations are further qualified by intimacy, others by dependence. The constellations perspective asks whether these relations between identities are relevant for the valuation processes at hand or for their social consequences. In the case of law school rankings mentioned above, for example, it is key to recognize the dependence of the schools on (some of) the audiences in order to understand the dynamics of reactivity.

⁵ The authors identify three different reactive responses to the media ranking: redistributing university resources (Espeland and Sauder 2007: 25 f.), redefining the staff's task profile (ibid.: 27 f.), and manipulating the rankings by virtue of gaming strategies, which engenders mistrust within the organizational field (ibid.: 29 ff.).

⁶ Note that in the literature on valuation, the label of "third party" is often reserved for the valuator, which functions as an intermediary between valuee and audience (Sauder 2006; Karpik 2010).

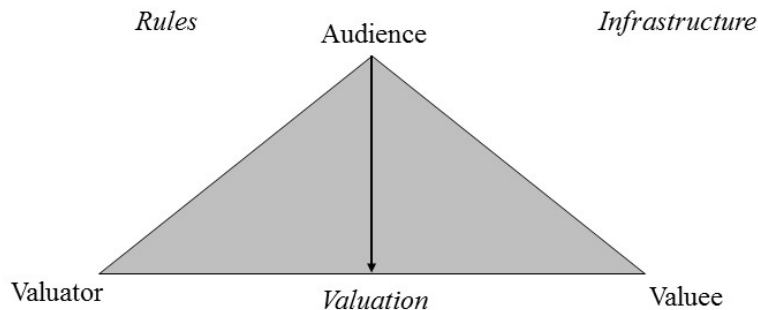


Figure 1 The valuation constellation

Source: Authors' depiction.

Formally mapping valuation triads is a helpful analytical exercise to account for the relevant identities of valuation processes as well as to disentangle the often-neglected relations between them, particularly when some of the relevant identities are barely observable in the situation. Moreover, mapping positions and relations is especially important for understanding more complex and interlinked valuation processes. In doing so, two features of valuation constellations come to the fore: positions may be populated by a *plurality* of identities and identities may occupy *multiple* positions within valuation constellations. Let us briefly discuss these two aspects.

First, mapping valuation triads sensitizes researchers to the fact that positions are often – but not always – populated by a *plurality* of identities. In the example of Espeland and Sauder's study, the ranking did not emerge as a valuator in a vacuum, but in a space already populated by various valutors.⁷ The ranking values its objects not in isolation but in comparison to other valuees – as is quite common in valuation practices (Espeland and Stevens 1998; Heintz 2010). Furthermore, the rankings are visible to multiple audiences, some of whom deem the judgment a “bunch of hooey” (Espeland and Sauder 2007: 13), while others based consequential decisions on it.

While situationalist accounts of valuation processes usually acknowledge the fact of plurality and reconstruct differences between both valuation practices of multiple valutors they often stop their investigation at that point. In contrast, the constellations perspective follows two methodological principles. First, that of actively searching

⁷ Espeland and Sauder (2016: 49, 108) report on professionals as well as on relatives and peers as valutors.

for valuers, valuees, and audiences – even if they are not apparent in a given valuation situation. And second, that of looking for potential effects of plurality for both valuation practices and their consequences. For example, the constellations perspective sensitizes for the processes of competition between multiple valuers, for the different dynamics that emerge in a valuation monopoly, and for the struggles of valuers trying to meet the inconsistent expectations of multiple audiences. Overall, reconstructing the plurality of identities and their respective relations in valuations not only sharpens the view on identities – in particular on those that are overlooked, ignored, or supplanted – but it also directs attention to the dynamics that result from plurality.

Second, mapping the positions and relations of valuation triads sensitizes researchers to *multipositionality*, or the possibility that identities occupy multiple positions and maintain multiple relations within and across valuation triads.⁸ Whether multipositionality is institutionalized or not may be regarded as a distinctive characteristic of valuation processes in different social fields. In fields such as science, multipositionality is a legitimate feature of its daily business as a person regularly switches from being the audience (as a reader) to being the valuer (as a reviewer) to being the valuee (as an author). In other fields, such as law, these positions are organized in a strictly exclusive manner, and it would be illegitimate for a valuer to simultaneously occupy a valuee position, or vice-versa.⁹

The constellations perspective sensitizes researchers to look for how multipositional identities link distinct valuations. A good example of this is what we call the *valuated valuer*, where the valuation practices of a valuer are affected by the same identity's position as a valuee in another triad.

Consider the case of valuation in science. Here, as Claes-Fredrik Helgesson (2016) points out, *valuated valuer*-effects can emerge even in blind review processes: identities of reviewers or editors are “torn” as they squint at their own h-index, or the impact factor of their own journal, while evaluating a manuscript (see also Davis 2017). As Figure 2 shows, two valuations are linked by virtue of the multipositionality of an identity, whose practice as a valuer in one triad is shaped by the awareness of their position as a valuee in another. The anticipation of such interconnected valuations generates links to further valuations (in this case, by authors who are tempted to consider references in their manuscripts with certain editors or potential reviewers in mind).

⁸ For a comprehensive account on the problem of multipositionality, see Boltanski (1973, 2014: 251 ff.).

⁹ Multipositionality has been deemed a distinct characteristic of valuation modes of different fields. For example, see Chong (2015), who distinguishes fixed- and switch-role structures in this regard, following Patrik Aspers (2008).

In this way, multipositionality results in dynamics that reshuffles valuation practices in consequential ways.¹⁰

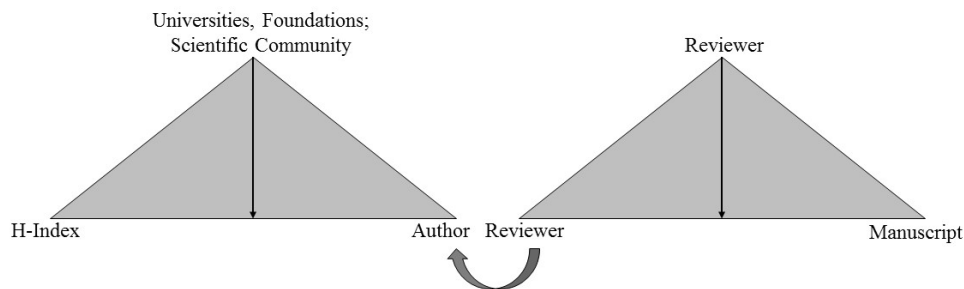


Figure 2 The valued valuator

Source: Authors' depiction based on Helgesson (2016).

As this example shows, mapping positions and relations is helpful for studying complex, interrelated valuation processes whose links are often invisible in the immediate valuation situation. To understand the dynamics of any valuation process one must take multiple adjacent triads into account and look at how their links shape the valuation process as a whole.

Rules

Reflections on the rules that give orientation to valuation practices are an integral part of the research program of valuation studies (Dewey 1939: 20 ff.; Boltanski and Thévenot 2006; Lamont 2012). Existing research not only reconstructs these rules, but also investigates patterns and consequences of – situational – conflicts between rule sets. Rules, here broadly defined as expectations directed towards identities by themselves and by others,¹¹ can be either formulated explicitly, like formal rules used in organizational life (Weber 1972), or implicitly as guiding practices within a given social context (Wittgenstein 2003). We distinguish three types of valuation rules. *Procedural rules* formulate expectations regarding the behavior of

¹⁰ For example, Espeland and Sauder (2016: 60 ff.) report that American law schools' use of their multipositionality (as valuees of the ranking, and valuers of prospective students) has substantially changed the way students are assessed by, and ultimately admitted to, their colleges.

¹¹ This general definition of rules is translatable to concepts like "conventions" (Storper and Salais 1997: 15 ff.), "forms" (Thévenot 1984), and "institutions" (Meyer et al. 1987).

identities within constellations by specifying how the attribution of worth to identities should take place. *Ontological rules* define the nature of identities and relations and provide broad accounts of worth; they express the practical ontologies (Meyer et al. 1987) that are used within the constellation. Finally, *rules of inclusion and exclusion* specify which identities are legitimate incumbents on positions within the constellation. As these are analytical distinctions, these types of rules may overlap in any given empirical rule or rule document.¹²

Procedural rules enable and constrain valuations; they prescribe the conditions for engaging in valuation, define valuation criteria, formulate the proper steps for it to proceed, and specify how judgments are communicated. Some procedural rules are formalized in concrete and explicit valuation programs. A good example of this is the beatification and canonization process of the Roman Catholic Church. In determining whether a deceased believer is worthy of canonization, the organization relies on programs guiding every step of the way – which is one reason why this process often takes decades (Veraja 1992; Woodward 1996). Valuation procedures are also shaped by unwritten “customary rules” that ensure valuations proceed smoothly (Lamont 2009; Lamont and Huutoniemi 2011). Informal rules are especially salient in interactional valuation settings. For example, Désirée Wilke (2016) has shown in her analysis of a string quartet’s practicing sessions that members avoid articulating explicit negative evaluations and formulate their judgments in a tactful way that leaves the door open for later revisions.¹³

The study of valuation rules is also concerned with ontological questions. Ontologies provide general cognitive frameworks about the nature of identities and the realization of (their) worth (Meyer et al. 1987). Boltanski and Thévenot (2006) provide the most prominent discussion of ontologies within valuation studies, arguing that critique and justification are processed by virtue of a plurality of orders of worth. In light of each order, persons and objects take different shapes, and are put to test according to distinct principles of justice and accounts of *grandeur*. Orders of worth indicate what a given situation is about; providing classification systems for categorizing identities and specifying the signs that represent value. In this perspective, valuation situations are ontologically indeterminate as well as subject to ontological pluralism. Other authors argue that ontological pluralism derives from the different social contexts, practices, and technological infrastructures they are associated with (Bourdieu 1984; Knorr-Cetina

¹² We do not claim this list to be exhaustive. Nevertheless, we argue that rules for procedures, ontologies, and inclusion cover some of the most important aspects of valuation rules.

¹³ In contrast, various formats of “valutainment” (Muniesa and Helgesson 2013) derive their allure precisely from breaching common rules of tactfulness.

1999; Fourcade 2011; MacKenzie 2011). While the theory of universal grammars of valuation has proven fruitful, it is this latter position that is even more important for a constellations perspective: As we will discuss below (see section *Signaling*), valuation problems not only arise in indeterminate situations, but may also result from valuation constellations crossing the boundaries of different social contexts.

Finally, rules of inclusion and exclusion regulate which identities can, should, or must be in- or excluded as valuers, valuees, or audiences. Who or what is allowed to value? Which persons or objects are legitimate valuees? Which audiences are entitled to observe, and who gets chided when caught sneaking a peak?

In modern societies experts and professionals are privileged *valuators*. Their legitimacy derives from claims of disinterestedness and otherhood (Meyer and Jepperson 2000). It is thus not surprising that valuation studies has a specific interest in professional valuation constellations, for example in science, education, or medicine (Lamont 2009; Kalthoff 2013; Dussauge et al. 2015). However, the time when a professional judgment was contested only by another expert (Fuller 1994) is long gone (Porter 1995). Organizations, amateurs, or intelligent artefacts may gain access to valuator positions that were once reserved for professionals. This process creates a unique opportunity to study the negotiation of rules of in- and exclusion in expert valuation constellations (Eyal 2013, 2019).

But access not only to valuator positions is constrained. The position of *valuees*, too, is subject to rules of in- and exclusion. Who or what can be subject to valuation is often contested, especially in the case of individuals. For instance, Viviana Zelizer's (1978, 1981) historical study of life insurance reported the moral resistance against what was perceived as an economic valuation of human life, particularly in the case of children. A contemporary example is the backlash against 'Peeples', an app that allowed users to publicly judge the 'character' of a person, which forced the app's inventors to adapt the rules of inclusion (Dewey 2015). The legitimacy of judging the ascribed or achieved attributes of persons varies significantly in different substantive, as well as historical, contexts.

Who or what can be included as a valuation's *audience* is regulated as well. Some rules advise valuers to systematically hide their valuations from interested audiences. In the case of gossip, for instance, not only are the valuees systematically excluded from listening in, but so are audiences that might potentially convey the secret valuations (Bergmann 1993). In general, however, modern societies foster an imperative of transparency (Davis 2016: 77 ff.) which results in a trend toward increasing visibility of valuations and thus of an expansion of audiences.

The purpose of the suggested typology of rules is two-fold. First, it is simply a reminder of the scope and diversity of the rules that are

guiding valuation and a tool for analyzing them. While investigating procedural and ontological rules is of primary concern to valuation studies, rules of inclusion and exclusion do not have the same prominence. Second, it highlights that rules are linked to positions and relations. This is perhaps most obvious in the case of rules of inclusion and exclusion.

Additionally, we want to point to the value of drawing on the two components in concert for analyzing valuations that transgress situations. A common example of this phenomenon is that of *travelling judgments*, which occur when value judgments that were produced in one social field are taken up by an audience for their own valuation purposes in another social field. The most prominent case of travelling judgments are consumer credit scores. By their sheer visibility and accessibility, these value judgments not only influence one's worthiness as a retail lender but as a potential worker, tenant, or even lover (Figure 3) (Fourcade and Healy 2013, 2017; Rona-Tas 2017).

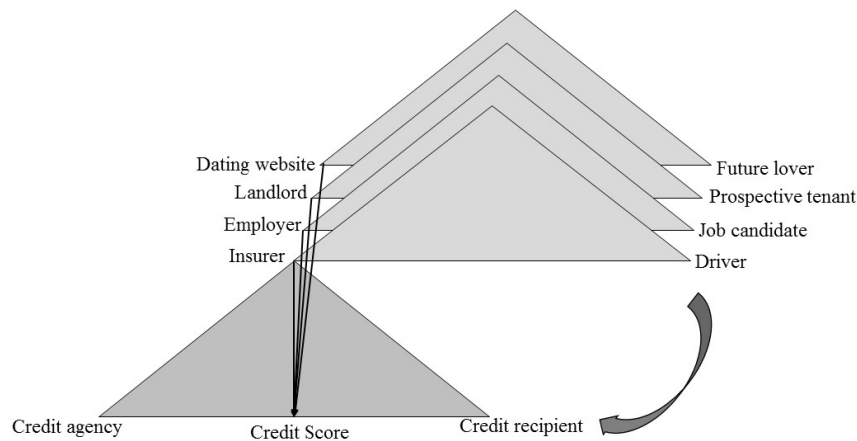


Figure 3 Travelling judgments

Source: Authors' depiction based on Fourcade and Healy (2013, 2017); Rona-Tas (2017).

Instead of taking for granted that processes of quantification result in converging valuations (Mau 2019), one should look more closely at how travelling judgments are actually linked together in different contexts (Waibel 2019). Because these contexts are populated with identities that foster their own “evaluation cultures” (MacKenzie 2011), travelling judgments are not self-evident, but instead bring about further valuation problems. For example, they require translation of the rules from their originating context as well as adaption of the rules in the receiving context. Indeed, when valuations travel, they not only evoke new procedural rules depending on the

receiving context (Christin 2018), they are also infused with new ontological understandings (Kiviat 2017). Travelling judgments may even be rejected wholeheartedly on the basis that the rules of the originating context are not intelligible or acceptable to the identities in the new context (Christin 2017).

Procedural rules, ontologies, and rules of inclusion and exclusion are normally studied in isolated situations, where the identities involved tend to take them for granted (e.g., Lamont 2009; Rivera 2010). As we have shown with the example of travelling judgments, the constellations perspective helps to account for the importance of rules in interconnected valuations, where they guide translation, adaptation, and rejection of travelling judgments.

Infrastructures

Infrastructures are another important concept for studying processes of valuation (Gerlitz 2016; Kornberger et al. 2017). Following Larkin (2013: 327) we define infrastructures as “built networks that facilitate the flow [and the valuation] of goods, people, or ideas and allow for their exchange over space.” Infrastructures operate “when local practices are afforded by a larger-scale technology, which can then be used in a natural, ready-to-hand fashion” (Star and Ruhleder 1996: 114). *Valuation infrastructures*, by extension, facilitate, transform, stabilize, and distribute valuations. They are the material context of valuation. For valuation studies, the key question regarding infrastructures is how they constrain, enable, and shape valuation processes while they are themselves shaped by social forces.

Valuation infrastructures may look unremarkable or even “boring” (Star 1999: 379). For instance, grading in German schools relies to a high degree on pen-and-paper-based infrastructures. Among other practices of grading, teachers collect written notes about student’s oral performance and transform them into symbols that allow for further calculations and the production of grades (Kalthoff 2016).

Several recent studies have analyzed the consequences of changing communication infrastructures and of the digitalization of valuation. Digitalization results in extended capacities for producing, collecting, memorizing, recollecting, and processing data (Kitchin and Dodge 2011: 7 ff.). Growing computing power and the continuous increase of bandwidth multiply the volume of data that can be used in processes of valuation. In addition, the internet is facilitating decentralized and disembedded valuations that can be used in an increasing number of interconnected calculations. Studies on internet platforms and their algorithms show (Gillespie 2014) that infrastructures participate actively in valuations. Technically, algorithms are rules for information processing. While algorithms in general can be based on different kinds

of infrastructures, contemporary digital infrastructures allow for their automated application and modification. These algorithmic systems (Seaver 2019) provide and shape valuations in many areas of contemporary society. For instance, algorithms influence romantic matchmaking (Roscoe and Chillias 2014), calculate convicts' risk of reoffending (Angwin et al. 2016) or the life expectancies of terminally ill patients (Lobe 2017).

While the ubiquity of infrastructures attests to their importance for valuation analyses in general, from a valuation constellations perspective they are interesting for two more specific reasons. First, infrastructures are closely linked to the other two components of the constellation: identities and relations, and rules. And second, infrastructures enable or restrict linkages between valuations.

For example, infrastructures affect which identities populate the constellation's positions. A widely discussed topic is the emergence of identities that are construed by valuation infrastructures themselves. For instance, algorithmic systems serve not only as valuers, but also as audiences. Additionally, in touristic valuation, as well as literary criticism, the emergence of platforms (Gillespie 2010; Helmond 2015) like "TripAdvisor" or "Amazon.com" has enabled the participation of amateurs. This does not only undermine the jurisdiction of professional critics but also reshuffles traditional notions of excellence (Pinch and Kesler 2011; Orlikowski and Scott 2014; Beuscart et al. 2016). As we will discuss (see section *Legitimacy*), the valuation of these new participants is shaped by the infrastructures they depend upon.

Additionally, valuation infrastructures reflect and materially embody valuation rules. As Susan Leigh Star remarked, infrastructures are shaped by institutions (read: rules) while they are also shaping institutions (Star 1999: 381). For instance, when algorithmic systems arrange the content on platforms, their calculations are shaped by specific views of relevance. In the case of Facebook, visibility is given according to their understanding of what a valuable user *is*: an identity that is prone to actively participate in discussions and interactions. In turn, the "threat of invisibility" is pushing users to alter their view of relevance accordingly, and to undermine the algorithmic system by resisting its (supposed) expectations (Bucher 2012: 1175, 2017).

Finally, as they expand, valuation infrastructures open new possibilities for linking valuations, leading to complex valuation constellations and changing the rules of the game. In contemporary educational systems, for example, digital infrastructures offer new possibilities for collecting, relating, and comparing students' performance data across schools and school districts. This might result not only in 'objectified' expectations regarding *learners'* performance but also towards expectations regarding *teachers'* work. Student data are increasingly connected to teachers' data (Anagnostopoulos et al.

2013), allowing school administrations the capacity to develop indicators and measures for evaluating teachers and their contributions to student success. Confronted with such complex valuations, mapping is essential for tracking the relevant components and checking for links between them.

Linking components

The valuation constellation perspective highlights the interconnectedness of valuations. Using this perspective sensitizes researchers to see the links between valuations by focusing on three features of valuation processes: positions and relations, rules, and infrastructures. We have developed this argument starting from positions and relations. This component of the heuristic allowed us to draw attention to the plurality of identities on the constellation's positions, their movement among those positions, as well as the fact that identities may occupy multiple positions. With the example of valuated valuers, we demonstrated the latter point, i.e., how valuation processes are shaped by the multipositionality of identities across valuations. From this starting point, we introduced two other components of valuation constellations – rules and infrastructures – and pointed out how all three components are interrelated. We conceptualize valuation rules as expectations regarding the valuation procedures, ontologies, and inclusion and exclusion. Using the notion of travelling judgments, we emphasized the role of rules in interconnected valuations. Since rules are embedded in social contexts, they play an important role in how valuations are linked across different social contexts. Finally, with valuation infrastructures, we attended to the materiality of valuations. Infrastructures are entangled with positions and relations as well as valuation rules. Not only do valuation infrastructures afford the participation of identities in novel ways, they are shaped by expectations of worth, while also shaping expectations. While infrastructures are apt to fuel links between valuations, we concluded that considering all three components is vital to analyzing how interconnections of valuations actually play out. To summarize our discussion so far, Table 1 provides an overview of the core components of the concept, their analytical foci, and examples of research questions that result from adopting the valuation constellations perspective.

Table 1. Components of valuation constellations

| Valuation constellations | | | |
|---------------------------------------|---|--|---|
| Components | Positions and relations | Valuation rules | Valuation infrastructures |
| Definition | Positions and relations are the social structure of valuation constellations. The positions of <i>valuator</i> , <i>valuee</i> , and <i>audience</i> are populated by <i>identities</i> . | Rules are expectations that are evoked in valuation processes and are orienting identities in the constellation. | Infrastructures are the material contexts of valuations that facilitate, transform, stabilize, and distribute valuations. |
| Analytical focus | <p><i>Mapping identities and relations:</i> Who or what occupies the constellations' positions? What are the relevant relations between these identities?</p> <p><i>Plural identities:</i> Are there multiple identities on either position?</p> <p><i>Multipositionality:</i> Do identities switch positions, or occupy multiple positions at the same time?</p> | <p><i>Procedural rules:</i> What are the proper steps of the valuation process?</p> <p><i>Ontological rules:</i> What is the "nature" of persons, things, their relations, actions, etc.?</p> <p><i>Rules of inclusion:</i> Which identities are to be included within or excluded from a valuation?</p> | <p><i>Materiality:</i> How do infrastructures facilitate or restrict valuation? How does technological change impact valuation?</p> <p><i>Inscription of rules in infrastructure:</i> Are valuation rules inscribed in infrastructures?</p> <p><i>In- and exclusion via infrastructure:</i> Do infrastructures enable the inclusion of (new) identities in a constellation? Do they contribute to the exclusion of identities? Do they enable the construction of (new) identities?</p> |
| Interconnections of valuations | Does the valuation constellation include multiple triads that are linked via identities and their relations? What are the effects of linked valuations? | What is the role of different valuation rules in valuation constellations? How do rules enable and constrain travelling judgments? How do different evaluative cultures coexist in valuation constellations? | How do infrastructures facilitate or constrain links between valuations? How does the interplay between identities, rules, and infrastructure shape complex valuation constellations? |

Source: Authors' work.

Analyzing valuation from a valuation constellations perspective

To this point, we have laid out the concept of valuation constellations and made some suggestions regarding its potential to develop new perspectives on phenomena of valuation, particularly interconnected valuations. In this section, we turn to demonstrating the analytical payoffs of using the concept. In order to illustrate the wide range of empirical and analytical issues that could profit from adopting a valuation constellations perspective, we use three empirical examples to address three analytical puzzles central to valuation studies, drawing on our empirical research. First, we show that the valuation constellations perspective allows researchers to systematically account for *historical changes in valuation processes* by using the example of the digitalization of intimate valuation. Second, drawing on the case of signaling quality in competitive higher education systems, we show how analyses of the *definition and solution of valuation problems* are enhanced by taking their embeddedness in valuation constellations as the analytical frame of reference. Third and finally, we show how the valuation constellations perspective adds to studies on the *legitimacy of valuations*. Referring to the rise of amateur literary criticism, we propose that thinking about legitimacy should be systematically expanded to account for its role in interconnected valuation processes. In doing so, we address three important research questions of valuation studies: How does valuation change? How are problems of valuation defined and resolved? And what is the role of different views of appropriateness of valuations, i.e., of valuations of valuations?

Change

The concept of valuation constellations offers a simple but effective heuristic to analyze change in valuations by producing formal representations of valuation constellations at specific points in time. These formal representations can be used for diachronic comparisons among constellations, highlighting their similarities as well as their differences at distinct analytical levels. In order to illustrate this potential, we now turn to the case of heterosexual intimate valuation.

Valuation practices in heterosexual matchmaking have undergone significant changes in the last quarter of the twentieth century.¹⁴ Current transformations are in great part caused by infrastructural innovation. Of course, technological infrastructures are not the only possible source of change in valuation constellations. In dating,

¹⁴ We use the case of heterosexual dating as an example for change of valuation constellations knowing that it does not represent the whole universe of dating, especially other forms of desire. For accounts of contemporary transformations of homosexual dating, see, for instance, Race (2015), Licoppe et al. (2016), and Tang (2017).

however, the advent of computers, the internet, and mobile phones have resulted in new opportunities for and practices of valuation. With online dating sites and mobile dating applications, the initial stages of the dating process moved online for a considerable part of the dating population (Rosenfeld and Thomas 2012; Smith and Duggan 2013). Observing this transformation from a valuation constellations perspective, one of the first analytical steps is to map the changes in positions and relations, rules, and infrastructures. While this is not the place to fully elaborate on these changes, we will briefly sketch out their central features.

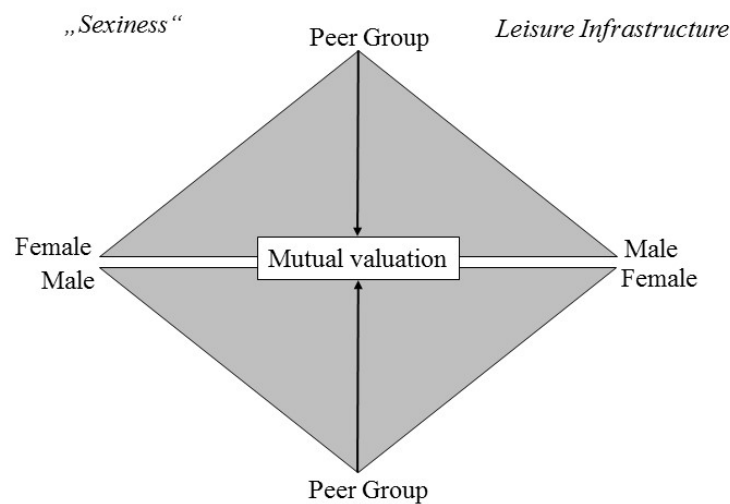


Figure 4 Modern heterosexual intimate valuation
Source: Authors' depiction based on Illouz (2012).

The transformation of intimate valuation due to (mobile) online dating should be analyzed against the background of the typical form of the valuation constellation which developed and flourished in western societies during the last century. Drawing on the work of Eva Illouz (2007, 2012), it is possible to characterize the constellation of *modern heterosexual intimate valuation* (see Figure 4). Within this constellation, male and female identities value each other in contexts that allow the observation of their behavior by members of their peer group (Goode 1959). These forms of valuation are embedded in a leisure infrastructure – the network of bars, dance halls, and cinemas – that yields opportunities for meeting and interacting with new values in the absence of traditional audiences such as close relatives. As Illouz (2012) argues, within this modern environment, psychological and emotional fit as well as norms of attractiveness (“sexiness”) regulate the intimate valuation of others.

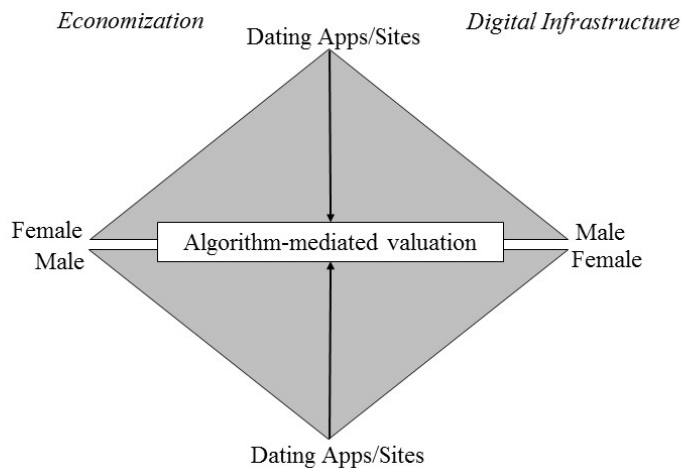


Figure 5 Heterosexual intimate valuation online
Source: Authors' compilation.

Compared to this formalization of modern dating, *contemporary intimate valuation constellations* look quite different (Figure 5) (see Heino et al. 2010; Finkel et al. 2012; Ranzini and Lutz 2017; Peetz 2019). Dating is increasingly removed from peer observation, especially in its initial stages. The selection of a date may now take place without the co-presence of others. Instead, dating platforms are the audiences of their members' valuation judgments. Moreover, based on their observations, they may influence the relation between valuator and valuee. For instance, Tinder – one of the most popular dating platforms – observes its members' mutual valuation, ranks identities based on their valuation by others, and uses this information for organizing the opportunity structures for matches. Research on online dating has also identified a shift in dating rules, especially with respect to ontologies. As some authors argue, identities describe their experiences on dating platforms using economic ontologies (Heino et al. 2010; Kaufmann 2012).

In the case of intimate valuations, the concept of valuation constellations is useful for substantial comparisons of valuation at different points in time. The observed changes suggest that the transformation of technological infrastructures results in shifts regarding the valuation's audience, the relation between valuator and valuee, and the ontology of dating. Based on these insights, it is possible to ask whether these shifts are related. If technological infrastructures and ontologies influence each other as students of performativity propose (Roscoe and Chillas 2014), how did this actually influence valuation practices? And how do platforms as

audiences of intimate valuations turn their observations into valuations of their users? These and other questions may allow researchers to develop more systematic accounts of the transformations of the practices and situations embedded within intimate valuation constellations.

Signaling

The constellations perspective not only allows for mapping changes in valuation processes, it also offers a novel view on problems of valuation and their possible solutions. Both problems and solutions are often shaped by the broader constellation in which valuers, valuees, and audiences are embedded. It is thus essential to analyze them in this broader context. The question of how signals are used in valuation processes illustrates the analytical power of this approach.

Signals become important when valuers cannot observe critical qualities of a valuee directly (Spence 1973; Gambetta 2009). They are a solution for two problems: While valuers use them for dealing with the problem of uncertainty, valuees invest in them in order to give the impression that they possess certain qualities, which they may or may not have. For valuees this is particularly important vis-à-vis relevant others, i.e., identities to which they are in a relation characterized by dependence. The constellations perspective shifts the view from the dyad of valuer and valuees to the larger network of identities. With this shift the chains of linked valuations that connect multiple *valuated valuers* come to the fore.

In competitive higher education systems, for instance, university leaders tend to use criteria in their internal evaluation that can *also* be used for signaling the scientific success of their universities to relevant others – like funding agencies, private donors, government departments of science, or students. Therefore, researchers must signal qualities that their valuated valuer can use for their own signaling of quality. As a consequence, researchers do not need to convince the university leadership that they are great scientists, but rather that they can help to convince relevant others that the university excels at research.

In some countries, university leaders use the judgments of an authoritative evaluation system as signals – like those of the Research Excellence Framework (REF) in the UK (Hamann 2016). In Germany, where no such system exists, research evaluation is focused on peer-review-based third-party funding (Gerhards 2013). In particular, ‘visible’, externally funded large-scale research clusters are used as a criterion for the valuation of research.¹⁵ By putting pressure on scientists to acquire specific types of funding, German university

¹⁵ For the increasing importance of public third-party funding in Germany, see Hüther and Krücken (2018).

leaders – as valued valuers – invest in signals that can be easily observed and assessed by relevant others, such as the departments of science. The departments of science, on their part, are valued valuers as well, preferring criteria that allow them to signal quality to *their* relevant others, like other departments or the electorate. Again, third-party funding and large-scale research clusters are privileged signals as they can be easily communicated to lay audiences (see Figure 6).

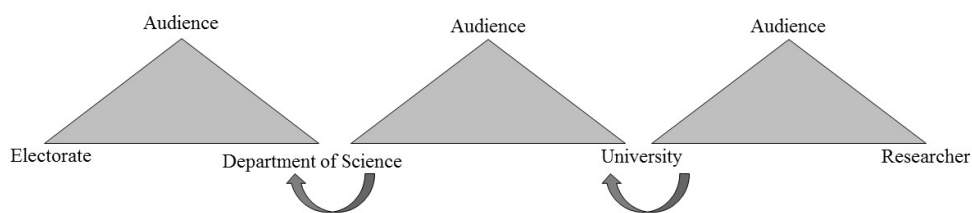


Figure 6 Signaling in competitive higher education
Source: Authors' depiction.

The example of competitive higher education systems illustrates two important points. First, the constellations perspective explains the selective use of valuation criteria. Many observers assume that valuers actually believe in the adequacy of these criteria or that they are guided by the normative rules of their own field.¹⁶ Critical views on higher education tend to dismiss the use, in their view, of inadequate valuation criteria as a result of neo-liberal ideology or cognitive deficits and ignorance in university management and higher education policy. Though we have no reason to rule out the relevance of these factors categorically, these views often neglect the positions of valued valuers in the broader networks. Even if both valuers and valuees are critical of a criterion, they might still find themselves forced to use it in order to signal value to relevant others. What can be used as a signal depends on the positions of these others in broader valuation constellations but also the valuation rules, the criteria of relevance, and the attention focus and observational capacities that guide them.

¹⁶ Of course, these as well as further arguments can support the use of a criterion: In the case of third-party funding, an argument would obviously be the resources that come with it.

Second, the constellations perspective sensitizes researchers to the effects of long and complex signaling chains on valuation practices and offers a conceptual tool for analyzing them. Signaling chains often link heterogeneous identities and are crossing the boundaries of fields and the area of application of valuation rules. This sketch of signaling is only one example of an analytical strategy that looks for valuation problems and solutions in broader constellations rather than in narrowly defined situations. One critical imperative of the constellations perspective is then: Follow the chains!

Legitimacy

In our last example, we are going to use the valuation constellations concept to address the problem of legitimacy in complex valuation processes. A common way to analyze legitimacy in valuation studies is to examine the plethora of (often informal) rules that produce belief in the legitimacy of the valuation process (Lamont 2009: 107 ff.).¹⁷ Unsurprisingly, legitimacy tends to be taken for granted by insiders of particular valuation situations (ibid.: 242). As we have discussed in the examples of travelling judgments, however, interconnected valuations increasingly deal with multiple understandings of appropriateness concerning worth as well as valuation practices. The example of amateur book critics on Amazon.com helps illustrate how the constellations concept accounts for this problem.

In 1999, Amazon invited its customers to publish book reviews online. By essentially lifting the barrier to publication, this move radically changed the rules of inclusion in book reviewing. In the professional world, gatekeepers to publication are book review editors who select the books to be reviewed and then assign them to reviewers (Chong 2020: 20 ff.). Since identities commonly switch positions in book reviewing (reviewers are mostly authors and vice versa), editors are crucial in producing legitimacy in book valuation (Chong 2015). The lack of gatekeeping has been identified as a major flaw in book reviewing on Amazon.com.¹⁸ Indeed, it has resulted in cases of self-praise and favor reviews (Harmon 2004). To ensure the quality of reviews, reviewers on Amazon.com are evaluated by a reviewer

¹⁷ In her programmatic call for a comparative approach to valuation, Lamont (2012) identifies legitimation as one of the sub-processes of valuation. A comparative approach sensitizes for the different and similar ways of how legitimacy is established in different valuations. In this regard Lamont and Huutoniemi (2011) compare review panels in the United States and Finland, and Chong (2013) compares scientific and artistic judgment.

¹⁸ For example, professional book critic Gail Pool (2007: 36 f.) argues that due to the lack of editorial control, reader-reviewers should not be regarded as amateur reviewers, or as legitimate reviewers at all.

ranking that determines their visibility on the platform. Previously, the ranking was primarily calculated from customers' "helpful"-votes on reviews.¹⁹ This created so-called "fan votes," as some members of the audience systematically provided "helpful"-votes to the same reviewers. As Figure 7 shows, fan voting can be understood in two fundamentally different ways.

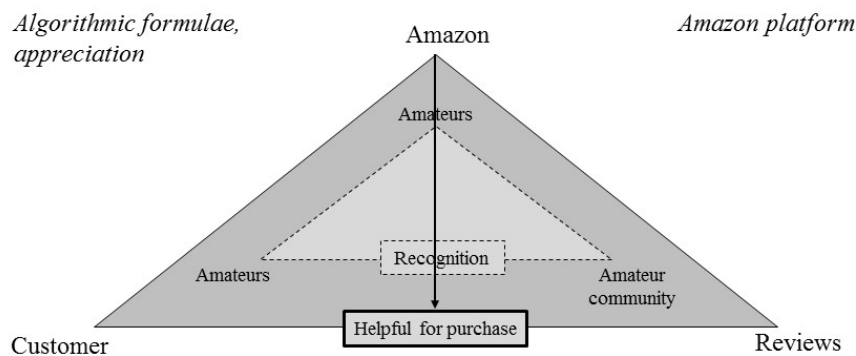


Figure 7 Valuations of reviews on Amazon.com

Source: Authors' depiction.

For Amazon, a "helpfulness"-judgment should indicate that a review is useful "to make informed purchase decisions."²⁰ It should be based on the comparison of the reviews listed below a product. Amateurs, however, especially self-published authors or fans of niche genres, use "helpful"-votes as a gesture of recognition of their shared passion for (otherwise neglected) books and of each other. Accordingly, the two identities hold different viewpoints on the legitimacy of fan voting. For Amazon, fan voting presents vote-stacking as a means to gain visibility, which is deemed illegitimate. For amateurs, fan voting presents a valuation of a specific community of taste, which is deemed legitimate (Pinch 2012).

Ultimately, amateurs use the infrastructure of Amazon to build a community of taste by means of a switch-role structure constellation – as authors, reviewers, and audiences – whose shape is similar to

¹⁹ Note that Amazon has not disclosed its algorithmic formulae. However, when the ranking system changed drastically in 2008, it became clear that while the old system valued quantity and stability, the new system values timeliness and the vote of the crowd (i.e., "helpful" votes) (Pinch and Kesler 2011: 56 ff.).

²⁰ See <https://www.amazon.com/review/top-reviewers>, accessed 15 September 2020.

professional literary criticism.²¹ However, they also depend on Amazon, an identity that has no regard for their own views on book valuation. As the dashed lines of their valuation triad in Figure 7 visualize, amateurs hold on to their own valuation practice and can do little when their “helpful”- votes disappear, causing them to drop in rank (Pinch and Kesler 2011: 61 ff.).²²

As the example of amateur book critics on Amazon.com shows, the valuation constellations perspective helps to track and explain the *multiplicity* of viewpoints on the appropriateness of valuations. Moreover, it highlights different means to assert those viewpoints. In this regard, asymmetries may be especially prevalent in large-scale infrastructures, which tend to decentralize control, but centralize power in the hands of the platform owner (Kornberger et al. 2017). However, the valuation constellations perspective also invites researchers to think about legitimacy more generally as *valuation of valuations*. In interrelated valuations, as we have seen throughout this article, these different viewpoints on the appropriateness of valuations play a crucial role in whether valuations are stabilized, interlinked, or rejected (e.g., see the example travelling judgments). This requires looking not only at the production of legitimacy in specific valuations situations, but also at how valuations are regarded from identities beyond the immediate valuation situation, what their respective means are to ignore or assert them, and consequently how such valuation of valuations shape constellations as a whole.

Conclusion

With this article, we extend the analytical toolkit of valuation studies. Moving beyond a narrow focus on practices in isolated situations, we suggest paying systematic attention to forces that may not be apparent in a moment of valuation but may nonetheless link valuations across multiple situations. To this end, we offer the conceptual framework of valuation constellations, which integrates three closely related analytical components.

The first component, positions and relations, is the key contribution of this article to the conceptual body of work of valuation studies. It directs attention to the positions of the valuator, valuee, and audience, which are populated by identities, as well as to the relations between them. By mapping positions and relations systematically, two features of valuation constellations become apparent: that the respective positions are often populated by a *plurality* of identities; and that

²¹ An important difference is reciprocal reviewing, which is regarded as illegitimate in the professional world, but frequently done by amateurs.

²² Of course, one strategy is to move to another reviewing page. However, amateurs report that they are reluctant to do so, as it took them years to build their status and community on Amazon.com.

identities may occupy *multiple* positions at once. As we have shown, mapping sharpens the view on relevant identities and how these identities link valuations. The second component is the rules orienting valuations within a constellation, i.e., their ontologies and more or less formalized expectations regarding procedures and inclusion. The third component is the technological infrastructures that both enable and constrain valuations. The three components of the valuation constellation are interconnected. Rules are built into infrastructures; both rules and infrastructures open up or restrict the inclusion of identities.

After elaborating the concept of valuations constellations theoretically, we have exemplified how the concept can be used as a heuristic in analyses of historical changes of valuation processes, the definition and solution of valuation problems, and the legitimacy of valuations. Our example of change in intimate valuation illustrates the usefulness of the constellations perspective for mapping large-scale historical transformations. Our examples of signaling in a higher education setting and legitimacy in platform based amateur book reviewing illustrate its capacity for helping to disentangle complex dynamics of linked valuations.

Given that the fast-growing academic field of valuation studies is driven mainly by substantive empirical research, i.e., detailed studies of specific moments of valuation, it is no surprise that there have been calls for the sociology of valuation to move towards a comparative approach (Lamont 2012). As we argue above, analyzing valuation from a constellations perspective entails a systematic reconstruction of the relations between valuator, valuee, and audience. Based on these reconstructions it is possible to map constellations by formal representations of (possibly interrelated) triads. The concept of valuation constellations thus provides a simple tool for the comparison of different cases.

However, this approach should not be read as a preference for structural aspects over the dynamic nature of valuations. As Niklas Luhmann (1995: 45) has observed, both structure and process are temporal concepts referring to reversability (structure) and irreversability (process). The concept of valuation constellations addresses both, by scrutinizing the activities of identities on positions and their movements among the positions of the constellation or across constellations. In so doing, it provides a dynamic account of valuation. Future research may also apply our concept to elucidate and compare temporal orders of valuation processes. Constellations unfold over time; that is, they are produced and reproduced by ephemeral events. Systematically exploring the temporality of these events is essential for understanding the dynamics and consequences of valuation. For instance, valuation judgments may be anticipated beforehand or observed with a considerable time lag. Different

audiences may – either by coincidence or systematically – register judgments at different points in time. Valuated valuers may react to an observed past valuation or to the anticipation of a future judgment. Both rules and infrastructures may have a profound impact on the temporal order by opening up or restricting timeframes, or by influencing attention. Though we do not directly address the temporality of valuation constellations beyond the issue of change in this article, the constellations perspective provides a conceptual tool that allows for temporal analyses.

Eventually, the concept will also add to the potential of valuation studies to analyze important transformations of contemporary society. As several authors have suggested, linked valuations have become increasingly relevant across different social spheres (Helgesson 2016; Fourcade and Healy 2017; Rona-Tas 2017). Some authors were quick to regard such linked valuations as signifiers of broader, unidirectional trends such as quantification, digitalization, economization, or the neoliberal polity (Lamont 2012; Miller and Power 2013; Mau 2019). However, little is known about how valuations are actually linked, and to what extent they transform more traditional processes of valuation. In this respect, the concept of valuation constellations helps to disentangle the increasingly complex interrelations of positions, relations and identities, rules, and infrastructures.

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Research note

Emotions and Valuations: Notre-Dame de Paris on Fire as a Case Study for Axiological Sociology

Nathalie Heinich

Abstract

The emotional reactions aroused by the fire that partly destroyed Notre-Dame de Paris in April 2019 can be analyzed as “valuations” in the light of the pragmatic sociology of values, since they provide empirically grounded material allowing for the description and modeling of the actual implementations and effects of valuations. After a quick summary of the recent history of the pragmatic turn in sociology as related to the sociology of valuation, and a short reflection on the relationship between emotions and values, the fire of Notre-Dame de Paris is used as a case study in the light of “axiological sociology”, a model built on value judgments observed in various contexts, including the display of emotions. This article intends to demonstrate both empirically and theoretically how important it is for the social sciences to consider values as an autonomous issue, deserving to be treated as “axiological facts”, as any other kind of social fact.

Keywords: emotions; French sociology; Notre-Dame de Paris; pragmatism; valuations; value registers

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Introduction

In April 2019, the fire that partly destroyed Notre-Dame de Paris aroused an impressive number of emotional reactions, be they verbal or behavioral. They can be analyzed as “valuations” in the light of the pragmatic sociology of values: observing and collecting occurrences of emotional demonstrations – be they individual or collective, positive or negative – such as tears, cries, protests and declarations of all kinds provide empirically-grounded material allowing for the description and modeling of actual implementations and effects of valuations. After a quick summary of the recent history of the pragmatic sociology of valuation, the fire at Notre-Dame de Paris will be used as a case study for a sociology of collective emotions regarding the value of national heritage. It will be analyzed in the light of “axiological sociology”, a model built on value judgments observed in various contexts. This should let us better understand how important it is for the social sciences to consider values as an autonomous issue, deserving to be treated as “axiological facts”, on the same level as any other kind of social facts.

Axiological sociology and the pragmatic turn

It has long been a challenge for sociologists to investigate values as a specific and worthy topic – beyond a mere section of opinion polls (Rokeach 1973; Inglehart 1977) – as long as it was framed inside a Bourdieusian or post-Marxist paradigm, for which values tend to be either a “myth” or an “ideology”. This critical paradigm, still quite powerful today in contemporary sociology, considers actors’ representations not as a reality to be analyzed, but rather as an illusion to be unveiled, or as an ideology to be denounced: hence the dismissing of the very notion of “value” as a mere “belief” having no other function than to hide interests (Bourdieu and Darbel 1966). For example, when the school fails to fully implement the ideal of equality, the latter is dismissed as an illusion imposed by “dominants” in order to better establish the “social reproduction” of inequalities (Bourdieu and Passeron 1970). There, no place is left for the collective, interactional, reflexive and argumentative dimensions of human experience, to which representations belong and, in particular, axiological representations, that is, values (Heinich 2007a, 2017; Bidet 2008).

The situation began to change when the domination of Bourdieu’s thought in sociology (especially in France during the last 20 years of the twentieth century) began to be challenged by a number of intellectual turns achieved in the 1990s, all of them having to do with the rise of pragmatism. Parallel to the American linguistic pragmatism initiated by John Austin and John Searle (Austin 1962; Searle 1969) and to the American philosophical trend initiated by John Dewey

(Dewey 1939; Bidet et al. 2011), these pragmatic turns in sociology are mainly due to two major French schools.

The first one appeared around Bruno Latour and his followers, with actor–network theory (ANT) and the replacement of a macro, explicative and determinist paradigm by a micro, descriptive and grounded on agency (including the agency of things) program (Latour 1984, 1989; Callon 1988; Akrich et al. 2006). As for the second one, it came out around Luc Boltanski and Laurent Thévenot: after shifting “from critical sociology to the sociology of criticism” (Boltanski 1990), it became possible to take seriously, and fully address, actors’ justifications of their actions (Boltanski and Thévenot 1991) as well as their actual relationship to objects (Thévenot 2006).

Both schools were based on the seminal notion of “*épreuves*” (tests), which anchors sociological investigation in the actual situations met by actors. And both opened the way for an acritical and thus more comprehensive approach to actions and representations (Lemieux 2018). Their double anchoring in empirical investigations and in more general and theoretical issues, even sometimes expanding beyond their discipline, testifies to their belonging to the very tradition of French sociology (Heilbron 2020).

Among several important consequences, this pragmatic renewal of sociology fostered the development of an empirical sociology of valuation (Cefai et al. 2015). Following both Latour’s and Boltanski and Thévenot’s breakings with the Bourdieusian critical paradigm, there appeared a number of sociological attempts to address actual processes of valuation, justification or expertise observed *in situ* (Dodier 1995; Trepos 1996; Lamont and Thévenot 2000; Kaufmann 2012; Vatin 2012), be it in the fields of medicine (Dodier 1993), auctions (Bessy and Chateauraynaud 1995), visual arts (Heinich 1998, 2000), music (Hennion and Fauquet 2000), journalism (Lemieux 2000), tasting (Hennion 2004), law (Karpik 2007), national heritage (Heinich 2009a) or film critique (Pasquier et al. 2015). Their pragmatic groundings opened up a quite new approach to the issue of values: far from the mainstream “sociology of values” (Rokeach 1973; Inglehart 1977; Galland and Roudet 2005) based on statistical surveys in the line of electoral sociology and the sociology of consumption, new and more qualitative methods of investigation could thus be experimented (Heinich 2006), grounded either on field observation of valuations or on the systematic analysis of a body of controversies (Heinich 1993, 2009b; Chateauraynaud and Torny 1999; de Blic and Lemieux 2005; Chateauraynaud 2011; Berthoin-Antal et al. 2015; Chaumont 2017).

Owing to this pragmatic turn, several advances have been completed regarding what should be called “sociology of valuation” rather than “sociology of values”: let us focus here on three main ones. First, the notion of value can no longer be reduced either to the ethical dimension (Forsé and Parodi 2004) or to the economic dimension

(Boltanski and Esquerré 2017): many other dimensions of actors' axiological resources have been opened up, grounded on the values of efficiency, authenticity, beauty, pleasure, spirituality, meaning, celebrity, legality, rarity, originality, sustainability, universality, etc. (Heinich et al. 2014; Heinich 2017).

Second, this pragmatic turn in the sociology of valuation avoids the long-standing confusion between values and norms, and the inappropriate reduction of the former to the latter: principles of valuation now appear as actual groundings for norms of action. Values and norms are definitely two different entities, belonging to specific ontologies: the ontology of representations regarding values, the ontology of directions for actions regarding norms (Heinich 2017). Indeed, analyzing the production of norms, their effects and their transgressions certainly allowed fundamental contributions to sociology (Goffman 1959; Becker 1963; Elias 1969). But the exclusive focus on norms tends to hide what makes them efficient, namely their grounding on relatively consensual axiological principles (Heinich 2020a).

Third, this pragmatic turn makes it possible to consolidate the orientation of sociology towards a scientific and no longer a moral or political aim, by understanding and explaining actors' relationship to axiological principles (or "values") through their contextual implementations and justifications (Lamont 1992, 2012; Boltanski 1993, 2004; Kaufmann 2012; Ogien 2016; Heinich 2017; Kaufmann and Gonzalez 2017). Far beyond the mere issue of valuation, and far beyond French borders, this indeed can be seen as an important step in the history of sociology (Heinich 2020a; Kuipers and Franssen 2020).

A model for axiological sociology

In the line of this pragmatic turn in the sociology of valuation, I proposed a model helping to analyze the three kinds of valuation: measure, attachment and judgment (Heinich 2017, 2020a, 2020b). Based on actual valuation processes observed in their context of production, this model has been initiated through the analysis of controversies about bullfighting (Heinich 1993), contemporary art (Heinich 1995) and national heritage (Heinich 2009), most of them dealing with tensions between aesthetic and ethical values. It relied on two major theoretical tools: first, Goffman's *Frame Analysis* (Goffman 1974), no longer applied to the status of experience but to the status of value judgments, through the notion of "value registers" or "value realms" ("*registres de valeurs*"); and, second, Boltanski's and Thévenot's work on justification (Boltanski et Thévenot 1991). However, contrary to the latter, the model encompasses not only processes of justification of actions but, more generally, any kind of valuation, be it about things, persons, actions or states of the world:

hence an opening of the repertoire of values, up to the 16 “value registers” that have been identified until now.

The term “value registers”, or “registers of valuing”, has also been used in quite a similar way by Frank Heut and Annemarie Mol in their analysis of value judgments about the quality of tomatoes (Heuts and Mol 2013). They evidenced five main registers: “monetary”, “handling”, “naturalness”, “sensual” and “historical time”. In the model I propose these are but five possible registers out of 16, and they respectively correspond to what I named the “economic” register (values of profit or accurate price, etc.), the “operative” or “functional” register (values of efficiency, utility, strength, etc.), the “pure” register (values of purity, authenticity, integrity, etc.), the “aesthetic” register (values of pleasure, sensuality, etc.), and finally something which is not a register but a “value amplifier”, that is ancientness or, on the contrary, innovation (see below).

Regarding the valuation of tomatoes, one could possibly add the “aesthetic” register, provided that their beauty or good-looking aspect would have been used as a criterion; the “ethical” register, provided that the social conditions of producers would have been taken into account in the valuation processes; the “civic” register, provided that the national origin would have been at stake; the “juridical” register, provided that the legal status of producers would have been raised; the “domestic” register, provided that the familial aspect of tomato growing or eating would have appeared; the “affective” register, provided that the capacity of tomatoes to elicit sentimental feelings would have come to the fore; the “technical” register, provided that the high technological level of agricultural devices would have been underlined; the “reputational” register, provided that the celebrity or good reputation of a tomato brand would have been invoked; or else the “hermeneutic” register, provided that tomatoes would have been interpreted as a symbol of, let’s say, western tradition. Only the “mystic” register (values of spirituality, transcendence, etc.), the “epistemic” register (values of knowledge, of scientific truth), and the “ludic” register (values of playfulness, irony, etc.) have few chances to be observed regarding the valuation of tomatoes.

Having been tested on a variety of domains (not only art, national heritage and design but also moral conflicts, sports, religion, politics, etc.), this model offers a wide repertoire of categories of values implemented in valuation processes, while remaining synthetic enough to be easily handled. The registers have been evidenced owing to an inductive and empirical method (contrary to more speculative or theoretical lists of values), borrowing more from the structuralist approach (evidencing the underlying “grammar” which implicitly sustains actors’ actions, as in Boltanski’s and Thévenot’s perspective) than to the description of networks through which things and persons

are connected, as in Bruno Latour's ANT approach (Latour 2006; Heinich 2007b).

In this model, values are defined as collective mental representations, and so are the value registers owing to which some values are more easily connected to others according to the contexts, to the nature of the valuated object, and to the status of the valuating subject. This means of course that, as for any kind of representation, these axiological principles are cultural, that is collectively shared in a same temporal and spatial context. However, they are by no way "subjective" or "arbitrary", as a basic constructivist approach would put it: no more subjective or arbitrary than the grammar of the language we speak.

Valuations rely not only on axiological principles carried on by *actors* in the valuating process, but also on the *context* in which this process occurs (a dimension which can be grasped only through an empirical and pragmatic method), and on the objective properties of the valuated *objects*, that is, the "affordances" they offer to the perception and valuation of their "qualities" (Gibson 1977). Affordances, qualities or criteria, axiological principles, value registers and, finally, "value amplifiers" and "qualification regimes" (see below): such are the main steps in the architecture of the axiological grammar according to which valuation processes are implemented. This model provides rather productive tools for the analysis of value judgments as we will verify now with the case of the fire at Notre-Dame de Paris in the perspective of a pragmatic sociology of valuations.

Emotions as revealers of valuations

Since the pragmatic method is based on the observation of actions in their actual situations, it requires to observe spontaneous acts or speech acts rather than to rely on interviews, which hardly allow taking the context into account while it is as relevant in the valuation process as the valuated object and the valuating subject. This is why our axiological sociology model would rather use conflictual or emotionally loaded situations, since they tend to elicit spontaneous valuations.

Considered from the valuation perspective, emotions often reveal values, be they implemented or transgressed in the object which elicits an emotional response: for example, emotional reactions in front of a beautiful thing or person, or in front of a moral action, or in front of a state of the world when disturbed by violence, testify to the existence of the value of beauty, the value of charity or the value of peace in the mind of the moved subject. Hence the utility of emotions – and, more generally, of affects (Gregg and Seigworth 2010) – for sociologists, since they inform actors' value systems.

This property has been noticed by philosophers (Livet 2002; Joas and Wiegandt 2008) as well as by political scientists (Faure and

Négrier 2017) and by sociologists (Kaufmann and Quéré 2020). According to Livet (2002), emotions signal a dissonance between a given situation and the expected value(s), so that “they reveal our values to us, in a sense quite similar to that in which our choices reveal our preferences ... It is by experiencing emotions that we reveal our values to ourselves. Emotions are necessary for humans to reveal to themselves the values they are attached to” (Livet 2002: 177–178).

But emotions are not or are rarely direct expressions of values: they are rather indirect effects, expressed in a language which is not primarily that of verbal value judgment but that of a physical reaction. Emotion can thus be considered as the physiological response to the feeling that a value is strongly present in an object or, on the contrary, unexpectedly absent. This is even more obvious regarding collective emotions; that is, according to Livet, those which are “shared by others” and experienced “in coordinated activities” (Livet 2002: 124), since “sharing your emotions means making sure that others confirm that they demonstrate our sensitiveness to recognized values” (Livet 2002: 134).

Collective emotions related to national heritage are particularly emblematic due to their intensity, perceivable through several indicators: the amount of people concerned, the extent of media dissemination of emotional manifestations, and their duration over time (Heinich 2012; Fabre 2013). This is obviously the case with Notre-Dame de Paris on fire, since it aroused considerable emotional demonstrations: crowds of people gathering on the site in front of the flames, some of them crying, screaming, calling their friends on the phone, photographing frantically, etc. Dozens of officials making statements in front of microphones and cameras, hundreds of journalists describing the situation: this was indeed quite an event, and also a “media event” (Dayan and Katz 1992).

The fire at Notre-Dame de Paris is thus a case study for heritage-related disasters: reactions were immediate and long-lasting; they came from the whole world; and they got huge echoes in the media and social networks. Moreover, emotions aroused by this catastrophe were dramatically enlarged both on the spatial axis, through their international character, connected to Notre-Dame’s effective status as “World Heritage”; and on the temporal axis, through their sharing on social networks. But the latter phenomenon only extends in space and accelerates over time the need for communicating one’s emotions to others: nothing indicates that Facebook or Twitter might modify their qualitative content.

As we shall see now, the emotional reactions to the fire can thus be used, first, as an indicator of the highly valorized status of the monument; and second, as an expression of the various axiological principles according to which it is endowed with such value, through

the different contexts in which these reactions are publicized and the different categories of people who react to the event.

The case of Notre-Dame de Paris in the light of axiological sociology

This case has been the exclusive focus of a workshop on valuations held at the EHESS (Ecole des Hautes Etudes en Sciences Sociales, Paris) during the 2019–20 academic year. Under my direction, participants¹ collectively constructed a corpus of public reactions, as exhaustive as possible and including all the themes having appeared within the first months after the fire: the fire itself, its causes and its consequences, plus the issues of restoration, donations, laws, lead pollution, etc.

The corpus includes: all the articles posted on the website of *Le Monde* in the 24 hours after the fire; statements by politicians; statements by Catholic authorities; intellectuals' op-eds published in newspapers; the practice of selfies in front of Notre-Dame and the reactions to them; controversies about donations made by wealthy entrepreneurs; debates between experts on restoration and the points of view of non-specialists on the same issue; parliamentary debates preceding the vote of a new law on national heritage at the end of July 2019; and articles on the main websites and newspapers belonging to the French intellectual world (*Le Monde*, *The Conversation*, *AOC*, *La Tribune de l'Art*, etc.).

Given the difficulty in building coherent and relatively compact corpuses, we did not try to include reactions from other countries, which would have required many more participants and much heavier technical tools as well as financial means. This does not mean of course that we consider the case of Notre-Dame de Paris as a French issue alone: on the contrary, one of its specificities is indeed its international resonance. What is French is our corpus, for technical reasons – not our object. Once more the pragmatic approach, by focusing on situated actions, may imply a certain restriction of the items it is able to study.

Conversely, reactions themselves have not been restricted in any way: once a corpus has been defined, every item in it is considered worth being taken into account. The aim is to describe and analyze the whole space of possibilities regarding reactions to the fire, even the more minor or marginal ones. Thus, indifference, detachment and/or even hostility are part of the corpuses, even if they hardly appear. This also belongs to a pragmatic sociology of valuations.

¹ Namely: Frank Beuvier (anthropologist), Jacques de La Porte (jurist), Nicole Dyonet (historian), Zinedine Gaid (sociologist), Quentin Mazel (sociologist), Tsolag Paloyan (discourse analyst), Nicolas Sarzeaud (art historian), Maho Sebiane (anthropologist), Vincent Timsit (sociologist).

Finally, no statistical method is at stake in our approach: our aim is not to measure the proportion of such or such reactions, but to make explicit the value system they are based on. This is coherent with the comprehensive perspective of our axiological sociology, far from the usual explicative perspective.

The three meanings of “value”

While our analysis is still in progress, a few results can already be displayed. A first axis concerns the shifts between the three meanings of the word "value" (Heinich 2017): first, value as “worth”, that is, the importance given to an object (be it a thing, a person, an action or a state of the world); second, value as a “good”, that is, the state of any object once it has been endowed with “value” in the first sense; and third, value as axiological “principle” (for example authenticity, beauty, antiquity)... according to which “some” value, in the first sense, is attributed to an object which thus becomes “a” value in the second sense.

In the case of Notre-Dame, the first meaning – value as worth – would appear through a statement according to which, for example, “The cathedral has considerable value”; but in this case no such example is available, since it goes without saying for everyone, all the most in the context of the fire : no need to argue. Contrariwise, the second meaning – value as a "good" – is very present as much in lay people’s interviews as in renowned politicians or intellectuals’ statements, when they publicly express their emotion by multiplying laudatory qualifiers: “It is such a jewel”; “It is indeed one of the wonders of the world”; “We’re losing a treasure”; etc. In so doing, they merely reaffirm the consensus as to “the” value of Notre-Dame, in the first sense, and therefore its status of “value” as a common good, in the second sense. But such utterances provide no clues allowing understanding on what kinds of axiological principles (or “values” in the third sense) this huge valuation is grounded.

This is why positions taken in controversial situations are more interesting to analyze, since they uncover actors’ “values” in the third sense; that is to say the different and sometimes opposite principles of valuation they mobilize. For example, the value of sacredness happens to be opposed to the value of national community, depending on whether one mobilizes the mystical register (Catholic worship: “*Le sacré coeur de la chrétienté*”) or the civic register (common good for all citizens: “*Elle appartient au peuple français tout entier*”); the same with antiquity and authenticity *versus* modernity and originality, depending on whether the preference goes to “identical restoration” (“*On doit absolument la restaurer à l’identique*”) or to an “architectural gesture” (“*Il faut un geste architectural hors du commun*”); the same with universality, referring to the international

resonance of the event (“*Le monde entier pleure Notre-Dame*”), versus familiarity, referring to the living environment of Parisians (“*Les Parisiens sont si attachés à sa chère silhouette*”).

A plurality of axiological principles and value registers

In the light of this model, reactions to the fire clearly demonstrate that in the case of Notre-Dame the axiological principles go beyond the values usually associated with historical monuments: namely, beauty, antiquity, meaning and, above all, authenticity (Heinich 2009). The latter, which is present in all segments of the heritage-making chain, refers to a continuous link between the current state of an item and its original state – a continuity which, of course, is submitted to all kinds of hazards, which specialists passionately discuss (as with the many evocations of Viollet-le-Duc and his restoration choices in the nineteenth century).

Once defined as the continuity of the link between the original and the present states of an object, the value of authenticity can be intuitively associated with a same family of values, such as purity, integrity, cleanliness, etc. This family of values – or “value register” – has been named the *pure* register, because of the centrality of the value of purity. This register is quite present in the controversies regarding what is to be done in order to replace the framework and the spire of the cathedral: restore it or not, restore it as it was at the origin, as it was before the fire, or else organize an architectural competition for a new proposal? And, in any case, what kind of material should be used? Wood, iron, concrete, other? Meanwhile this “pure” register is also present, together with the *ethical* register, in the many controversies about lead pollution: once a significant quantity of lead had been discovered in August around the burnt monument, discussions were also aimed at the preservation of workers’ health, not only at the preservation of the monument’s integrity – both being sometimes contradictory, hence weighty discussions and disagreements between those who care about the integrity of heritage (heritage lovers and specialists, focusing on the monument) and those who care about the integrity of persons at work (work inspectors, focusing on workers).

Much less controversial is the value of beauty (“*L’un des plus beaux édifices au monde*” [One of the world’s finest constructions] belonging to the *aesthetic* register: it is present in many discourses in order to justify “the” value (first meaning: worth) attributed to the cathedral, which participates in making it “a” value (second meaning: good). In this aesthetic register, beauty is closely associated with the emphasis on monumentality (“*Un sublime monument*” [A sublime monument], or with the role of good taste which is more or less explicitly invoked by certain art historians regarding past or future restorations (“*L’horrible flèche ajoutée par Viollet-le-Duc*” [The horrible spire added by Viollet-Le-Duc]).

Is Notre-Dame a symbol of Catholicism, or of western civilization, or of Paris? Here is the value of meaning or significance, belonging to the *hermeneutic* register. Significance, beauty, authenticity: here are three of the main values commonly associated with national or world heritage. But in the case of Notre-Dame on fire, other values and value registers are at stake, whether regarding Notre-Dame itself or regarding the many actors associated with the fire, be they persons, objects or institutions.

One can thus meet the *domestic* register, through the values of proximity to the cathedral or of familiarity of the landscape; the *affective* register, through the capacity of the building to elicit emotional manifestations of distress or of attachment; the *economic* register, through the issues of funding its reconstruction and of tourism and local trade; the *civic* register, through the expressed feeling of national mourning; the *mystic* register, through the issue of religious worship as opposed to secular appropriations; the *ethical* register, through an emphasis on the heroism of firefighters ready to sacrifice themselves for the common good, or on the highly commented gestures of patrons offering a share of their fortune; the *technical* register, through confidence in the competence of experts; the *reputational* register, through the risk of letting architects perform an "architectural gesture" for the sole benefit of their own notoriety, or else through the possible transformation of gifts into mere sponsorship; the *operative* register, through the debates about the most appropriate materials regarding resistance to fire or the most rapid restoration technics regarding the anticipated schedule; the *legal* register, through the issue of regulations and charters governing the restoration of historical monuments; and even the *fun* register, through the many jokes that ran on social networks.

Value amplifiers and qualification regimes

Some other values do not belong to one or other register but can be found in any register. They are somehow special values, since their role is not only to value but also to enhance, to amplify other values: let us call them "value amplifiers". A basic one regarding historical monuments is antiquity, or sustainability: it has often been used in order to insist on the high value of Notre-Dame, since its antiquity enhances its beauty as well as its authenticity and its significance. Another recurrent amplifier is universality, as Notre-Dame is valued as a worldwide concern, a "World Heritage" in UNESCO's terms. Sustainability and universality belong to the "community regime": a qualification regime granting an unquestioned preference to what is common, multiple, shared, conventional, etc.

Opposite to the "community regime" is the "singularity regime", granting an unquestioned preference to what is particular, rare,

original, etc. (Heinich 1996 [1991]). This singularity regime governs two “value amplifiers”: rarity and originality. The former has also been very much used in order to enhance the value of Notre-Dame as exceptionally beautiful, authentic, significant, ancient, etc. As for the latter, originality is much less present: it is used only by those who request an “architectural gesture” in order to replace the spire, pleading for renewing rather than for restoring it. This scarcity of the value of originality is quite understandable since it is an amplifier on the temporal axis (turned to the present and to the future) whereas rarity is an amplifier on the spatial axis – exactly as antiquity is an amplifier on the temporal axis (turned to the past) whereas universality is an amplifier on the spatial axis. So the crossing of the space and time axes with the community and singularity regimes clearly organizes the distribution of the four value amplifiers.

The “grammar” of valuations in the case of Notre-Dame thus clearly appears: antiquity, universality and rarity amplify the values of authenticity (pure register), beauty (aesthetic register) and significance regarding the history of France or of Catholicism or of western civilization (hermeneutic register), as well as the values of proximity with ancestors and of familiarity of the living environment (domestic register); the worship value (mystical register); the value of architectural prowess (technical register); the patriotic value of an emblem of French nation (civic register); the sentimental value for “Paris lovers” (affective register). At least eight value registers and three amplifiers are thus present in the valuations of Notre-Dame itself, without even considering the ones associated with its reconstruction.

Notre-Dame de Paris as a “total axiological fact”?

Through the emotional responses to the fire, Notre-Dame magnificently illustrates all the values of heritage: it links people both in space to a planetary community (value of universality) and in time to their ancestors and to their descendants (values of antiquity and sustainability); and its uniqueness makes it irreplaceable (value of rarity).

So the intensity of emotions in front of the disaster (even if not everybody shared them) can be explained not only by the aesthetic, technical, symbolic or religious qualities of the monument, but also by its very patrimonial status. Indeed, any object endowed with a “heritage function” must satisfy a double hypothesis: on the one hand, the hypothesis of its community of belonging, insofar as it constitutes a common good (whether at the private level of a family or at the much more general level of a nation or even of humanity); and, on the other hand, the hypothesis of the sustainability of its value, insofar as it must come from the past and has to be transmitted to future generations. The value of universality and the value of sustainability,

combined with the value of rarity, are thus the main values revealed by emotions when faced with the loss of any element of heritage (Heinich 2009).

Notre-Dame thus carries various highly prized values: hence the intensity of emotions aroused by the fire; but hence also, for the sociologist, the heuristic nature of these emotions as they reveal the multiplicity of values invested in a heritage object. The number of value registers, importance of amplifiers in time and in space, relevance of both community and singularity regimes; and, finally, shifts between the three meanings of “value” as worth, as good and as axiological principle: indeed, Notre-Dame ticks the largest number of boxes that one can imagine in the axiological repertoire specific to “our” culture. Following Marcel Mauss’s analysis of gift as a “total social fact” (Mauss 1950), should not we then consider Notre-Dame-de-Paris as a “total axiological fact”?

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Three Modes of Valuation Practices in Art Games

Michael Hutter


Abstract

Several suggestions on distinguishing between “modes” of valuation practices are found in the literature. In this contribution, valuation practices are moves in a kind of social play that generates its own kind of value. Valuation in the Arts is chosen as an empirical example. Following the model, the Arts are interpreted as a set of games with the same kind of value code, in which artists and producers create performances for engaged and curious spectators. The four kinds of players engage in valuations of objects and other players in their respective games. The broad range of observations in art games demonstrates that valuation is practiced in three modes: attribution, assessment and payment. While practices of attribution and assessment generate and stabilize art-specific value accumulation, paying practices link the attributed and assessed values to the monetary valuation in games of commercial play. The distinctions of valuation practices employed by three recent authors are set into relation to the suggested modes.

Keywords: valuation; consecration; evaluation; art games; orders of value

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Introduction

Blurred distinctions, and a suggestion

As the research on valuation practices picks up steam, differences between various kinds of such practices come into view. A look at major contributions to valuation research demonstrates that distinctions between “modes of valuation” have been made since the beginnings, but that the suggestions differ significantly between authors.

John Dewey’s encyclopedia entry *Theory of Valuation* is widely considered to be the starting contribution of a sociology of valuation, as it switched the debate from the “very notion of value” to the “notion of valuation” (Muniesa 2011: 24). Dewey noted the wide variety of terms used for valuation. He pointed out that all of them are situated in linguistic proximity: “[...] praise, prize, and price are all derived from the same Latin word; [...] appreciate and appraise were once used interchangeably; and [...] ‘dear’ is still used as equivalent both to ‘precious’ and to ‘costly’ in monetary price” (Dewey 1939: 5–6). The proximity of terms is noteworthy because it is in contrast to the wide difference in meaning.

In response to a question prompted by his text, Dewey elaborated a few years later on the difference between “an attitude that will be called prizing or holding dear” and “valuation, or appraisal” (Dewey 1944: 449). The “attitude” of “prizing” is equivalent to the “energy” that goes into maintaining “an event or thing having existence independently of being prized (or valued)” (ibid.: 451). “Valuation”, on the other side, deals with all the practices of “putting a value upon, assigning value to” (Dewey 1939: 5). Pricing, as a separate valuation mode, was only mentioned by Dewey, but gained more attention through the recent work of economic sociologists (Beckert and Aspers 2011; Muniesa 2011; Aspers 2018).

A second classical position is part of Pierre Bourdieu’s social theory. Bourdieu focuses on the forces of competition and cooperation in the “intellectual field”, particularly in the literary “family of thought” (Bourdieu 1996: 108). He observes a kind of valuation that does not rely on economic value. His term for the practice is “consecration”, a term explicitly borrowed from religious practice (ibid.: 344). Consecration takes place in institutions, and is strongly linked to education. Those actors who have power award prizes, they write reviews and eulogies, and they permit membership in academies and juries (Bourdieu 1983: 323, 1996: 123, 225). The players in the intellectual field, however, are dominated by players who yield not only cultural,¹ but also economic, political and “social” capital.

¹ Bourdieu’s terms oscillate between “intellectual”, “cultural” and “symbolic”.

Sociologists in Bourdieu's intellectual tradition have maintained the focus on practices of consecration, albeit with diverging assumptions: Michèle Lamont discovers practices of valuation beyond evaluation; Nathalie Heinich proposes an elaborate model of valuation practices that is structured, among other features, by three "forms" of action in three temporal "moments"; while Marion Fourcade emphasizes the similarities between ordinal and monetary valuation (Lamont 2012; Fourcade 2016; Heinich 2020).

This contribution adapts the move towards a pragmatist focus on practices, but intends to challenge the dominating Bourdieusian model in a different manner. It introduces the perspective of a societal theory that assumes the coexistence of "plays of value". These plays are claimed to create and reproduce values in their own, bordered worlds of meaning. The empirical material to affirm the claim is drawn mainly from visual art. The observations suggest a set of three modes of valuation: Practices that *attribute* value to things, persons or events, practices that *assess* value attributions and aggregate them, and practices that lead to *payments* for artworks.

I will compare this result with the valuation modes suggested by Lamont, Fourcade and Heinich. Finally, I will address an epistemological consequence of the heterarchical model: since autonomous plays of value evolve side by side, valuation takes place in each of them. In consequence, the modes of valuation in visual art and neighboring scenes become an exemplary case for modes of valuation in other plays of value that have developed in modern society. Applications to religion, science, law, polity and economy are suggested.

Valuation practices in plays and games of value

Bourdieu is the author of the most influential formulation of the kind of domain in which valuation activities take place. He uses the notion of "field", and he equips it with a double meaning: the "intellectual field" is a very wide domain where actions are determined by a certain kind of "cultural" value, and where more of such value is generated. These actions take place on the level of a multitude of narrow arenas, like the "literary field of Florentine painting in the Quattrocento" (Bourdieu 1983: 312). By introducing the terms "game" and "play", the English language permits a distinction between these two levels. Each sub-field functions as a *game*, bordered by common rules

of the game, and based on tacit agreements between the players.² The games are played like the game of chess, by figures with differing “functional weight” that are engaged in permanent struggle and cooperation (Bourdieu 1996: 104). The “stakes” of each game lie in the accumulation of a kind of value that has meaning in that game. The stock of value accumulated by the players is called “capital”. The entire intellectual field can then be identified as a certain type of *play of value*. The games in the “cultural” or “intellectual” play share the kind of value that Bourdieu describes as “*illusio*”³ or “fetish” (Bourdieu 1983: 317). This “cultural value”, he claims, is dominated by economic value.

At this point, the theory of societal subsystems parts company: it assumes that autonomous systems have evolved distinct “preference codes” around fundamental challenges of society (Luhmann 2013 [1997]). These preference codes indicate what is considered as a meaningful and valuable “stake” within the games of a particular type of play. Thus, autonomy of valuation is still a fundamental condition, but it is not split between a “pure” and an “impure” pole. Instead, such autonomy is assumed for coexisting logics, with players that have capital and competence in the games of several plays: the economic and the political play, the play of science, played by scholars in their various research games, the play of religion, and the plays of philosophy and of art, which made up the “intellectual field” in its original French mid-twentieth-century version.

The notions of “play” and “game” help in finding out more about the commonalities and differences of valuation practices in these various worlds of meaning. Interactions in games are primarily framed

² In French, “*jeu*” carries the double meaning of “play” and “game”: “the field of power is also a field of struggle, and may thus be compared to a game (*comparé à un jeu*): the dispositions, that is to say the ensemble of incorporated properties, including elegance, facility of expression or even beauty, and capital in its diverse forms—economic, cultural, social—constitute the trumps which will dictate both the manner of playing and success in the game” (Bourdieu 1996: 10). Bourdieu uses his terms without further discussion, but the epistemological root of the approach is Wittgenstein’s notion of *Sprachspiel* (Wittgenstein 1953). See also the use of “play” and “game” in Bateson (1955) and Goffman (1969). Recently, Brian Massumi pointed out the difference between material action which is executed, and “ludic gesture” that fills the action with vitality and self-enjoyment and thus “instantiates the play-value of the game” (Massumi 2014: 10). See also Hutter (2015, 2018).

³ “[A] certain form of adherence to the game, of belief in the game and the value of its stakes [...] makes the game worth the trouble of playing it [...]. [...] *illusio* is the condition for the functioning of a game of which it is also, at least partially, the product” (Bourdieu 1996: 228).

by a common sense of what is valuable.⁴ Players are involved through all their sensory emotions when winning or losing.⁵ “Adherence to the game”, and thus to its shared valuation, is taken seriously by the players of each game. The “logic” behind such valuation differs, depending on the preference code that has been developed in societal plays of value. Hierarchical value scales are observed in each play, but the relationship between value plays is heterarchical. Moves in different value plays irritate and complement each other. Thus, the variety of combined and entangled valuations is much greater than in the Bourdieusian model—a point to which we return in the concluding section.

Unlike physical metaphors like “sphere”, “world”, “field” or “pole”, the play-and-game-metaphor focuses attention on different kinds of players—different in their position, their skills and their power within one or several games. In each game event, *performers* can be distinguished from *spectators*, although performers are also spectators for the performances of others. When games are observed over longer stretches of time, with many, often regularly staged performances, finer distinctions are perceived. Performers are either highly visible as *creators* (authors, photographers, dancers, composers, musicians) or less visible as *producers* (organizers, fundraisers, gallerists, venue directors), even if individuals switch and combine these positions. Spectators divide into *engaged* spectators and *curious* spectators.⁶ Engaged spectators are experts, or critics, and amateurs, or fans.⁷ They seek direct contact and interaction with creators, and they turn into creators on occasion. Curious spectators, in contrast, confine their involvement into the valuation process to their presence, their applause and their payment for an admission ticket or a recorded copy. They seek their experiences from performers that have gained reputation in their games, like famous sites and prestigious events. Beyond the players who perform and those who take part in the performances, there are the mere *on-lookers*. They do not engage in actual

⁴ The Bourdieusian model emphasizes the actions of players; the Luhmannian model emphasizes the continuity of play from which the players draw their power of action. The terminological switch from “field” and “system” to “play” allows a choice of relevance, between individually performed moves and collectively binding performance.

⁵ See Goffman (1961) on the sensation of winning and engagement in games. For a theory that interprets society as a latticework of recurrent games, see Fligstein and McAdam (2012).

⁶ Negus (1999) distinguishes between hard-shell and soft-shell audiences. Negus (2002) and also Maguire and Matthews (2012) focus on particularly active players with the Bourdieusian notion of cultural intermediaries (see sec. II.1).

⁷ On the particular kind of engagement contributed by amateurs, see Hennion et al. (2000) and Hennion and Teil (2004: 19–37). On opera fans, see Benzecry (2011).

experiences, but are content to hear and read about valuations of the events in a particular game.⁸ This categorization of players can be observed in all value plays, in and around political, legal, scientific, religious and artistic performances.⁹

How is a play's specific kind of value generated by the players; how can they store or even transfer it? The short answer is: Whatever has been generated in a game's performances—be it political, scientific, artistic or commercial—is attributed a value-marker by players, which is then acknowledged or contested by other players and finally results in an approximate consensual degree of value. Such *attributions* are collected and systematized in each game, often by specialized players. These *assessments* stabilize the attributed values, and they enhance comparability of valued things, persons and actions. If the physical ownership of things is desired, it can be accomplished through the valuation procedure of commercial play, where money, a specialized value medium for changes of possession, has been developed. The size of *payment* serves as an indicator for the degree of value attributed in terms of the object's own value medium.

The symbol-based objects and events typical for art games have a particular need for such valuation practices. The impact of works on their spectators is mental; they have to be deciphered by sensory organs and by conscious repertoires of meaning, resulting in an "experience" that is then remembered and possibly communicated to performers and other spectators.¹⁰ Novels, symphonies, videos and YouTube clips are created to trigger sensory feelings of joy, pleasure and disappointment, and imaginations of fictional worlds in literary, visual, auditory or audio-visual form (Brewer 1997). To make the mentally perceived qualities of these experiences appear in social space, their communication must be recognized as valuation. Artists comment on each other's works, curators select and justify, publishers and gallerists promote what they hope to sell, critics review music

⁸ In art games, valuation practices were noted first among artists and critics. Spectators were treated as a homogenous social cluster of regular visitors, termed "audience". Raymonde Moulin's pioneering study of the French art market distinguishes four kinds of actors: dealers, critics, collectors and painters (Moulin 1987).

Curators, fans and tourists found attention recently. See Obrist (2014), Lewis (1992), Urry (1990), respectively. In the visual art field, Yorgev notes different "status actions" by artists, curators, gallerists, museum directors and audience members (2010).

⁹ The interpretation of valuation as performance connects the contributions in a recently published volume on the "performance complex" (Stark 2020) to this study.

¹⁰ The notion of experience has a rich philosophical tradition, in several languages, and therefore a range of meanings. On one pole, experience has the character of an *épreuve*, an event that proves a certain quality. On the other pole, experience is an *Erlebnis*, a lived episode that is felt through the senses and mentally stored in memory. My interpretation leans toward the latter.

performances, collectors bid at art auctions, and those who saw, heard, read or tasted artworks, or simply know of their reputation, express their own judgments, and they buy copies of texts and recordings. Art games, therefore, provide a rich opportunity for empirical observations of valuation practices. Art scenes are not limited to the genres of high culture. Most imagination-inducing works are experienced in the genres of popular culture, from movies to musicals and from books to video games, usually accessed through industrially reproduced copies or digital networks.

The setting of the art play, with its specific value code and its myriad of separate and overlapping games, will serve as a testing ground in the next section. In the concluding section, evidence for three modes in other major societal plays of value will be discussed.

Evidence for three modes of valuation in art games

Three modes were identified: the mode of *attribution*, through practices that augment or decrease the value of works, persons or actions; the mode of *assessment*, through practices that collect and aggregate value judgments along accepted scales; and the mode of *payment*, through sums of money exchanged for rights to possession. The majority of examples will be drawn from games of visual art, with their rare singular objects, but also from games of entertainment, where valuable objects are reproduced and sold as copies. The evidence consists of reports on largely unique activities from diverse sources, and from a range of countries. The cases cited serve primarily as illustrations, in a research game where methods of objective proof are rarely applicable.

Value-attributing practices

Artistic events and objects are cognized through eyesight, hearing, sometimes even tasting and smelling, and they are recognized through memory and imagination. Such mental experiences can be pleasurable or painful, disappointing or elating. The affective connection makes players attribute qualities to those artworks that triggered such experiences.¹¹ The value circumscribed as “aesthetic quality” carries a sense of esteem, even awe.¹² Value-attributing practices communicate degrees of aesthetic quality to other performers and to spectators. The communicative act must be so convincing that it evokes feelings of appreciation in players who have never seen, read or heard the original

¹¹ In German, the meaning of the English term “experience” is split into a term for the actual process of living through it (*Erlebnis*) and a term for the memory of having done so (*Erfahrung*).

¹² This interpretation of quality differs from the objective quality characteristics of commercial goods, as defined by Callon et al. (2002).

work. In art games, such practices are well known to creators and producers, and they are employed by engaged spectators, particularly by critics, as well.¹³ They range from reflexive critique to pushing a *like*-button.

Aesthetic judgment, or: Critique

Reflexive judgment on artistic accomplishments has a long history in all civilizations. In the European tradition, the earliest contributions were made in Greek and Roman antiquity (Bakoš 2004). Accounts of modern aesthetic judgment begin with Immanuel Kant's *Critique of Aesthetic Judgment* (1790). Kant discusses four criteria for "reflective judgment"; two of them—the beautiful and the sublime—are subjective and universal at the same time: like the judgment of pleasures, they rely on sensory impressions, and like moral judgment, they rely on a common sense, which is the community of taste. These two dimensions of aesthetic judgment are in "free play" (*freies Spiel*).¹⁴ In conclusion, those who practice these kinds of aesthetic critique must have the skills of experiencing artworks in their own imagination, and the skills to express the qualities of these works in arguments that connect them to the currently established state of esteem in their community of taste.

Aesthetic critique, in the Kantian interpretation, gained its credibility through the player's attitude of detachment and reflection, suggesting an unbiased transformation from sensory experience to verbal and written expression. It has allowed the players wide variation in expressing their judgments in both dimensions. In visual art, the "critic" became a central figure in the late nineteenth century, when the collaboration of value-attributing critics and value-exchanging dealers in Paris drove the market for contemporary artworks (White and White 1993). In the 1970s, visual art critique shifted from abstract criteria of material form toward criteria of political relevance (Elkins and Newman 2008).

Bourdieu's attitude to the critic's detachment and reflection was one of doubt. Although he did admit the relevance of "immediate appreciation" (Bourdieu 1996: 100), he emphasized consecration, in ritualistic patterns, by players in academies, educational institutions, media houses and award juries.¹⁵ A few consecrators, often dominated by holders of religious, political or economic capital have the power to

¹³ Practices common among artists and routines that are applied by production firms are described and categorized in Sawyer (2015).

¹⁴ See Ginsborg (2015: 53–93).

¹⁵ Bourdieu (1992: 229). On canonization in a Bourdieusian framework, see Guillory (1993).

elevate artists and authors to specific status levels in their game.¹⁶ They ensure the continuity and the moderate change in the symbolic value attributed to certain works and to their creators.¹⁷ Some works become part of the canon, accumulate symbolic value and thus turn into symbolic capital.¹⁸

The shortcomings of such a limited and rigid interpretation of value attribution have been recognized by Bourdieu's students. Notably Luc Boltanski and his co-authors have taken the model further. They recognize several orders of worth (*cités de grandeur*), each with its own form of symbolic capital. The "worlds of justification" have developed their own way of disputing value attributions, their own way of critique. The practices that build up "inspirational worth", for instance, respond to the experience of "an inner movement [...] sincere and involuntary" (Boltanski and Thévenot 2006 [1989]: 159) when an observer is confronted with new, unexpected creations. In a later study, the world of network capitalism, where production takes place in projects, was identified. In this world, critical judgment of commercial projects relies not only on moral, but also on artistic criteria, namely emancipation and self-realization (Boltanski and Chiapello 2005 [1999]). Thus, aesthetic critique takes its place alongside forms of social critique.¹⁹

In Boltanski's most recent co-authored work, the role of aesthetic valuation is even more prominent (Boltanski and Esquerre 2017a). The subtitle, *Une critique de la marchandise*, sets the level of aspiration: this is a further, a fourth kind of critique, after Kant's three kinds. It is a critique that links aesthetic experience and its symbolic expression to the monetary price paid for its ownership. On one hand, this attempt reverts to the simplicity of Bourdieu's original, with the role of the single most powerful play shifted from the political to the commercial

¹⁶ For recent studies that demonstrate the strong-ties network of literary critics, see Dozo and Lacroix (2010) and Chong (2015). Modes of consecration, between small aesthetic networks as well as for large profitable consumer groups are, again for the literary field, explored and described in Sapiro (2016) and Pouly (2016).

¹⁷ Another key role is assigned to "intermediaries" that bring new talent to the attention of the consecrators. In a model that recognizes more diverse roles, intermediaries are reconstructed as producers, as experts or as amateurs. They often perform competently in several roles of the same game.

¹⁸ In Bourdieu's writings, contradictory definitions of symbolic capital can be found. Sometimes, it is a general category of capital that includes cultural and social capital; sometimes, it is restricted to field-specific symbolic markers, like literary prizes (Bourdieu 1986).

¹⁹ Boltanski has also considered political critique (Boltanski 2011). Critique invokes alternative states and thus encourages unrest, yet avoids the outbreak of physical violence. The focus is on a kind of practice that is not content with only expressing judgments of quality, but feels legitimized to demand the change of social conditions.

play—to gain value means to gain monetary value. On the other hand, the authors show that certain kinds of goods develop a “memorial force” that causes their prices to increase over time. Their producers generate “value narratives focused on traditions, genealogies, identities and pedigrees” (Esquerre, in Boltanski and Esquerre 2017b: 79). In consequence, the role of those who make value attributions through critical judgments becomes more complicated. Their judgments contextualize art works, and they add narrative content. Thus, value attribution turns into valorization of commodities.²⁰

Praise-and-criticism

Value attribution practices are part of the “competitive struggle” in each of the games. There are those voices that intend to increase the current value position of a work, and those that intend to decrease that value position. “Challengers” and “incumbents” are pushing in different directions.²¹ The reasons for their actions might be sincere attempts to do justice to a work’s qualities, or they might be blatant misrepresentations. Practices that increase value will be called “praise”, those that decrease it “criticism”. Through them, the voices of players are heard in ongoing debates around “contentious” works that are praised and criticized at the same time. I will focus on four varieties of praise-and-criticism.

As spectators are moved by an aesthetic experience, they *applaud*—they clap, laugh, or even call out to the artists. Such immediate bodily resonance is sometimes difficult to suppress, but it can also be premeditated, designed to push the value attributed to the performers upward or downward.²² The spontaneous commentary on a live performance is part of value attribution, but it is also part of the performance (Heister 1984). Applause can be registered and gauged as to intensity, loudness, length and attribution to specific performers. When engaged spectators, like fans, react, their “ejaculations” can take a wide variety of forms, ranging from whistling to elaborate chants.²³ Curious spectators can be more easily manipulated into a standardized positive response. Via the technique of the *like*-button, applause has

²⁰ “Valorization” is a term coined by economic sociologists. It means “(1) to produce an increase of market value, to increase the price. (2) to increase the value, the esteem given to something” (Vatin 2013: 32). The value might lie in useful features of a new tomato breed (Heuts and Mol 2013), or in enabling new services of telephone network (Bidet 2020). Valuation may have valorizing side effects.

²¹ These terms are used by Fligstein and McAdam (2012).

²² Theater performances in ancient Rome were an effective arena for voicing praise or criticism on political players (Parker 1999).

²³ Dewey (1939: 6) suggests the term “ejaculatory”. In contrast, “resonance” is intended to capture the visceral and animated nature of reaction.

migrated into games that are performed on digital platforms. Pushing a button performs applause in a reduced, digitally adjusted form.

Open *promotion* may take the form of a text that raises expectations about possible future experiences. The texts, formatted as advertisements, interviews or reviews, connect the new work with works that are already recognized by the readers. Often, promotional language about the works is woven into complex narratives that include past successes and current issues of aesthetic or political discourse. Catalogue texts for private and for public art exhibitions are examples for the practice. Promotion can also take a spatial form. The artwork to be promoted is seen and thus experienced in mental and material relation with similar works of higher esteem. This happens in commercial art galleries, in the display arrangement of public museums and in the design of temporary exhibits, it happens in local and in globally distributed games. Spectators tend to be suspicious, even dismissive about promotional statements. They learn to devalue signals, and yet to detect useful signals that enable them to identify and select those novelties that promise to fit best with their desires. Active downgrading is also well known. Strategies of defamation discredit features of a work or its performers. They use the same type of arguments, but connect the novelty with works that are called “weak”, “outdated”, “empty”, or use other terms that signify low attribution of symbolic value.

The award of *prizes* is a very old device for praising. It involves contests in which a jury awards a certificate of quality distinction to selected persons or works (English 2005, 2016). Prize contests are staged in regular intervals, usually yearly. They accumulate their own reputation through association with the prestige of former jury members and former prizewinners.²⁴ The juries are the centerpiece of this attribution practice. They are convened by the organization, foundation or individual that sponsors the prize. Organizations that are instituted through political authority, like museums and academies, carry particular weight in the more traditional art games. A criterion for being chosen as a jury member can be previous performance as artist, expert or juror. Diversity of professions on the jury is also desired (Dozo and Lacroix 2010). The judgment of the jury connects the winner with previous winners, and with winners in other, comparable contests. The decision is usually accompanied by a written statement that justifies it. The decisions themselves are, in turn, praised and criticized by others, and used in the promotional material of the winners. A clash of opinions can be fueled into a “scandal”, which

²⁴ Prizes may gain part of their value in an art game through the sum of money that is associated with it. In that case, the prize accompanies a gift, presented by the sponsoring institution. See also Heinich (1999).

attracts the attention of a larger public, including curious spectators and mere onlookers.²⁵

A form of praise-and-criticism is the assignment of *numbered scores*, stars or otherwise named markers of quality by experts who have established their own reputation for taste and independent judgment. To the spectators who look for reliable and trustworthy information about yet unknown works, the advice, often given in the printed form of guidebooks, is a “judgment device”.²⁶ Guidebooks and their digital successors seem to be most effective in transmitting value attributions in constantly changing games where products are offered in large numbers, with highly diverging degrees of quality, and where equally large numbers of curious spectators search for reliable value assignments. Guidebooks select, describe, compare and attribute value points.

The innovation of rating points can be traced to one of the earliest travel guides. Karl Baedeker’s guidebook, first published in 1830, indicated elevated levels of excellence among the most eminent buildings and artworks in the largest European cultural centers through a two-star scale (Müller 2012). The concept was adapted by other guidebooks, notably the restaurant guidebook *Guide Rouge Michelin*. Its selections and ratings are regularly updated, responding to the entry and exit of restaurants, and to changes in quality.²⁷ In the case of wine, where every year brings new vintages, points are attributed to various qualities of the wines that are considered worthy of attention.²⁸

Scores with cardinal numbers have gained in popularity since digital techniques enable users to attribute zero to five value markers to their experience, be it a museum visit or a restaurant meal. Despite its simplicity, this practice constitutes an influential form of critical

²⁵ On the scandals surrounding the Booker Prize during its early years, see English (2005). The invention and institutionalization of the Turner Prize has been recognized as a valuation technique in its own right, with empirically verifiable effects on the market value of works by young British artists (Pénet and Lee 2014).

²⁶ The concept was introduced by Lucien Karpik in his study on valuation in markets for commodities that are singular in physical and possibly temporal appearance, like artworks or music concerts (Karpik 2010).

²⁷ To Karpik, the *Guide Rouge Michelin* is the “ideal figure of judgment devices” (Karpik 2010: 80).

²⁸ To gain acceptance for their ratings, “wine critics codified a vocabulary [...], they worked out protocols of judgment for comparative tasting, they supported the development of judges, they supported the development of sensorial techniques, and some acted as consultants to producers” (Karpik 2010: 137).

judgment because it greatly expands the number of players who are now able to attribute degrees of value.²⁹

The total value attributed to artworks through all the practices discussed above—critique, applause, promotion, prizes and scores—amounts to a specific volume of art-generated value within a society. Throughout the cultural history of Europe’s major cities, the size of this stock of esteem has fluctuated. Some periods, a few generations long and documented only in a few cultural centers, are today considered as particularly rich in artistic value creation.³⁰ Creators, producers, experts and amateurs in art games around the planet have generated and devalued claims to artistic value.

Value-assessing practices

Assessment practices in art games are ways to account for the many, often contradictory value attributions to certain works and performances. They aggregate, filter and condense judgments. They provide descriptions of outstanding works, and they invite comparisons on the basis of assessment results. Rather than pushing the value of works and the worth of players upward or downward, assessment practices register and probe the value of artworks. An alternative term for assessment is “evaluation”. Since “evaluation” is used by some authors as a synonym for “valuation”, “assessment” is chosen as the less ambiguous term.

Value assessments have to convince, even coerce other players. They are habitually denounced with all conceivable arguments by those who risk being downgraded by the results. Therefore, elaborate organizations have evolved. Some assessing institutions became standard-setters in their games, thus taking on a role between public service and private service. Prime examples are the three bond rating institutions in global financial markets.

Four varieties of practices designed to assess the value of artworks will be presented and discussed.

Aggregating judgments

Judgments of artworks tend to be heterogeneous. They take the form of words employed in literary reviews, in selected displays and performances during a time period, in prizes awarded and in voices raised in debates. A very simple practice is the aggregation of such judgments in an artist’s résumé: the listing of reviews, prizes, ranks in

²⁹ In 1709, Roger de Piles suggested four criteria that could be applied to any artwork and then be graded with up to twenty points each. De Piles’ technique was adapted by other writers on art connoisseurship, but did not survive the 18th century (De Marchi 2008).

³⁰ In Hutter (2015), three such extraordinary periods in European-American cultural history since 1400 are identified and discussed.

competitions, exhibitions in galleries and museums, and acquisitions by public and private collections constitutes an aggregated assessment of the artist's symbolic value capital. The separate items on the list are of a highly diverse nature, yet to gallerists or amateurs who know the game's categories of value—and use them in similar communication—they add up to an assessment of the esteem attributed to an artist in that game.

More condensed assessments are in demand as well. However, any condensation implies decisions with regard to the relative worth of disjunct criteria. What are prizes worth in relation to reviews, or to exhibitions in locations of low or high artistic prestige? When presented with such a listing, it is the reader who has to attach relative “weights” to the entries in the various categories. When works or artists are valued in general levels of distinctions, the choices have been made by the assessing agency, or by an individual. The 2- or 3-star-rating invented for guidebooks to artistic monuments is based on value attributions, but transforms them into assessments that order the relative value of a large number of items, distributed over a wide geographical area. An interesting case from financial markets is the practice employed by credit-rating agencies: They aggregate judgments of past performance, and use letters as condensed markers of reliability, from “AAA” as the highest to “CCC” as the lowest rating. The grading terminology, accepted among all participants, avoids cardinal numbers. Cardinal numbers, the elements of quantification, introduce particular problems into assessment techniques: “Quantitative orderings, by stripping away context, nuance, and history, confirm certain narrow classifications, rendering ambiguities invisible, and conferring specific meanings and distinct identities on categories and products” (Orlikowski and Scott 2014: 870).³¹

Cardinal numbers are central for the digital algorithms that transform single 5-star-(e)valuations into averages. The five points on the scale, intended as an ordinal ranking of value attribution, are treated like natural numbers. They are added and subtracted, multiplied and divided. The terminology of “points” permits a shift from ordinal attribution to cardinal assessment. Once the criteria are transformed into homogenous points, they lose the nuance of value criteria.

Digital technology has generated new academic assessment techniques in art games. The numbers of lines or words dedicated to each artist painter, composer or author in the most widely used

³¹ Although the traditional letter scores are easily translatable into numbers, they still carry a different affective message. Over the decades, certain letter combinations have become brands in their own right, like “Triple-A”, or “B-”. These meanings resist operations of numerical computation.

encyclopedias of each genre can be coded and counted, and claimed as an indicator of their value attribution by experts.³²

The power of large numbers due to digital means of aggregating and processing data on value attribution has changed valuation practices, particularly in fields where experiences are consumed en masse, and where newcomers are frequent. Through digital networks, the judgments of the many less engaged spectators are accessible, not only those of a few engaged critics and amateurs. The success of TripAdvisor in games of touristic experience is based on a combination of such condensed, quantitative value attributions with brief qualitative accounts by individuals, portraying their hotel, restaurant or museum experience. Every guest is converted into a potential reviewer.³³

Ranking judgments

Ranking techniques are a subcategory of judgment aggregation. The initial tool is invariably an algorithm that is commensurate with various nominal categories of worth. The registered value attributions are amalgamated through relative numerical weights attached to them. The result is a total number per entrant, be it an artist, a pop song, a law school or a city. The sequence of numbers can then be transformed into a plain rank number on the list.³⁴

A successful example from the visual art game is *KunstKompass*, a ranking tool invented in 1970, and still published annually. The algorithm computes reputation points assigned to several categories of exhibitions, reviews, honors, sales to museums, and positions in museums. The original purpose—inspired by similar tools for issued shares traded on stock markets—was to compare the outcome of an artist’s reputation assessment with the prices attained by works of that artist in order to identify artists whose works are “undervalued” on the art market.³⁵ Today, sophisticated digital tools have taken over the task. The algorithms provided by *Artfacts* or *Artsy* rank more than 500,000 artists and offer statistical data on auction prices, displayed in patterns adapted from financial asset analysis.

³² For an example, see O'Hagan and Kelly (2005). For a ranking of artists that use textbook illustrations as an indicator, see Galenson (2002).

³³ On the details of TripAdvisor’s combination of travel accounts with numerical ratings see Orlikowski and Scott (2014). See also Jeacle and Carter (2011).

³⁴ The consequences are considerable in education, where ranking tools are vital in determining the perceived reputation of universities. See Espeland and Sauder (2016).

³⁵ See capital.de/Kunstkompass. Data from *KunstKompass* are used in Hutter et al. (2007).

Appraising future valuations

Appraisal connotes a type of assessment that links the symbolic value of a work or performance to the “money terms” (Dewey 1939: 5) that might be paid in the future. Appraisals in financial games simulate a future market transaction by comparing the work in question with similar works that have been sold in the past at known prices. They do not involve the actual sale or purchase of the items to be valued.³⁶ The skill lies in applying relevant criteria for comparing the features of items sold in the past with the features of the works under consideration. For singular objects, like oil paintings, office buildings or brand values, such comparisons are difficult (Moor and Lury 2011).

In addition, conditions in markets for financial assets are volatile. Even the appraisal of financial assets that were acquired at a known price but whose current market price differs from that earlier price, leads to contingent results (Power and Mennicken 2015). Contingency is the reason for strategies of financial risk-spreading that involve the acquisition of artworks. The independence of their value generation from commercial fluctuations favors them for inclusion in risk-diversified wealth portfolios (Teece 1998; Velthuis and Coslor 2012; Gerlis 2014; Hutter 2014). Reputation for aesthetic quality generates stable value expectations, similar to expectations based on natural resources or on production capacities.³⁷

Appraisals of works and persons are not restricted to establishing the connection with financial worth. They also take place when the alternate play follows the rules of scientific conduct and achievement. Juries in competitions for scholarships or study courses appraise the applicant’s achievements against the horizon of future professional success, even if the shared understanding of such success is vague. Formal evaluation procedures, as they have become commonplace for university departments and for institutions in artistic fields, also constitute appraisals: the performance of the institution under review is held against past assessments of the performance achieved by comparable institutions, in order to predict future performance (Lamont 2009).

Probing claimed experiences

Claims to works that consist of symbols can be falsified. This is particularly frequent in the visual arts, when works in the style of a reputed artist are claimed as works by the hand of that artist. Works

³⁶ Muniesa speaks of “choreographies of valuation” that are performed in contemporary financial markets (2011: 33).

³⁷ A recently invented method is “contingent valuation”. It is frequently used in cultural policy issues. By asking survey respondents to express their valuation in money-equivalents, an estimate is constructed for the degree of value attributed to natural resources, like lakes, or cultural amenities, like opera houses (Bille Hansen 1991; Noonan 2003).

might also be inaccessible, like the content of a bottle of wine, or the talents of an actor or the repertoire of a musician. Providing “probes”, i.e. small fragments of the entire performance, is a strategy to gain confidence in claims for future experiences. When the probes contain fragments that can be analyzed, we speak of testing; when they consist of snippets from a sensorial experience, we speak of tasting.³⁸ Both practices will be sketched briefly.

Testing applies criteria that are external to the evaluator.³⁹ They are based on natural laws, or on historical fact. Criteria that refer to the material composition of an item are measurable in numerical magnitudes that can be counted and compared (Hutter and Stark 2015). Material testing favors laboratory-like situations where contingent circumstances can be controlled. The tests nevertheless rely on specifications that are negotiated and challenged between those involved in artistic or scientific projects—like authors, engineers and users (Pinch 1993).⁴⁰ In visual art games, material testing is used to prove or disprove the claim that a physical object belongs to a reputed artist’s body of work. Scientific tests of their physical, chemical and sometimes biological properties help to confirm or dispose of such claims. In a 1929 New York court case around the authenticity of a painting by Leonardo da Vinci, the judge found the test of a chemist specialized in analyzing pigments more convincing than the assessment of renowned art experts, which was based on stylistic connoisseurship (Brewer 2015). Still, there are many occasions when testing takes place at the symbolic level. Arguing for or against “the hand” of a well-known painter on the basis of small idiosyncrasies is still used as a first screening device for fakes. Somewhat in the middle between material and symbolic criteria lies the account of a work’s history, or provenance. Changes of a work’s location are on the material, or objective, side, while being part of a specific collection is part of the work’s symbolic narrative. Provenance assessment has the power to increase or decrease an artwork’s symbolic value capital.

Tasting enables players to estimate the value of the entire experience by being exposed to a small piece of the experience or to a fraction of the time span of the entire performance. Spectators are provided with samples of a movie, a music album or a dish that they can view, hear, or smell and savor. Tasting involves value attribution, but only as an indicator of future value attributed to the entire experience product. It requires a well-trained eye, ear, nose or palate (Karpik 2010; Fourcade

³⁸ Hutter and Fariás (2017) suggest “probing” as an umbrella term for all evaluation practices.

³⁹ For a recent, focused analysis of testing practices, see Marres and Stark (2020).

⁴⁰ Pinch draws his conclusions from a case of contested technical specifications in constructing new airplanes.

2016). In the field of gastronomy, organic, physical taste is real, not only metaphorical. Players in the wine game have received particular attention. They are experts, equipped with training, vocabulary and the memory of previous similar tastings, and amateurs that try to master the “pragmatics of sensory attention” (Hennion 2015). Every year, vintners, experts and *aficionados* taste the new vintages and compare them to vintages of past years. At this point in time, the actual experience of drinking a bottle of wine from the vintage tasted is still years in the future. Yet, the bottle’s value claim can be communicated credibly.

The practice of tasting extends to institutional procedures. On-site visits during formal evaluation procedures are means of “getting a taste” of the organization whose performance is to be assessed. Such a visit is too short to judge, but it is deemed long enough to confirm results gained from the formalized assessment process.

Aggregating, ranking, appraising and probing practices constitute value assessment. The examples were mostly taken from art play, interpreted in a very wide way to include games of shared experiences like gastronomy and tourism. Sport games, as activities and as spectacles, could have been a further rich source of actual assessment practices.

Assessment results are an inevitable imposition of worth, because they depart from individual opinions held by players. The imposition is necessary to establish a shared consensus on the accumulated stocks of symbolic artistic value in a particular game. The shared consensus—the *illusio* in its positive interpretation—might encompass rather small games that count not more than a few thousand participants, or it might extend to the millions of fans attached to some global music genre. In all these games, assessments shape individual decisions as to which works and events to seek out, avoid, pay for, experience and protest against in the future, with whom to cooperate and whom to avoid.

Value-paying practices

Payment is a very common mode of valuation. A sum of money, in units of an established currency, is given away in exchange for the right to own an object, or to gain access to its service. The item gained through the transaction is called a “commodity”, because the very act of payment makes it an object in commercial play.⁴¹ “Commerce”, or

⁴¹ Commodification in market games is a temporary state. All kinds of entities may go through a transaction, and then continue to play their role in a non-commercial game. See Kopytoff (1986).

“economy”,⁴² is the societal play through which players are provisioned with desired objects. Commercial play is splintered into many markets, or games of offering and acquiring commodities.

Payment in commodity transactions is not the only kind of move that connects art games with commercial play. Players also give money away in the form of private gifts, and in the form of public grants, paid out of tax money collected by political authorities.

Payments in commodity transactions

The amount of money value exchanged for exclusive rights to an object or an event is called its “price”. The price actually paid in a market transaction,⁴³ not simply the price asked, generates a numerical indicator of the commodity’s value. According to the prevalent economic theory, price is considered to be the only relevant indicator of a commodity’s value because the sum paid per commodity subsumes all possible influences on the valuation, and it expresses them in terms of the precise amount of monetary value given up.⁴⁴ Money, in this theory, is considered to be neutral—an externally given magnitude, just as the weight of an object is measured in grams and pounds.

Price paid per product indicates that the use-value for those who paid it exceeds their exchange-value of the object, exchange-value being use-value’s lower limit. In bargaining, buyers try to talk the object’s value down, while sellers try to talk it up to the buyer’s “reservation price”, the highest sum considered at given use-value. In regimes of fixed prices, sellers claim a price, and buyers can acquire an arbitrary number of products at that price.⁴⁵

This theory has plausibility for useful objects, reproduced and sold in large quantities. But is the same true when prices are paid for artworks? Are payments an adequate, or even the only adequate valuation mode in art games? The answer hinges on the applicability of the two core assumptions that make market transactions feasible: the practice of possession, and the performance of money.

In essence, artworks consist of information, of messages that trigger uncertain affective experiences. Artworks can take physical form, as in

⁴² The term “economy” is widely used with two meanings: the first refers to the specific play with the value medium of money; the second refers to any kind of autonomous play of value.

⁴³ The internal organization of markets is a separate issue. Economic sociologists have drawn attention to the complex performative mechanisms by which market prices are reached (MacKenzie 2008).

⁴⁴ *Locus classicus* is Debreu (1959). See also Hutter and Throsby (2008: ch. 1). Economists consider value attribution and assessment to be “cheap talk” because words, including those of value judgments, are seen as gratuitous.

⁴⁵ Fixed prices for consumer goods were introduced during the 19th century, and have become the rule in consumer goods markets (Crossick and Jaumann 1999).

paintings and sculptures, or in live performances of music and dance. The set of messages might also take symbolic form, coded as letters on paper, or as electronic charges in digital files, capable of generating audiovisual performances. In either case, possession is questionable.

Material artworks are singular. As objects, they are unique, even if they are produced as part of a series. As events, they are unique in time. As objects, they can be owned like any other material commodity. Since the works are unique, they have only one buyer, one player who is the highest bidder. To find that bidder, the auction mechanism, an alternative to fixed price and bargaining price, has been adopted. Auction events are value-charged occasions in themselves; they are matches in ongoing games of art play. The successful bidder might consume the acquired work as decoration and discard it eventually, or she/he might add it to a collection of already acquired artworks. As staged events, artworks are performances of sight and sound, like operas or rock concerts. A limited number of spectators gains access for a time span by paying a price, often differentiated by seating quality. The total sum of money paid for access to a particular production covers the cost of production only in the most popular genres. In many classical art genres, payment through community or state agencies covers the difference. These payments are discussed below as grants.

Price transactions for visual artworks seem straightforward—a sculpture, a painting or any kind of installation is transferred to the premises of the buyer, and a sum of money is paid to the seller. When demand for works is strong enough for payment, value attribution and assessment for these works have already taken place. The ground for shared valuation is now firm enough for sellers and for buyers to define conditions of appropriation, and to quote a price for their delivery. When works are sold in art galleries, the product is not only a singular painting, or a photograph in limited edition, but also membership in the social game orchestrated by the selling gallerist (Hutter et al. 2007). Inevitably, there will be sellers who try to manipulate the value of their stock of artworks: they pay for services of value attribution, and for favorable assessment results. In consequence, value attribution and assessment take place against the background of expected sales. Gallerists and dealers intervene in the relevant processes and try to steer the consensus toward the value positions they have already invested in. They might also try to deceive observers with arbitrarily high price signals, hoping to boost artistic value attribution for selected works and artists.

When artworks take on symbolic form, possession becomes more obscure. Messages have no physical form; they are directed at senses that synthesize auditory and visual signals into a meaningful mental experience. They might cost exorbitant amounts of money for their initial material generation and composition, but once the “master

copy” exists, it can be multiplied at low cost—relatively low in print, lower in broadcasting and even lower in digital files. As a countermeasure, most states have adopted laws of “intellectual property” that try to emulate barriers to unauthorized use of a work by granting time-limited privileges of use and reproduction to owners.⁴⁶ The nature of these barriers is highly contested. Although they protect monopolies, they also are a precondition for the commercial valuation of certain works, making it possible to pay for the investment necessary to produce future new works. The mechanism for selling copies of valuable works changes under the conditions of digital multiplication, from prices for single material copies to rental prices for electronic copies, or to flat fees for time-limited access to large digital libraries of music tracks, films or audiobooks (Hutter 2020). The valuation implicit in such payment forms is indicated by the number of viewings of a certain work, but the barriers to access are often so permeable that the number of pirated copies might be a more plausible value indicator.

Payment owes its easy and precise recognition as a measure of value to the properties of “money”. Money currencies consist of symbols that are understood among those who are competent in using that particular variety. Communication is addressed to the receiver of a bundle of banknotes or a positive entry in a bank account. The message is a promise that the indicated sum of value units will be accepted in a future exchange for the appropriation of some object or access to some event. Money is an umbrella term for all kinds of titles accepted in commercial play. The forms in practical use—stamped gold, signed contracts, certified positions in bank accounts or blockchain contracts—have become increasingly immaterial. The total flow of money obligations in commercial games is driven by expectations of future earnings, measured in the units legitimized in a given currency area.

Shared expectations determine the volume of credit titles circulating between public and private agents. The generation and circulation of financial titles is made possible by an elaborate two-tier banking system.⁴⁷ With the evolution of more effective forms of titles to future earnings, like shares of capital stock or bond issues, the volume of transactions that can be expressed in monetary terms has increased exponentially.⁴⁸ The titles function as “near-money” because they store commercial value and they can be transformed into cash money

⁴⁶ Patent rights, copyrights, performance and trademark rights protect certain uses of immaterial goods for a limited span of time (Samuelson 2000).

⁴⁷ Central banks regulate the money supply and the price of money, i.e. the interest rate. Business banks store, transfer, transform and loan money.

⁴⁸ See Hutter (1993, 1999).

quickly. Their properties also apply to material artworks: pieces by artists of high standing in an art game are sold and purchased at constant or even increasing prices, they are relatively easy to store and fairly quick to put up for auction. They have become attractive for commercial players who construct risk-minimizing portfolios of financial assets because price fluctuation in art markets follows criteria different from those that determine prices in business cycles. In such purchases, payment indicates primarily commercial valuation. However, players might combine an interest in commercial value storage and in positive returns on invested money with their affective engagement in art play.

The power to pay high prices and to purchase artworks in large number is concentrated among a few active commercial players, and players who have inherited or accumulated financial and productive capital. In art games, they participate as engaged spectators, more concretely as private collectors. A collection can become a performance in its own right when it is displayed and gains its own reputation.⁴⁹ Collectors can make artworks migrate from a studio or a gallery to a private home, to a storage space in a free port, to a private or a public museum. Directors of public museums are also among the buyers of artworks. The acquisition of works for a prestigious museum collection is interpreted by observing participants as an act of value attribution, and the attributed valuation spills over to works by the same artist in private collections.

Payments in gift and grant transactions

The practice of giving away valuable commodities as gifts is historically older than that of commodity transactions. Since the dawn of civilization, gifts have been offered and received between tribes, within social hierarchies and between friends. They are interpreted by participants and observers as expressions of mutual respect, and as ways to establish reciprocal social bonds (Hénaff 2010).⁵⁰ Unlike commodity transactions, the relationship between giver and taker does not end with the exchange. The gift taker enters an ongoing obligation toward the gift giver that is not precisely defined, yet is hoped to turn out satisfactory for both parties. Power holders in pre-capitalist times employed gifts in the form of presents and entitlements as a way of distributing resources to their dependents.

In art games, gifts may take the form of prizes with monetary endowment. Such prizes combine the attribution of artistic value with the payment of a sum of money. In some cases, the spending of the sum is restricted to activities that enable future creative work, in other

⁴⁹ Collecting has been interpreted as a fundamental way of increasing the price value of items by providing them with a narrative that links value positions of the past with the commodity. See Boltanski and Esquerre (2017b).

⁵⁰ See also Sherry (1983) and Hyde (2007).

cases the sum is given in recognition of the quality of past creations. The degree of merit is expressed in dual form, in monetary terms and in terms of the artistic distinction attributed to the prize, its historical prestige as well as that of the awarding institution. Gift giving in art games may also take forms that are less attention-seeking. Major private collectors spend money on artistically acclaimed buildings for their collections, on subsidizing publications related to artists represented in their collection, and sometimes on direct financial support for artists. The relationships and obligations thus generated are manifold, since museum directors, politicians, writers, artists and other players are among the gift takers.

In the public sector, gift transactions have taken the form of awarding grants. Grant givers are usually political agencies. They assign money accumulated in public accounts, but they do so in a particular way. The money is not given on the basis of some entitlement that results in a budget line. Instead, it is tendered to the competent public and, after a competitive selection process, awarded to those organizations or individuals that promise to fulfill the goals set by the granting agency. Whenever innovation is among these goals, grant competition is seen as the adequate form for allocating public funds. Grant takers are bound by the promises made in their proposals, but since new outcomes are desired, actual delivery is inevitably uncertain. Grant giving has become the rule in science funding, and its volume has increased in art games as well.

In art games, grants are also offered by private foundations, often provisioned through the estate of their founders. Grants to artists may take the form of a residency or other benefits in kind, but most of them are paid out as sums of money. Valuation lies in the amount of money and other valuable support granted, but also in the mere fact of being chosen out of a much larger cohort of artists with similar styles and comparable résumés. To select the grant receivers, value assessment practices like those described above are used. Since granting agencies involved in cultural policy apply the “arm’s-length-principle” (Hetherington 2017), they regularly commission judges to carry out the selection. The jury members tend to be peers in the game of the grant seekers. In order to protect the reputations and the personal relationships of contestants and judges, the process of selection is kept as confidential as possible (Chong 2015).

Payments for commodities, gifts and grants seem to be the simplest and most visible signal of an artist’s prestige or an artwork’s value even to distant observers. They make it easy to overlook that the amounts of money transacted are based on artistic value attributions and assessments. Payment is not simply a third valuation mode in art games, a practice to measure artistic value more conveniently. Whenever a player pays for something, she or he practices the valuation code of the appropriation play, making the commodity

acquired comparable to all the other commodities—goods, services, data files—that are paid for with the same kind of currency. When private and public payments are used in art games, the players have to translate between the two value codes. This task is not always accomplished skillfully, often commercial valuation dominates artistic valuation, and sometimes commercial valuation is outright rejected. So the tension between two disjunct value plays remains.

Contemporary valuation research: A comparison

With this model of valuation processes as a reference, the three post-Bourdieuian approaches briefly mentioned in the introductory section are now set into perspective.

Michèle Lamont had focused in earlier work on formal evaluation and selection practices in institutions of research and higher education (Lamont 2009). In recent work, she has sketched a much more general theory of valuation that might be applied to heterarchical practices in any other world of worth (Lamont 2012). She does suggest a distinction between “valuation practices (giving worth or value) and evaluative practices (assessing how an entity attains a certain type of worth)” (ibid.: 205). But she finds the two so indiscernible that she proposes the umbrella term “(e)valuation”. Her notion of evaluation matches “value assessment”, but her notion of valuation is unclear. On occasion, the term is substituted by valorization, legitimation or consecration. However, in a paper explicitly labeled as “post-Bourdieuian”, the arguments for leaving the traditional framework correspond with “value attribution in a game”: it matters “how subjects learn to appreciate and evaluate cultural objects and how cultural objects exert influence on evaluating subjects”. Evaluators are emotionally engaged in reaching their judgments, they are “driven by the desire to contribute to collective problem-solving” (Beljean et al. 2016: 43, 42).

Lamont started out with a traditional view on valuation by payment: pricing is the inverse, the counterpart to “cultural valuation”—which covers science and art in her case. But the recent contribution argues for a more nuanced view. Commercial considerations may be intertwined with aesthetic criteria, for instance, when production costs are high, or when cultural prestige drives up the price for objects and services. Lamont sees the connection to the work of economic sociologists. They went beyond the Bourdieusian genres of pure art and “extended empirical sociological research on valuation processes to a broad range of *cultural industries*” (Beljean et al. 2016: 44).

Nathalie Heinich began her research on values in visual art very early in her career. Her exemplary study on the “beatification” of the work of Vincent van Gogh still follows a Bourdieusian pattern (Heinich 1997 [1992]). A more theoretically focused study reinterprets

a Bourdieusian cultural field as a “triple game” [*triple jeu*] of valuation, being played in the contemporary visual art scene between artists, various kinds of intermediaries and various publics (Heinich 1998). Twenty years later, her insights led her to an explicit break with the Bourdieusian framework, and the proposition of a fully developed model of valuation. Parts of the French original (Heinich 2017) became recently accessible in English (Heinich 2020). Major parts of her model coincide with the model presented here; some aspects diverge.

Following Dewey, Heinich focuses on acts of valuation, which increase (valorize) or decrease (devalorize) the attribution of values to a thing, a person, an action or a situation. The attribution takes place in acts of judgment that combine personal appreciation with its expression toward others. The total value attributed is described as a “shared mental representation” (ibid.: 7)—shared, presumably by the players of the game. This sense of value is not discredited as illusion, but taken seriously. Heinich characterizes it as shared public value, which complements private values, rather than being dominated by them. With reference to Max Weber, a plurality of heteronomous values principles is claimed. Their construction, however, follows less the example of Weber, who posited half a dozen “spheres of value” (*Wertsphären*), including the economic and the aesthetic sphere, but the example of Boltanski and Thévenot’s orders of worth.

According to Heinich, there are three “forms under which valuation occurs: that is, first, measure (including, of course, price), second, attachment, and third, judgment” (ibid.: 9). Measurement includes any kind of marker to which social value is attached, including prizes awarded. This form seems quite similar to the mode of value assessment. The treatment of monetary payment as a kind of measurement, without regard for the peculiarities of ownership, precludes a more differentiated treatment of the mode of payment. “Attachment”, the second form, encompasses manifestations of physical reaction, like joy or disgust, toward the item to be valued. The medium of expression for “judgments” is language. Judgments constitute the “actual operations through which a value is attributed” (ibid.: 10). In contrast, the model proposed here combines the emotional attachment of the players with their value-attributing judgments.

The forms of value attribution are just one of the categories that constitute Heinich’s model. Apart from the four kinds of objects, she identifies three operators (object, subject, context), three logical levels of worth (quality, commodity, principle) and three temporal moments: practices before the act of valuation are concerned with repertoire, those during the act with interaction and conflict, and those after the act with “the permanent re-elaboration of the repertoire” (ibid.: 15). Attention to the peculiarities of the three temporal moments seems to

be a promising aim for further research on the distributed process of valuation.

Marion Fourcade is an economic sociologist. In consequence, payments on markets are the standard practice of valuation in her research domain. But, like Heinich, she sees her work in the broader tradition of moral philosophy. In a paper addressed to “theoretical agenda setting”, she distinguishes three logical principles of classificatory judgment: nominality, ordinality and cardinality (Fourcade 2016). In the traditional practice of attributing value, a nominal, already value-charged category is chosen. Nominal categories are “lumpy”, and they are “priceless”—which makes them attractive to cultural games. A more “fluid” way of value attribution employs ordinal judgments, often enhanced by cardinal numbers. Ratings and rankings are popular ordinal methods, but ordinal distinction might simply consist of two states: “high” and “low”, or “in” and “out”. Ordinal scales permit commensuration between diverse objects of value, which makes them similar to the money scale, known as “a particularly efficient instrument of commensuration” (ibid.: 178). Because of that similarity, and because of the rise of ordinal measuring with digital technology, Fourcade expects an expansion of price valuation, as ordinal measures are “translated” into money values. She introduces a Bourdieusian notion of material and cultural capital to argue for a third type, “ubercapital”, that is accumulated by doing well on digitalized performance scores (Fourcade and Healy 2017).

For Fourcade there is no theoretically relevant difference between value attribution and value assessment. Her dividing line separates ordinal valuation, including cardinal devices like prices, from nominal valuation. Different “worth-ordering principles” are acknowledged, and they are reflected in the assumption of kinds of capital that are not expressible in money units. But the social world of model is still firmly centered on the economic play, with all other plays as peripheral territory, where valuation is either (ordinally) similar or (nominally) distinct.

These short accounts are intended to demonstrate commonalities and differences in theorizing about valuation practices throughout society. Many of the features are also found in the model proposed here, and they share the goal to break with fundamental assumptions of the Bourdieusian model. They differ in distinguishing less clearly between value attribution and value assessment, and in assuming pricing to be either external or central, but not alongside the other value scales developed in the value plays of contemporary society.

Valuation practices across plays of value

It was the aim of this paper to find empirical support in art games for the claim that valuation practices are performed in three modes: value attributing practices generate the value medium; assessment practices

make single valuation acts commensurable, and make it possible to accumulate value in the terms of a given game; paying practices link the attributed and assessed values to monetary valuation.

The actual practices, as they are recorded and documented in the literature, are often “folded” (Helgesson 2016): value attribution blurs with performance when applause motivates the musicians. Attribution blurs with assessment in the judgments and recommendations of guidebooks to gastronomical and artistic sites. Appraisal, as a form of assessment, blurs with payment valuation when it is employed as a predictor of future price. This is a particularly contested border because artworks are drawn into the appropriation sphere at the risk of jeopardizing their artistic value standing.

The players have differing experiences, they have differing interests, and they have differing skills and resources to assert their own opinions. Therefore, attributions, methods of assessment and particularly their relation to payments are constantly debated and contested. Artists and producers engage in much praise and some critique, they quote assessments that suit them, they pay prices for material resources, and they are paid for fictional works and services. Tourists and other curiosity seekers just pay the access price or a flat rate, while engaged spectators, like fans, amateurs and experts, are so skilled and knowledgeable that their value attributions and assessments are recognized and adopted by other players. The engagement of the players is an essential aspect of the value play model. Experiences are affective, and so are attributions, both positive and negative. Concern with materiality is less focused on the physical environment in this model. It is shifted to the body, with all its senses and all its mental capacities.

The review of post-Bourdieusian approaches affirmed the switch from a hierarchical to a heterarchical model of society, with a number of autonomous plays of value, each performing its special function within the rules of a multitude of social games. The model, however, prompts the question whether the three modes of valuation observed in the artistic (or aesthetic, or cultural) play can serve as an exemplary case for modes of valuation in other plays of value. At this point, an answer to this question can only gather some strands of evidence that are readily visible.

In the case of value attribution, some similarities are striking. Consecration, a practice observed in religious play, notably in the Catholic faith game, was considered similar enough to serve as a descriptor of value generation and preservation in art games. Value attribution in the games of science is also evident, although the competence for attributing value markers is claimed by peers, rather than by players who are exposed to artistic productions and performances. Value attribution in commercial games is particularly obvious since it is documented in the size of payments for ownership

of some kind of commodity or service. Political power has varying sources, ranging from physical violence to democratic majority vote. The outcome, and thus the attribution of public authority, is usually clear enough to govern social life within a given territory. The case of legal value is intricate: Bourdieu used “legitimacy” alongside “consecration”, but left the games generating such legal value unexamined. Legitimacy, not only as a nominal, but also as an ordinally scalable value, relies on “shared mental representations” that are formed, within legal games, into a series of individual and collective rights of the participants. The differing degree of value attributed to such rights is the basis of judgments pronounced by judges—players who have acquired authority within a hierarchy, comparable to that of priests in religious games.

Value assessment necessitates practices of comparison. As with the varieties of praise and prizes, certain value markers are considered to be commensurable. In consequence, they can be counted, with cardinal numbers, and aggregated in frameworks of accounting. Accounting is a practice known from commercial games, where it is indispensable for most of the players. The ratings and rankings used to generate assessed value in art games have their parallels in the evaluation formats of the games in science, sometimes refined into algorithmic indices based on publications in journals to which differing scholarly weights are attributed. Value assessment in law games has a different form: the claims of the parties before a court are compared, and they are assessed by the advocates of the parties. These preliminary assessments are the basis for the final, legitimate assessment by the judges who constitute the “chamber” of a court. Value assessment in political games is a sophisticated skill: players have to be able to judge power relations without their explicit execution. They rely on representative signs of the power holders, and on surveys that aggregate the opinions of experts or of the voting population. In religious play, assessment is of little relevance in monotheistic faith games, because the dogmatic nominal difference between the profane and the holy sphere prevents ordinal shadings of value that lead to a demand for assessment. In animist religions, however, value is distributed finely between spiritual entities—things, persons, sites and situations. Those who perform the game’s cult do not distinguish between attributing and assessing spiritual power, since the source of such power is considered to be transcendental.

Valuation by payment sits uneasily with the other two modes, since it employs the practice of value attribution developed in one particular play of value, the economy. The games in that play have as their goal the assignment of property rights to the highest-valuing user, and they rely on the expression of that value through the payment of money, which is a medium consisting of diverse financial assets. In consequence, value attribution by the buyer and the performance of

payment fall into one. For the other value plays, however, the payment scale remains in tension and contradiction with their own, autonomous value scale. This tension has been observed and criticized in art games, whenever material objects and copyrights are exposed to pricing practice. It exists in the other plays of value as well: when prayers are bought, or scientists are paid to work on certain commercial projects, or legal advisors are paid to represent a client. The payment for court decisions, however, is outlawed, and so is the payment for favorable treatment by politicians and civil servants, although the influence of payments for election campaigns and other devices in power struggles is unmistakable.

Despite the constant debate about the appropriate relationship between the commercial and the non-commercial value scale at hand, the duality of practices stabilizes the value positions on both of them, either explicitly or implicitly. Similar advantages of external value dimensions can be observed with respect to most plays of value: Legal and political value considerations are relevant for decisions in all the games, across a territorially restricted range, scientific authority is recognized globally in most games, religious value has lost ground in some regions and gained ground in others. Even aesthetic value considerations are recognized, globally and locally, in games that follow another value code.

The analytical distinction of the three modes of valuation, as they are practiced in these adaptations to various plays of value, should be helpful in understanding their real and historical entanglements, their mutual coupling and their incompatibility.

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