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Theme issue editorial

Valuation as a Semiotic, Narrative, and Dramaturgical Problem

Fabian Muniesa and José Ossandón

Value is, at least in part, about signs. But then the study of valuation as a problem requires confronting the multifarious debates on the meaning of *signification*. Several paths have been opened already, with many studies of valuation drawing from various traditions in semiotics, resulting in different understandings of what value as sign is and does. And a similar point can be made about *narration*. Valuation is a *narrative accomplishment* and therefore it can (and has been) analyzed with the help of tools developed to inspect styles, tropes, and plots; and through different ways of connecting these to different theories of the rhetoric, narrative, and linguistic constitution of reality. And comparable paths can be (and have been) explored in which value is thought of as a *performance*, where valuation is examined from the perspective of *dramaturgy*, contrasting several understandings of what it means to act, to enact, to represent, or to express.

It is now time, it seems, to acknowledge the fact that social studies of valuation rely – or can rely – to a great extent on analytical tools and concepts developed originally for the analysis of signs, texts, and plays, drawing from different semiotic paradigms, different approaches

Fabian Muniesa is Professor at the Centre de Sociologie de l'Innovation, Ecole des Mines de Paris.
José Ossandón is Associate professor at the Department of Organization, Copenhagen Business School.

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to the study of discourse and narrative, and different understandings of the meaning of enactment, performance, and role-play. Is this import flow at a standstill today? Is the toolbox of valuation studies in need of renewal from that angle? The pages of the journal *Valuation Studies* have always remained open to this conversation, as made explicit in a number of past editorial notes (e.g., Muniesa and Helgesson 2013). Today, however, the impression is that the bulk of the discussion has been lacking work in this particular direction. It is as if the conceptual toolbox of studies of valuation is formed and fixed for good.

This theme issue is an invitation. It is a call to rethink and explore how concepts that might have been developed for the study of semiotics, drama, and narrative could better equip the study of *valuation and value as a problem*. It is an invitation for contributions that – while not loosening their empirical grip on and interest in specific valuation situations – could use the opportunity to explore and hopefully enrich the conceptual toolbox of future studies of valuation. The theme issue has seven articles: each of these articles proposes a distinct answer to the call to rethink valuation as a semiotic, dramaturgical, and narrative problem.

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Let us start with the connection between value and sign, between valuation and signification. This is a question linguists and semioticians have hardly neglected, as the very notion of value is, at least in part, inherent in their disciplinary repertoires. Graeber (2001), among others, quite clearly signaled this in his remarks on the foundations of an ‘anthropological theory of value’, referring to Saussure. Kockleman (2005, 2020) endeavored more recently to put Peirce first and to explore the potentials of ‘semiosis’ as a distinctive instrument for the examination of valuation processes. Muniesa (2007), in turn, showed how the study of ‘pricing’ could draw from Peirce’s theory of signs. In his contribution, Tom Duterme further develops that direction. He invites us to ask why we need to bother with Peirce and the very specific sense of valuation as semiosis that emerges from this perspective. Duterme pays attention to an object whose relevance for the valuation studies literature was once explored, for example, by Millo (2007): financial stock indexes. These objects populate the screens of financial analysts, asset managers, and derivatives traders, and they certainly shape what valuation is about, and the consequences thereof. Indeed, stock indexes do certainly signify. But what? And how? Duterme’s proposition is that, instead of assuming that stock indexes have a fixed role, they should be inspected in terms of what they do; their semiotic value, so to say, shifts in various relational configurations, and that two of the triads proposed by Peirce (*iconic*, *indexical*, and *symbolic* and *rhematic*, *dicent*, and *argumentative*) could help us in tracing such variability. To simplify a more complicated grid: sometimes the stock index *indexes* – it refers to the actions of peers – sometimes it is taken as an icon, as a representation of the market, and in others it works as a symbol that encapsulates interpretations about the reality of the market.

The problem at hand here is certainly manifold. It includes clarifying the contribution of semiotic analysis to the study of valuation, but it is also controlled by momentous attention to one particular ensemble of valuation problems: those dealing with the pervasiveness of business valuation today, with varieties of finance, marketing, management, economics, and strategy forming the meaning of value in countless sites and circumstances. Meaning is power: the power to signal, to justify and to propel. And recent critical forays into the ductile problem of the meaning and power of capital (or the meaning of capital as power) have rightly revived interest in authors such as Castoriadis, for example (Nitzan and Bichler 2009). A semiotic take in valuation studies, however, is often accused of remaining focused on the surface of capital. This is particularly the case when the semiotic take openly sides with actor–network theory (ANT). Can a critique of capital be elaborated from this perspective (Muniesa 2019)? Metaphors of 'surface' and 'core' operate a curious tension.

In his contribution to this theme issue, Ulises Navarro Aguiar examines one of those 'superficial' expressions of the signs of capital: a report from a major consultancy company aiming at promoting the business valuation of a particular sector (here, design). Here, Latour comes at the forefront, particularly through the greimassian foundations of his early work, where emphasis is on the semiotic narratives and entities constructed in and around technical documents. What Navarro Aguiar rehearses is a method of close reading that is attentive to the specific narrative constraints that constitute the consultancy report (how it unfolds as a puzzle akin to detective fiction) and, from there, to hypothesize what the report produces as semiotic intervention. The report produces value but not, merely, in accounting the value of design, but in a way in which design is rediscovered as a form of asset worth investing in.

Navarro Aguiar's inspection of the consultancy report could be connected to some of the articles in this theme issue that also call for better attending to those documents that populate valuation and their particular dramaturgical constraints and properties. True, theater features, besides text alone, as a recurring metaphor in the social sciences and the humanities: one that allows sometimes emphasizing the expressive intensity of the way in which meaning is produced in a particular circumstance, and some other times highlighting how contrived and affected this production of meaning may turn. Goffman stands certainly as an unavoidable resource here, one that allows refining a penchant for the theatrical imagery of 'role-playing' that is indefectibly at work in the sociological mainstream. And, indeed, the notion of 'performance' features prominently in recent valuation studies literature (e.g. Muniesa 2014; Stark 2020), at once signaling its connections to theories of language, theories of management, and theories of theater (McKenzie 2001).

In their contribution to this theme issue, Julian Hamann and Kathia Serrano-Velarde join this line of inquiry. They look at academia, and their study deals with the all too familiar game of the researcher as a perpetual candidate, a performer who ought to enact unceasingly the persona of the applicant (see also Ossandón 2021). Their research, though, focuses on the kinds of writings this process entails: grant funding, for example, increasingly involves official documents that demand competence in managerial wording, prompting candidates to espouse the jargon of accountability and procedure. Narration and enactment, text and play, signs and acts: all connected. As colleagues such as Cooren (2004) have convincingly demonstrated, 'textual agency' stands as a key ingredient of organizational life. And this certainly applies to valuation life too. Hamann and Serrano-Velarde show in particular how the figure of the candidate, and candidacy as an organizational process, are framed and scripted with and through the documents that accompany university procedures, and how archival analysis of said documents can help us in unveiling the historicity and contingency of the perpetual academic candidate that we might today take for granted.

Considering valuation as a matter of performative, semiotic engines is part of a tradition in critical thinking that is now well established within the valuation studies repertoire. Deleuze and Guattari, followed by Alliez, certainly bring here a set of fruitful resources with their approach to capital as a semiotic assemblage. Althusser's notion of interpellation, or Laclau's approach to the rhetoric constitution of society also enter the critical mix. What is 'critical' about these and comparable approaches is subject to debate. But it certainly includes the fact of considering the signification of value as inherently problematic: either because it contains inescapable contradictions, prompts spiraling interpretations, or because it sustains ideological fantasies. Financial valuation offers a case in point. Currently trending debates on financialization have highlighted the problem of the 'asset economy' or the 'asset condition' (Muniesa et al. 2017; Adkins et al. 2020; Birch and Muniesa 2020).

But how is the 'asset' – a key element in the financial valuation device – considered in terms of a semiotic operation? Alessandro Maresca, Giulia Dal Maso, and Aneil Tripathy adopt a promising angle in their contribution to this theme issue. They consider the asset complex that sustains so-called 'green finance' (with particular reference to the case of green bonds) as an ideological apparatus, approaching it with a notion of performativity less inspired by a science and technology studies (STS) tradition and instead informed by Althusser's notion of interpellation, and its interpretation by authors such as Buttler and Balibar. The article's proposition is that green finance is performative, but not only in the sense captured by approaches that inspect how the models used in financial valuation enact the agents inscribed in financial economics, rather in a way in which a new type of actor, the green financier, and new types of financial realities, the *greenium*, come about as they are named as such. It is this particular form of *ideological* reality the authors remark should be given further attention.

Capital is a performance. Or, at least, it can be considered as such, and it is analytically fruitful to do so. The dramaturgical dimension of the process of practicing the 'allure' of capital is present in a number of valuable ethnographic studies (e.g., Røyrvik 2011). And the metaphor of show and theater has been usefully developed in critical management studies (e.g., Biehl-Missal 2011). But what does this angle entail? What does it mean to call something a performance, a show, a play or a spectacle? Anyone familiar with performance and theater studies knows that there exist a vast variety of methods, theories and approaches there. And the philosophical take is also notoriously high, with multiple, contrasting approaches to the reality of the simulacrum, from the classic debate on the virtue of theater in ancient Greek philosophy to the conflicting positions of Deleuze and Baudrillard on the problem of simulacra (Muniesa 2014). In their contribution to this theme issue, Sylvain Maechler and Valérie Boisvert approach this discussion with reference to a particularly timely case. Capital certainly stands as a recurring metaphor in the valuation of natural resources, but it is also a principle of dramatization: a resource to foster characterization and impersonation and to generate expression and adhesion. The article is a call to inspect the sites and figures of the global nature-accounting circuits as drama in a literal sense. This type of research invites us to interrogate the value of the dramaturgical repertoire in valuation studies: certainly not as a device to denounce the lack of reality of something that would be spurious and fake ('just theater'), but as a tool to further understanding of the constitutive function of drama.

Valuation is not only about discrete punctuated events, such as prices are, though. It is also about the narrative accomplishment of long chains of signs. And when we say that, we inevitably open up old discussions about the emphasis that one is meant to put either on the mediations, devices and processes this narrative accomplishment is made of, or on what it tells – that is, on the content and significance of discourse, and the assessment thereof. Foucault stands certainly as a pivotal resource in that discussion: a resource both for the investigation of the various technologies of ordering that produce meaning in particular situations, and for the characterization of the wider, distinct epistemic orders that are hence instituted. The same can be said of Latour: at once punctiliously promoting the scaling down of signification – the semiotic engine known as 'actor–network theory' – and passionately calling for the reconsideration, if not the philosophical restoration and normative reassessment, of the different regimes of enunciation – or 'modes of existence' – that make and unmake our world. The influence of ANT in valuation studies is indeed palpable, as attested by editorial initiatives such as those offered by Antal et al. (2015) and Kornberger et al. (2015), and by Doganova (2019) in her recent summary of the 'value' of ANT for the study of economic valuation devices. But that influence has been often combined there, often with quite some difficulty, with understandings of value derived from mainstream sociology or the humanities. In her contribution to this theme issue, Patrycja Kaszynska offers a frontal approach to the clarification of this difficulty. She provides a diagnosis of the limitations with which ANT may have been loading valuations studies, and she offers a way out. Does a notion of 'narrative intelligibility' enable a renewed connection to the normative approach to values inherited from (and inherent in) the tradition of moral philosophy? This is a thread the valuation studies conversation should cling to, and a thread in which the narrative accomplishment of valuation comes at the forefront.

So, how are we ('we' in so-called 'valuation studies') supposed to use the notion of value, if at all, then? As an analytical concept? Or as a what? This is certainly a theoretical question. But it is also a semiotic one: valuation studies (and not just valuation) as a semiotic, narrative, and dramaturgical problem. Making sense of and within valuation studies is certainly a problem that the editorial board of this journal is not unfamiliar with, as multiple editorial notes attest (e.g., Helgesson and Muniesa 2013; Doganova et al. 2014, 2018). And we have some news: there is no univocal recipe. And it is not that there are several univocal recipes, it is rather that all recipes might be equivocal at some point. Some see for example a clear direction in a rather classic sociological orientation that emphasizes the existence of several contrasting regimes of value in society, as exemplified for example by the influential work of Boltanski and Thévenot, but also by an institutionalist tradition in the social sciences. Others would rather advocate for an emancipation from the analytical category of valuation, considering it rather as a vernacular jargon that ought to be deciphered ethnographically, or even as an 'ethnomethod' in the vein of Garfinkel. But these and other options do not form clear-cut alternatives. And this is even more so 'after performativity' (Ossandón 2019). Writing about value and valuation, indeed, raises the question of the agency of both the concepts at work and the texts that mobilize these concepts. And the same can be said about the polysemy of notions of the market (Frankel 2018).

In his contribution to this theme issue, Johannes Coughlan dissects this problem. We, in valuation studies, maneuver within the realm of polysemy. Some order can be brought in, however, not through pure scholarly clarification but rather through empirical, ethnographic test. Coughlan uses here materials from an ethnography of an architecture office in order to pressure the conditions in which valuation studies can make sense, offering a useful compass with which to navigate several 'grammars' of valuation studies.

References

Adkins, Lisa, Melinda Cooper, and Martijn Konings. 2020. *The Asset Economy*. Cambridge: Polity.

Antal, Ariane Berthoin, Michael Hutter, and David Stark (eds.). 2015. *Moments of Valuation: Exploring Sites of Dissonance*. Oxford: Oxford University Press.

Biehl-Missal, Brigitte. 2011. "Business is Show Business: Management Presentations as Performance." *Journal of Management Studies* 48(3): 619–645.

Birch, Kean, and Fabian Muniesa (eds.). 2020. *Assetization: Turning Things into Assets in Technoscientific Capitalism*. Cambridge, MA: MIT Press.

Cooren, François. 2004. "Textual Agency: How Texts Do Things in Organizational Settings?" *Organization* 11(3): 373–393.

Doganova, Liliana. 2019. "What is the Value of ANT Research into Economic Valuation Devices?" In *The Routledge Companion to Actor-Network Theory*, edited by Anders Blok, Ignacio Farias, and Celia Roberts, 256–263. London: Routledge.

Doganova, Liliana, Martin Giraudeau, Claes-Fredrik Helgesson, Hans Kjellberg, Francis Lee, Alexandre Mallard, Andrea Mennicken, Fabian Muniesa, Ebba Sjögren, and Teun Zuiderent-Jerak. 2014. "Valuation Studies and the Critique of Valuation." *Valuation Studies* 2(2): 87–96.

Doganova, Liliana, Martin Giraudeau, Hans Kjellberg, Claes-Fredrik Helgesson, Francis Lee, Alexandre Mallard, Andrea Mennicken, Fabian Muniesa, Ebba Sjögren, and Teun Zuiderent-Jerak. 2018. "Five Years! Have We Not Had Enough of Valuation Studies by Now?" *Valuation Studies* 5(2): 83–91.

Frankel, Christian 2018. "The 's' in Markets: Mundane Market Concepts and How to Know a (Strawberry) Market." *Journal of Cultural Economy* 11(5): 458–475.

Graeber, David. 2001. *Toward an Anthropological Theory of Value: The False Coin of Our Own Dreams*. London: Palgrave.

Helgesson, Claes-Fredrik, and Fabian Muniesa. 2013. "For What it's Worth: An Introduction to Valuation Studies." *Valuation Studies* 1(1): 1–10.

Kockleman, Paul. 2005. "The semiotic stance." *Semiotica* 157(1/4): 233–304.

Kockleman, Paul. 2020. *Kinds of Value: An Experiment in Modal Anthropology*. Chicago, IL: University of Chicago Press.

Kornberger, Martin, Lise Justesen, Anders Koed Madsen, and Jan Mouritsen (eds.). 2015. *Making Things Valuable.* Oxford: Oxford University Press.

McKenzie, Jon. 2001. *Perform or Else: From Discipline to Performance*. London: Routledge.

Millo, Yuval. 2007. "Making Things Deliverable: The Origins of Index-Based Derivatives." In *Market Devices*, edited by Michel Callon, Yuval Millo, and Fabian Muniesa, 196–214. London: Blackwell.

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

Muniesa, Fabian. 2014. *The Provoked Economy: Economic Reality and the Performative Turn*. London: Routledge.

Muniesa, Fabian. 2019. "Is ANT a Critique of Capital?" In *The Routledge Companion to Actor-Network Theory*, edited by Anders Blok, Ignacio Farias, and Celia Roberts, 56–63. London: Routledge.

Muniesa, Fabian, and Claes-Fredrik Helgesson. 2013. "Valuation Studies and the Spectacle of valuation." *Valuation Studies* 1(2): 119–123.

Muniesa, Fabian, Liliana Doganova, Horacio Ortiz, Florence Paterson, Alaric Bourgoin, Véra Ehrenstein, Pierre-André Juven, David Pontille, Basak Saraç-Lesavre, and Guillaume Yon. 2017. *Capitalization: A Cultural Guide*. Paris: Presses des Mines.

Nitzan, Jonathan, and Shishmon Bichler. 2009. *Capital as Power: A Study of Order and Creorder*. London: Routledge.

Ossandón, José. 2019. "How to Write after Performativity?" In *The Routledge Companion to Actor-Network Theory*, edited by Anders Blok, Ignacio Farias, and Celia Roberts, 46–55. London: Routledge.

Ossandón, José. 2021. "(University) Management after Valuation Studies: Carving a Practice between the Offended Native, the Anxious Scholar, and the Useless Practitioner." *Valuation Studies* 8(2): 61–72.

Røyrvik, Emil A. 2011. *The Allure of Capitalism: An Ethnography of Management and the Global Economy in Crisis*. New York, NY: Berghahn.

Stark, David (ed.). 2020. T*he Performance Complex: Competition and Competitions in Social Life*. Oxford: Oxford University Press.

Fabian Muniesa is Research Director (Professor) at Mines Paris – PSL, and a member of the Centre de Sociologie de l'Innovation in Paris. He is the author of *The Provoked Economy: Economic Reality and the Performative Turn* (Routledge, 2014). His most recent research interests include the anthropological critique of value, and the

connections between finance and paranoia. He is the co-founder of the journal *Valuation Studies*.

José Ossandón is Associate Professor in the Organization of Markets, Department of Organization, Copenhagen Business School. He specializes in economic sociology, social studies of finance, and social studies of markets. His current collaborative research efforts focus on two main areas: the work and techniques deployed in the organization of markets designed to deal with collective problems, and on the different actors and practices involved in managing household finance. He is co-editor-in-chief of *Valuation Studies* and associate editor of *The Journal of Cultural Economy.*

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Theme issue contribution

The Semiosis of Stock Market Indices: Taking Charles Sanders Peirce to a Trading Room

Tom Duterme

Abstract
Stock market indices are among the signs populating financial markets and allowing traders to support their valuation work. The movements of the Dow Jones and the S&P 500 are constantly monitored, but how are they interpreted? Is this interpretation unique to each trader? Does it depend on how the indices are communicated? Considering these questions, this article aims to illustrate the heuristic interests of Charles Sanders Peirce's semiotics. Peirce's concepts can elucidate that stock indices assume different semiotic statuses. Depending on the financial context in which they operate, their signification and thus their function for traders will vary. This article demonstrates the usefulness of these concepts through empirical illustrations drawn from the literature, the financial press and a fieldwork in a trading room. Beyond this case study, this article reveals how the Peircian toolbox contributes to the studies of valuation signs.

Keywords: stock market index; semiotics; finance; Peirce; trading room

Tom Duterme is FNRS Research Fellow at University of Louvain.

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Introduction

Traders are overwhelmed by signs.[1] 'This is the fate of all our contemporaries', a postmodern thinker might reply. Admittedly, every city dweller is constantly stimulated by their environment (advertisements, passers-by, road noise …). However, they allow themselves to refuse most of these 'propositions'; they adopt, for their psychic well-being, 'the blasé attitude' (Simmel 1995: 412). Since 'nothing is a sign unless it is interpreted as a sign' (2.308[2]), most urban stimuli do not flower into semiosis. This is different in trading rooms where signs are better received. According to the sociologist Charles Smith, this receptivity is the trader's main mission: 'The crucial task here is not to become fixated on any given set of markers at any given time, since new markers of importance are apt to appear suddenly while others are likely to disappear' (Smith 2011: 279). This implies a permanent vigilance not only for signs, but also for the absence of signs, which then becomes a sign. As Smith notes, 'some key markers take the form of the expected not happening: these markers make their mark by continuing to remain dormant' (Smith 2011: 284). The trader's semiotic work does not stop there though: 'When a marker appears, it still needs to be interpreted within the existing context' (284).

These 'markers' do not bring together all the signs that traders are confronted with. The work of interpretation involves discarding some stimuli deemed irrelevant (the attire of colleagues, the noise of the trading room fan, etc.). The markers evoked by Smith are the signs *that enable the valuation of financial products*. Only these markers are used by traders to revise their positions. Their scope is unclear: some are well established (price-earnings ratio, volatility, volume, etc.), others make rather cyclical appearances. For example, the generally insignificant attire of colleagues can become a relevant 'marker' if sweaty halos are perceived as an index of panic in the market managed by that colleague. In this article, I will adopt the semiotics of Charles Sanders Peirce to study a well-established valuation sign: the stock market index.

The contribution of this article is therefore predominantly theoretical. It presents the 'toolbox' of Peircian semiotics and demonstrates, through a case study, its twofold relevance for valuation studies. On the one hand, concepts relating to the relationship between

[1] The term 'trader', often used generically to designate any participant in financial markets, will refer in this article to the profession which consists in buying and selling securities – whether for own account or within a mandate. Located at one extremity of the chain of participants (client-salesperson-trader or employee-pension fund-asset manager-trader), the trader is therefore the one in direct contact with the market which they monitor via their various screens.

[2] Peirce's writings are referenced in the standard form: (n.m) refers to paragraph m of volume n of the Collected Papers.

a sign and its object (icon, index, symbol) allow a systematic description of 'valuation signs' through identification of the plurality of their meaning: a sign is not assigned, *a priori*, to a unique object. On the other hand, the second conceptual triad explored in this article (rheme, dicent, argument) opens the way for an analysis of the role of signs in the process of valuation, by suggesting certain hypothetical effects that can be tested empirically. Given this double contribution, I believe that pragmatist-oriented studies on relations between economic devices and valuation practices can benefit from Peirce's toolbox. If its main purpose is to illustrate the heuristic virtues of this toolbox, the case study proposed in this article also sheds light on stock market indices, at the heart of contemporary stock markets but yet little studied.

The article is structured as follows: The first section presents the concepts of Peirce's semiotics, which will be useful for analyzing stock market indices and then reviews previous works linking Peirce, valuation and financial markets. The following sections illustrate how stock indices can assume different semiotic statuses. Depending on the financial context in which they operate, their signification and thus their function for traders will vary. Finally, the conclusion focuses on the consequences for this theme issue of *Valuation Studies*, and for studies of valuation in general.

Key concepts of Peircian semiotics

For Peirce, semiosis is a process of signification involving 'the cooperation of three subjects' (5.484): a sign or representamen (e.g. a cry) that refers to an *object* (a person's fear or distress) for an *interpretant* (the effect produced: directing attention to the origin of the cry). This already implies the pragmatic dimension of semiosis. First, the relationship between the sign and the object (which will determine the one between the sign and the interpretant) is attached to a situation; in other words, only practice informs to which object the sign refers (for a cry: surprise, joy, distress, madness …). Second, the attribution of a semiotic status is contextual: a public cry can become the *object* if a witness plans to mime the situation, while the orientation of the witnesses' attention can be a *sign* of an event 'worthy of attention' for other passers-by. Each component of semiosis, as well as each relationship between these three components, can itself take three forms.[3]

[3] These triads are always structured around the three categories of Peirce's philosophy: Firstness (pure quality remaining at the state of potential; for example, solidity), Secondness (actual causal relation; a stone hitting a wall), Thirdness (general mediation, ensuring predictability; the law announcing the reaction of the wall to the shock of the stone).

The referral of the sign to the object can be iconic, indexical or symbolic (2.299). The icon *resembles* the object; it owes its semiotic power only to its own quality (a unicorn drawing is a sign, even if its object does not exist). The index[4] is *marked* by the object; it testifies to the object by a physical connection with it (a weather vane can only refer to its object if the wind actually blows). The symbol is associated by *convention* with the object; it refers to the object via a mediator who links them by virtue of a general rule (the semiotic quality of a word is based only on the convention regulating interpretation).

As for the relationship between the sign and the interpretant, it can be rhematic, dicent or argumentative. A rheme loosely determines its interpretant, limiting itself to *suggesting* a potentiality; 'not true nor false' (8.337), it is illustrated, in Peirce's work, by phrases with blanks, such as ' -- *buys-- from* -- f*or the price* - ' (3.420). A *dicisign* transmits information 'without furnishing any rational persuasion of it' (2.313). It relies on previous experience to *submit* an interpretation. Peirce takes the example of a photograph: 'the mere print does not, in itself, convey any information. But the fact, that it is virtually a section of rays projected from an object **otherwise known,** renders it a Dicisign' (2.320, emphasis in the original). The argument, finally, *involves* its interpretant, whom Peirce then calls its 'conclusion' (2.95); deductive reasoning, for example, brings into play arguments that constrain the interpretant to the point of making it necessary.

	Firstness	**Secondness**	**Thirdness**
Relation to the object	*Iconic* (looks like)	*Indexical* (marked)	*Symbolic* (refers to by convention)
Relation to the interpretant	*Rhematic* (suggests)	*Dicent* (proposes)	*Argumentative* (implies)

Table 1a: Two triads of Peircian semiotics
Source: Author's work, from Peirce (1931-5)

Peirce and valuation studies of finance

This article's approach lies at the crossroads of two research streams: valuation studies and the social studies of finance. In the first field of research, I take up the perspective of pragmatist-oriented works that grasp valuation as a *practice* rather than as the discovery of an essence or the convergence of desires (Muniesa 2011a). In this practical operation, 'valuation signs' are mobilized to make emerge

[4] In this article, the term 'index' will be used alone, without qualification, when referring to the second element of the Peircian triad, and it will be qualified ('stock market index' or 'stock index') when referring to the empirical object.

and then 'hold' the value of things (Bourgoin and Muniesa 2016). For example, as Philippe Lorino (2018) noted about Shewhart's control card (a management tool representing the evolution of a performance), 'manufacturing engineers often used control [cards] as manifestations of scientific truth in quality evaluation' (Lorino 2018: 247). Muniesa's (2014) theorization explicitly linked Peirce's sign theory to this research perspective. So far, this work has mobilized the icon-index-symbol triad. I continue and extend this work by paying attention to the two triads presented in the previous section.

In the field of social studies of finance, I join what could be called the 'informational' perspective. Researchers here have paid special attention to how financial market actors process massive flows of information in such a way as to reduce the uncertainty of their environment and make decisions (Arnoldi 2006). In this effort to reduce uncertainty, these actors will rely on situational cues: the content communicated by these cues, as well as the way they are communicated, is a key object of exploration for the 'informational perspective'. In this spirit, different studies have inspected the semiotic power – that is the potential as 'uncertainty reduction tools' – of trading volume (Schinckus 2010), data patterns stimulating high-frequency trading algorithms (MacKenzie 2018), 'spreadplots' (Beunza and Muniesa 2005), as well as the decisions and profiles of managers of listed companies (Certo 2003; Janney and Folta 2003).[5] Such an approach has not been applied to stock market indices. While the latter have been the subject of historical studies (Stillman 1986; Goede 2005; Hautcoeur 2006; Duterme 2021) and have recently attracted the attention of political economists (Petry 2021; Petry et al. 2021), they have never been studied for themselves in the context of the Social Studies of Finance. That said, as will be elucidated in the next section, they have become central features of financial markets and thus appear in several works that I shall mobilize as empirical support points.

[5] These last two publications are part of the 'signaling theory' initiated by the so-called Nobel Prize for Economics holder Michael Spence, that focuses on situations of information asymmetry in which 'one party, the sender, must choose whether and how to communicate (or signal) that information, and the other party, the receiver, must choose how to interpret the signal' (Connelly et al. 2011: 39). Constrained by the framework of neoclassical economics, the scope of investigation is therefore much narrower than that of Peircian semiotics (exclusively signals from humans to humans, consciously emitted and consciously perceived, implying a cost and a 'return', within the framework of information asymmetry).

Three articles have explicitly mobilized Peirce to grasp certain dynamics of financial valuation.[6] They lie at the conjunction of these two fields and are therefore close to my perspective. First, Fabian Muniesa (2007) studied the stock market price itself, revealing the relationship between the ground (i.e. 'the material vehicle of signification') and the type of referral of the sign to the object (iconic/ indexical or symbolic). He argues that different market technologies perform prices with different semiotic statuses. Thus, the Parisian closure call auction produced a price-sign whose indexicality 'held' (the sign bore witness to the actions of the operators, durably and consensually). Conversely, the 'weighted mean' (another technology implemented at the Madrid Stock Exchange) produced a price-sign with a low indexicality because it was 'perceived as being "calculated from the outside"' (Muniesa 2007: 388). Then, based on historical research on the Chicago and New Orleans futures markets at the end of the 19th century, David Pinzur (2016) compared the impact on volatility of two 'semiotic infrastructures' embodied by the classification practices of the products traded (wheat and cotton). Unlike the grade produced in New Orleans, the grade produced in Chicago was a bad index (because it was often manipulated) but provided a secure connection between the index (used on the spot market) and the symbol (used on the futures market). These semiotic qualities favoured speculation rather than hedging, explaining – at least partially – the greater volatility observed in Chicago. Finally, Benjamin Lee (2018) traced the evolution of the use of the 'Black-Scholes model' as an 'indexicalization' of this valuation sign. Designed to 'reveal' the price of an option from different market variables, the model was then 'diverted' to calculate one of the variables (volatility) from the market price, triggering some self-referential dynamics: 'the calculation of implied volatility ties Black-Scholes to the indexical time of trading and the market; the starting and end points of the pricing process are the market prices of options' (Lee 2018: 243).

Of these three pioneering pieces of research, the last one is the closest to my work. The reason is that the first two question the valuation of the sign itself (the price for Muniesa, the grade for Pinzur), and not the valuation that the sign allows – as a 'valuation tool' – to be instituted. Like Benjamin Lee (and Lorino in another field), I study the role (or, rather, the roles) that a sign plays in a process of valuing *something else*. While Lee explained the semiotic status of the Black-Scholes model in the valuation of financial products, I will explain the semiotic status of stock market indices.

[6] Two other publications refer to Peirce to study the financial sphere: Johnson (2017) proposed a brief analogy between the scientific community theorized by Peirce and the financial community, while Souleles (2020) relied on the icon/index/symbol triad to formulate a critique of the concept of 'semiotic ideology'. However, these two papers do not address the issue of valuation.

Methodological approach

In order to understand the different roles of stock indices in the valuation work of traders based on Peirce's concepts, it is important to identify (1) what a stock index can refer to for a trader (sign–object relationship), then (2) the impact of this reference on their decision making (sign–interpretant relationship). I approached the first part through fieldwork spread over two years (from March 2020 to April 2022). I first conducted exploratory interviews with five traders and distributed a questionnaire aimed at understanding what the main Belgian stock index (the BEL 20) represented for traders active in this market. Then, I deepened and broadened the initial findings through a three-month participant observation in a trading room of one of the main European banks. As an intern, I had the opportunity to conduct one to three semi-structured interviews with the 19 traders in the room and to spend days sitting next to several of them. I was thus able to address the first issue: the observation of what a trader looks at on their six screens, completed by requests for explanations.[7] This allowed me to identify the different objects to which a stock index could refer. These results have been corroborated in discussions with traders and, as we shall see, are frequently found in the financial press (*Bloomberg*, *Financial Times*, *Wall Street Journal* …). In reality, they are not very innovative – at least for financial market professionals and commentators. At this stage of the approach, I used Peirce's toolbox to put some order into these empirical materials. Specifically, his triad 'icon-index-symbol' offered an effective structuring of the different objects to which stock market indices refer.

The second part is more original and implied a reversal of the relationship between field and theory. The impact of these different relations between the stock index and its object on traders' purchases and sales is more difficult to identify, above all, for very practical reasons. Not all appearances of the indices give rise to position taking (or not immediately; they are kept 'in a corner of the head'). Decisions are always motivated by several factors: the moments of buying and selling are stressful and monopolize the trader's attention, who cannot explain the reasons for their action while acting. Therefore, I had to operate in a more deductive way. Peirce's conceptual architecture seemed to be particularly well-suited to this purpose. To each reference observed empirically (sign–object relation), I associate a theoretical effect (sign–interpretant relation). The result is a set of original but more speculative propositions. The following sections attempt to demonstrate their empirical relevance by using 'vignettes' from fields explored by other sociologists of financial markets. While they help limit the risk of excessive idiosyncrasy, these illustrations do not

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[7] 'Why do you devote a screen to the American indices?'; 'why is the S&P 500 down?'…

constitute proof. They reveal a certain relevance of conceptual hypotheses that remain open to challenge. The discussions and critical mobilizations that they can fuel even constitute their main contribution.

Finally, it should be noted that my focus on the semiotic powers involved in the valuation work of traders leaves some issues unaddressed. These same stock market indices will present – under another 'semiotic framing' (Kockelman 2005) – other semiotic qualities: when the CAC 40 logo appears on the *Euronext* website, does the index not become the *object* of this iconic sign? Moreover, in addition to the value of a security, the stock market index can indicate the quality of the firm that calculates it (representative sample, consistent weighting, etc.) but also the 'normal return' (against which an asset manager's performance will be evaluated). In other situations, it can also signal the health of the economy (when it is announced on the television news), the difficulty of paying a loan (if the rate is indexed to the S&P 500), or even the 'financialization of societies' (if it rises during an economic and health crisis). All these semiotic aspects, interesting as they are, will not be discussed here.

Stock market indices as valuation signs

Formally, a stock market index is an average of the price of a sample of stocks, usually weighted by the size of each stock (i.e. the number of shares issued). During the 20th century, indices – produced by financial newspapers, national statistical offices or stock exchanges themselves – were one focus among many for market participants. In the 1970s and 1980s, their importance exploded as a result of an evolution in financial theory and its impact on portfolio management: the random walk hypothesis. This hypothesis argues that, given the random ('Brownian') movement of prices, no investor can, on average, obtain a better return than 'the market' as a whole. The indices were doubly impacted. First, in the academic arena, researchers wanted to test this hypothesis and therefore needed a representative of 'the market'. This is how stock indices are invoked in most scientific articles. Sometimes, researchers try to demonstrate that an investment technique '[beats] the average represented by the S&P 500 Index' (Sorensen et al. 1998). In other cases, they propose a new algorithm 'to predict the stock price index' (Kim and Han 2000). Second, in the financial world, several investment techniques – grouped together under the label 'passive management' – have sought to take advantage of the conclusions of the random walk hypothesis by investing in 'the whole market'. This involved transforming indices into financial products. After an intense socio-technical process described by Millo (2007), index futures and index options emerged and became very popular.[8] In addition, index funds offer to guarantee the performance of the index to those who invest in them; if they are listed on stock exchanges, these funds are called ‘exchange-traded funds’ (ETFs) – the ETF having become one of the main investment products, with US$10 trillion assets under management (Statista 2022).

This explosion in popularity has transformed the way stock market indices are produced. They now represent very profitable brands for the few companies owning them – MSCI, S&P Dow Jones Indices, FTSE Russell and Euronext – which are constantly trying to adapt to the needs of their clients, to the point where Bloomberg now references more stock indices than stocks (Duterme 2023a)! Despite this proliferation, the historical stars – Dow Jones, S&P 500, CAC 40 … – remain the most influential indices. Who do they influence? First and foremost, asset managers. If they adopt a passive strategy, they *de facto* delegate their decision-making powers to the index engineers (Petry et al. 2021). If, instead, they are active managers, the indices dictate the performance benchmark against which they will be assessed, encouraging them to deviate little from passive management. As early as 2006, MacKenzie noted that ‘if, as was increasingly the case, a manager’s performance was judged relative to an index such as the S&P 500, then there was some safety in selecting a portfolio that closely resembled the makeup of the index’ (MacKenzie 2006a: 86). However, asset managers are not the only ones to be more influenced by indices since their popularity exploded. Traders are forced to consider them carefully in their valuation work.

The traders at the heart of this article are equity traders, responsible for trading on (a specific part of) the stock market, although we will see that other traders are also impacted by stock indices. Equity traders are traditionally distinguished according to the ‘side’ of the financial system in which they operate: ‘sell-side traders’ respond to requests from clients for which they act as counterparty (which implies giving a price to the requested product and then hedging the position taken), while ‘buy-side traders’ manage a portfolio of products that they hold (typically within an investment mandate of a fund). Although this distinction is important for grasping the potential variety of traders’ responsibilities, it will not impact the rest of the analysis because, in both cases, their main job is to assess the value of

[8] An index option gives the holder the right to sell or buy the index at a predetermined price and date, while the index future establishes a transaction at a predetermined price and date. Since indices – unlike the agricultural commodities that are the source of these derivatives – are not ‘deliverable’ at the maturity of the contract, the holder obtains from the seller the difference between the predetermined price and the market price at maturity (if positive, of course).

the securities for which they are responsible.[9] In both cases they rely on signs. These signs include stock market indices as an icon, index and symbol. The predominance of one semiotic dimension over the other depends on the specific stock market situation.[10]

First, the stock index can refer to its object as an icon, by virtue of its resemblance: it is the representative 'of the market'. I have mentioned that this is the case in the financial economics literature, but also on the trading floor, where comments on the state or sentiment of 'the market' are frequently associated with stock index movements. Financial commentators take up – and help to stabilize – this first sign–object relation, as in the following excerpt: 'the July signal was not as good as many of the previous signals, but it still preceded a 10% rally in the S&P before the market reversed'[11] (White 2022); what has 'reversed' is the price of the S&P 500, but it is now referred to as 'the market'. Note that this iconic quality is independent of its object ('the market'). Moreover, a little bit like the drawing of a unicorn can dispense us from proving its existence, the stock index as an icon of the market allows us to avoid a definition of this object, since it is confused with the object. A good icon-index is representative *whatever the definition of the market*, that is, independently of its object – which is well in conformity with the Peircian definition of an icon.

As for its role in the traders' valuation effort, I argue that the index has a *rhematic* relation to the interpretant. This is a relation of incomplete determination (see the example of Peirce's phrases with blanks). In fact, an index-icon does not imply any univocal reaction or even proposes a type of response. It only conveys potentiality about the state of the market. A rise in the index *can* mean a future rise (and have the *buy* as interpretant), but *can* also mean, if the point reached is a 'peak', a future fall (and have the *sell* as interpretant). In this respect, it is indicative that this sign is coveted by technical analysis. This has been the case for a long time: the Dow Jones was conceived in 1896 by

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9 Another frequent distinction separates traders according to their type of strategy: scalping, day trading, swing trading, arbitrage, technical trading … Again, these categories are not central here, because none of them exempts the trader from the essential work of stock valuation (even when this work is assisted by an algorithm). However, we will see that there are 'elective affinities' between certain semiotic properties of stock indices and certain trading strategies.

10 Let us note, by the way, that with regard to another Peircian triad dealing with the nature of signs 'for themselves', the stock market index is always a legisign, that is to say, a sign of a general nature established by convention. 'Usually established by men' (2.246), the legisign is illustrated in Peirce's work by a word or a graph (independently of their practical realization, their replica which is a sinsign).

11 I mobilize articles from *Bloomberg*, rather than the *Financial Times* or the *Wall Street Journal*, on purpose: the Bloomberg Terminal, which relays these articles, is the platform most used by traders and contributes to disseminating certain interpretations of events (Duterme 2023b; Carluer 2005).

Charles Dow precisely to develop his own technical analysis (the 'Dow Theory'). Even today, indices are popular tools for many technical analysis models (Edwards et al. 2018). As opposed to fundamental analysis which is based on an examination of company balance sheets, technical analysis bases its predictions on the trends 'revealed' by the history of stock prices. It is characterized by the openness of its interpretation: two traders using technical analysis can, from the same sign, deliver contrary recommendations. Thus, Olivier Godechot (2016) relates the predictions on CAC 40 movements made by the technical analyst of a trading room: 'He envisioned a fall that should either stop at 2812, or at 2784, or in the worst case at 2650, unless prices should rise, in which case it would reach 2857 or 2885' (2016: 424). In conclusion, as an icon, stock market indices do not reduce the uncertainty of the valuation of financial products.

Second, the stock market index can refer to its object as an index when it 'physically' bears the mark of its object. As I have shown, stock indices are now treated as products in their own right, autonomous entities from the stocks they aggregate. When one invests in an S&P 500 ETF, they invest in the S&P 500 index as such. Therefore, as with any financial product, stock indices can signal some behaviours by the brand they imprint on it. They become an index of 'the attitude of other investors'. Again, this sign–object relationship is part of the common sense of traders and often comes up in financial commentary. For example, a Bloomberg analyst recently described the movements of the major US stock index as: 'after a bounce that started around noon in New York and was attributed to a big options trade, the S&P 500 came back lower again' (Nazareth 2022a).

In practice, this indexical relationship takes two forms. The most explicit is the recognition of the 'paw' of a financial operator in a movement of the index price or of its order book (all bids and asks pending). This phenomenon appears regularly in trading rooms and has been identified in previous research. The anthropologist Caitlin Zaloom (2003) gives the example of the 'spoofer'[12] that the London traders she met were trying to unmask: 'Traders learned to identify a spoofer by watching changes in the aggregate number of bids or offers on the screen' (2003: 10). Without focusing on this phenomenon,

[12] The 'spoofing' is a technique consisting of entering very large buy or sell orders in order to inflate the volume on one side of the order book (bid or ask), then to cancel these orders. The objective is to make other traders react in the direction desired by the spoofer.

Donald MacKenzie (2006a) notes two other illustrations.[13] Finally, Fabian Muniesa (2011b) found that traders are not the only ones to exploit the indexicality of stock market indices (and other financial products): market surveillance officials also manage to detect the activity of 'arbitrage traders' through the movements of CAC 40 stock. The second form of this indexical relationship is not offered spontaneously to the eyes of traders; it involves an intervention in order to be 'unveiled'. It is the recognition of the positions of other financial operators in the depth of the index's order book.[14] If a moderate buy order doubles the price of the S&P 500, it is an index of the weak presence of other operators at the sale. This sign, as frequently seen as the previous one, therefore requires intervention in the situation, taking a position in order to 'test the market'.

And what is the effect (on the valuation of financial securities) of the stock market index as an index? In its relation to the interpretant, this second type of index is a *dicisign*: it transmits information without proof of its validity. Unlike the rheme, the informational content of the *dicisign* is sufficiently structured to be true or false (e.g. it is indeed a spoofer or not), but – unlike the *argument* – it does not, in itself, provide 'any rational persuasion of it' (2.313) (i.e. the proof that it is indeed a spoofer or not). Another characteristic of *dicisign* is its reliance on prior knowledge: Peirce's print only becomes *dicisign* when a photograph is recognized in it, when it is associated with an already established landmark. In the example given by Zaloom, the evolution of prices only provides information on the presence of a spoofer if the principle of the order book is kept in mind. Without this 'background knowledge', the numbers displayed on the trading screen would not reach *dicisign* status. Without convincing, *dicisign* thus allows one to frame the interpretation: 'traders try to gain contextual clues from their interactions with other traders (…); [this] helps traders create

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[13] At the end of the 1990s, 'arbitrage traders' recognized in the movements of index prices certain strategies of traders from the Long-Term Capital Management fund. Earlier, during the crash of 1987, the decline of the S&P 500 was associated with the behaviour of traders from portfolio insurers (forced to sell to secure the floor they guarantee to their clients): 'the crowd detected a pattern of a guy who had to sell as the market went lower. So what you do? You push lower' (quoted in MacKenzie 2006a: 186). In these two cases too, the 'proposed' interpretant is mimicry (cf. Table 1b below).

[14] In an 'order-driven' market, buy (resp. sell) orders are ranked in descending (resp. ascending) order to establish the price range (bid–ask spread) of a security. The depth of a security can be understood as the capacity of its order book to 'absorb' large volumes of purchases or sales without the price varying greatly (this happens when a large number of orders have been introduced close to the bid–ask spread: even a large buy order can be absorbed by these numerous sell orders without straying too far from the price range). Depth therefore provides information on the 'state of the forces at play'. Finally, it should be noted that this second form of indexicality can also be found in a 'price-driven' market (e.g. by testing the counterparty's reserves).

understandings of market fluctuations that direct their decisions to enter and exit the market' (Zaloom 2003: 7). As Zaloom notes, this type of marker 'directs', but does not 'determine' the valuation effort of traders. As *dicisigns*, stock market indices therefore propose an interpretant; the latter can be picked up by the formula: 'follow him!'.

On financial markets, information on the position of competitors (whether judged from the price movements or revealed in the evolution of the bid–ask spread) offers an opportunity for profit. The index-*dicisign* says 'follow him!' What does it mean? For example, when the index (through its price or bid–ask spread) signals important upward pressure, it *suggests* that the index should be valued more and thus bought and vice versa. In other words, it invites adoption of a mimetic behaviour. Note that the 'to take advantage of the future appreciation' is a rationalization of the interpretant that is not included in the index-*dicisign* itself and is therefore largely dependent on the example: the same semiotic quality can produce, in other illustrations, very different or even opposite rationalizations (e.g. 'to avoid future loss'). This means that the advice 'follow him!' does not contain the reasons for following him. Since it is not rationally founded, this interpretant is not necessary. The case of the spoofer perfectly embodies this persistence of uncertainty. In fact, if a trader relies on the indexicality of the index to interpret a price movement as a symptom of the action of a spoofer, 'follow him!' will no longer translate into an imitation, but into a stalking: '[traders] aspired to "take out" the Spoofer by calling his bluff, selling into his bid, and waiting for him to balk' (Zaloom 2003: 10), which gives rise to a reverse valuation (selling rather than buying in the face of upward pressure). More generally, a trader can also take the opposite side of the '*dicisign* advice' if they judge the position of their competitors to be 'unfounded' or revealing a 'short-lived bubble'. In sum, as an index, the stock market index gives financial operators a grip by reducing uncertainty, while at the same time leaving room for doubt. More stabilized than technical analysis, it is still less so than logical reasoning.

Third, the stock exchange index can refer to its object as a *symbol* when it functions as a convention. The most popular stock market indices are formidable centres of attention and are therefore at the origin of the well-known self-referential sequence. When everyone looks at the index, everyone knows that everyone looks at the index and thus everyone tries to look at it as everyone else looks at it. From this dynamic popularized by Keynes's (1936) beauty contest, a collective perception of the index is born. This perception is not the result of each individual's view of the index, but of each individual's view of what the collective view of the index is. In other words, each member of the group learns to read the evolution of the index *as the group reads it*. This interpretation will be reinforced by a broad adherence (if every member shares it, it will effectively represent the 'collective gaze') and destabilized by dissident readings. These are the features of a *convention* (relatively arbitrary, collectively sanctioned, nourished by repetition …); the association between the prices of the index (sign) and a collective interpretation of these prices (object) is thus of a symbolic nature.

This association is found in the press when financial journalists invoke shared understandings of the financial community to account for the movements of a stock index: 'It was a sea of red across equity trading desks, with the S&P 500 briefly breaching its June closing trough (…). Chartists looking for signs of where the rout might ease had identified that as a potential area for support' (Nazareth 2022b). Traders associated the crossing of a symbolic milestone (the June closing of the index) with a technical interpretation known to all (once this threshold is crossed, the decline will be accentuated), which fed the validity of this association since these traders wanted to sell before the lowest point ('sea of red'). These articles, just like the textbooks taught in business schools that use their content, stabilize the convention, notably by facilitating its transmission. As a child learns the conventional association between words and things, the young trader learns to associate prices of the index and the collective opinion.[15]

A well-known and several times empirically observed phenomenon (Cyree et al. 1999; Lobão and Pereira 2016; Woodhouse et al. 2016) provides an illustration: the abnormality of the movement of stock market indices when they approach 'round numbers' (e.g. prices ending in 00). For example, the growth of the Dow Jones has been regularly interrupted near the threshold of tens of thousands. Behavioural finance links this phenomenon to biased reasoning: investors tend to cling to benchmark numbers that should not be relevant to a rational individual. But this hypothesis becomes hardly tenable when one discovers that traders are generally aware of this phenomenon (Mitchell 2001). It is therefore likely that this 'roundophobia' is more the result of collective reflexivity than of behavioural bias. If the trader has learned to associate a stock index movement (a rise approaching a round number) with a collective interpretation ('fear' preventing prices from reaching this number), their decision not to buy in order to avoid the stagnation (or even the fall) of prices is not irrational. On the contrary, it is rational reasoning – based on the symbolic quality of the stock market index – that explains the persistence of this conventional phenomenon.

Reflexively, the trader recognizes in a sign a type of reaction specific to their community (not to buy as a round number approaches) and

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[15] Tullio Viola (2018) relies more on Mead to characterize this institutional power of the symbol that 'allows the individual to adopt the attitude of a generalized Other and to internalize the attitude of other members of the community' (Viola 2018: 83).

relies on this information to react by *imitation*. Imitation must be distinguished here from the mimicry that characterized the interpretant of the stock index as an index: whereas the 'follow him!' implies a 'simple' mimicry (copying the other's behaviour, regardless of the motivation for this behaviour), imitation 'requires copying both the form and function of another's behavior (both what others do and why they do it)' (Kockelman 2005: 294). Our trader's reflexive reaction is to adopt the same attitude as their peers (not to buy) for the same reason as their peers (each judging that the community is afraid to cross some thresholds). By the same token, the nature of the relationship between the sign and the interpretant is no longer *dicent* (proposal of an unproven answer), but *argumentative* (deduction of a proven conclusion). Where the index-*dicisign* transmitted information without rationalization (detection of a presence through price movements or bid–ask spread, but without proof that it is a spoofer), the index-argument relies on a 'law': the growth of the index weakens around a round number, *by virtue of roundophobia*. The interpretant, taking a short position, is therefore logical. It is even necessary, because the law covers all potentialities, present and future: the slowing down of the index around round numbers is certain, conditionally, not to future behaviours, but to the 'law' pacing them. In other words, this sign can only produce other effects if it violates its own rationalization, that is, if it is no longer a symbol-argument. The adoption of a short position by the trader perceiving the sign is the *conclusion* of this sign.

This symbolic quality of the index is the most general and comes to weigh on markets other than equities. Despite the weak connections between equities and their scope (foreign exchange), one trader I met devoted half of one of their six screens to the evolution of major stock indices and justified it as follows: 'because of self-fulfilling prophecies'. At the same time, all equity derivatives markets are symbolically linked to indices. Traders watch the movements of the index to establish the value of index-based derivatives. One might even say that, in the case of index futures and index options, the symbolic relationship has stabilized to such an extent that traders fluently interpret them as if they were reading in their native language. Formalization has contributed to this evolution: until the mid-1970s, traders deduced the value of derivatives from those of the underlying assets, based on certain 'traditional rule-of-thumb heuristics' (MacKenzie 2006a: 257) similar to *roundophobia*. These rules were then supplanted – or extended (Haug and Taleb 2011) – by the Black-Scholes model, which enjoyed tremendous success in the financial community. Once they were widely adopted (notably because they were accessible to all), the equations of this model made it possible to stabilize the link between the value of the underlying (in this case, the index) and that of the corresponding option. The model was later embedded in price evaluation software.

Regarding the interpretant, this type of sign results in an adjustment of the trader's position which is logically deduced from the sign itself. This adjustment is generally entrusted to an algorithm (again, modelled on the risk hedging techniques initially proposed by the Black-Scholes model). It is not surprising that algorithmic techniques can support, or even supplant, the trader's interpretation of this type of sign; their functioning fits easily with the generality and necessity of the symbolic-argumentative relationship of a Peircian triad. Moreover, we could imagine, if the convention hardens to the point of crossing the threshold of mathematical formalization, an algorithmic treatment of *roundophobia*. Conversely, the interpretant of the stock index, as an icon and index, seem too weakly marked out to allow for deterministic treatment. However, here again, as the appearance of the 'volatility smile' showed (MacKenzie 2006b), control of the future allowed by the stock market index remains relative.

Below, I reproduce Table 1b now completed with the salient features of the three semiotic statuses of stock market indices.

	First index	**Second index**	**Third index**
Relation to the object	*Iconic* (looks like the market)	*Indexical* (marks the behaviour of	*Symbolic* (refers to a collective
Relation to the interpretant	*Rhematic* (suggests potentiality on the state of the	*Dicent* (proposes a mimetic response)	*Argumentative* (implies a revision of the position)
Examples	Technical analysis, general impressions on the state of the market	Detection of a spoofer, interpretation of a shocking fact (e.g. a sharp rise)	*Roundophobia*/ Black-Scholes model, unanimous conclusion of a typical

Table 1b: Two Peircian triads applied to stock market indices
Source: Author's work, from Peirce (1931-5)

Conclusion

By mobilizing the triad 'icon-index-symbol', I have conceptualized the significations of stock market indices in the trading room. In a certain way, they always evoke the market: by constituting a representative sample (icon), by bearing the imprint of the forces at work (index) or by referring to a shared reflexive interpretation (symbol). By adding the triad 'rheme-*dicent*-argument', I was able to grasp the indices as valuation signs, through their effects on traders' interpretation. This allowed me to explore the ways in which stock market indices *could* be used by traders as a basis for their decisions. To explore this issue, which is at the heart of this theme issue, I conclude by briefly addressing a question that may have confused the reader: if the index as a symbol-argument is more effective in reducing uncertainty, why would traders rely on the stock index as an icon-rheme or index-*dicent*?

In my field experience, some traders refused to rely on stock index as an icon-rheme ('I don't believe in technical analysis') and as an index-*dicent* ('it's too risky: other orders can bypass me, like the algos'). On the other hand, others used them generously, devoting two of their six screens to technical analysis (to 'spot patterns in the market') or scrutinize the dynamics of the order book (to identify the 'big players'). To account for these situations without resorting to the behavioural perspective of 'bias', two approaches exist. The first is 'genealogical' (Viola 2018), whereby today's symbols are yesterday's successful icons and indices. Some of today's extravagant interpretations of technical analysis could therefore achieve the symbol's degree of certainty if they convince enough to stabilize. Conversely, today's symbols, unanimously approved, could not have germinated without the effort of lonely precursors. It is therefore useful to look at the stock market index as a rheme: it could reveal the symbol to come. The second approach is more institutional: in financial markets, consensual signs are not profitable. For example, once they were integrated into pricing software, the Black-Scholes equations could no longer be used to exploit discrepancies between theoretical and actual prices, precisely because their success made such discrepancies disappear. Traders who use technical analysis often put forward this argument: 'it allows me to see things before others' (interview extract).

The pragmatic turn in sociological research on economic valuation has brought to light processes that reifying conceptions of value had tended to ignore (Muniesa 2011b; Elder-Vass 2022). Indeed, many works have done justice to the roles of unsuspected objects, such as the underlying assumptions of models, graphs or computer cables. This theme issue has called for new concepts and tools that help us to better understand the semiotic and dramaturgical aspects of valuation. For there is a need. The massive recourse to the concept of 'performativity' in this field of study is symptomatic: this concept allows us to grasp a type of impact of a device on valuation practices (Sparsam 2019). However, performativity captures only one of the modalities of this 'device-valuation' relationship. Peirce's concepts can help to fill this gap: as the summary tables illustrate, they offer a systematic view of the plurality of sign contributions to valuation, from the most loose and unstable ('rhematic') to the most instituted and performative ('argumentative').

As this article has shown from a study of stock market indices, mobilizing Peirce's concepts offers two types of insight. On the one hand, it allows us to identify the plurality of objects to which a sign can refer – without enclosing these objects in a relation of internal correspondence determined *a priori*. In other words, and contrary to non-pragmatist semiotic concepts (such as the 'signifier-signified' pair mobilized by Schinckus 2010), the 'icon-index-symbol' triad is sufficiently flexible to shed light on the plurality of significations, but also on their evolution (e.g. the tendency towards symbolization of language evoked by Peirce). This first contribution refines the *description* of 'valuation signs' and enables us to put some order into the empirical material. On the other hand, the Peircian toolbox makes it possible to elaborate conceptual hypotheses concerning the roles of devices in valuation processes. The triad 'rheme-*dicent*-argument' can indeed be conceived – and has been effectively conceived in this article – as a set of propositions that need to be tested empirically. This second contribution is the most original and enriches the *analysis* of valuation signs.

This article thus opens the way for a Peircian study of other valuation signs. The economic sociology literature is full of potential candidates. For example, central bank interventions, like stock market indices, are signs that are closely monitored by many financial market actors. Their semiotic dimension has already been raised (Holmes 2013; Braun 2015). The Peircian toolbox could be used to structure and enrich this work, first by clarifying the objects to which central bankers' interventions can refer, depending on the 'enunciation context' – as an index (are securities purchases identified in prices?) or as a symbol (a conventional reference to the future state of the economy?) – then by suggesting different impacts on traders' decision making – as a rheme (during ambiguous communication?), *dicent* (following price movements driven by the Central Bank?) or argument (automatic conformism according to the adage 'Don't Fight the Fed'?[16]). The Peircian framework thus offers both a logical organization of empirical material and an opening to potentially unexplored avenues. Its formalism may seem costly to adopt, but this article has tried to highlight the many 'returns' of such an investment.

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[16] Moreover, attempts at automated processing of monetary policy decisions seem to suggest a tendency towards symbolization (Goshima and Kumano 2019).

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References

Arnoldi, Jakob. 2006. "Frames and Screens: The Reduction of Uncertainty in Electronic Derivatives Trading." *Economy and Society* 35(3): 381–399.

Beunza, Daniel, and Fabian Muniesa. 2005. "Listening to the Spread Plot". In *Making Things Public: Atmospheres of Democracy*, edited by Bruno Latour and Peter Weibel, 628–633. Cambridge, MA: MIT Press.

Bourgoin, Alaric, and Fabian Muniesa. 2016. "Building a Rock-Solid Slide: Management Consulting, PowerPoint, and the Craft of Signification." *Management Communication Quarterly* 30(3): 390–410.

Braun, Benjamin. 2015. "Governing the Future: The European Central Bank's Expectation Management during the Great Moderation." *Economy and Society* 44(3): 367–391.

Carluer, Claudine. 2005. "La transposition des outils professionnels d'information financière vers les médias grand public : Le cas Bloomberg." *Recherches en Communication* 23: 65–77.

Certo, S. Trevis. 2003. "Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures." *The Academy of Management Review* 28(3): 432–46.

Connelly, Brian L., S. Trevis Certo, R. Duane Ireland, and Christopher R. Reutzel. 2011. "Signaling Theory: A Review and Assessment." *Journal of Management* 37(1): 39–67.

Cyree, Ken B., Dale L. Domian, David A. Louton, and Elizabeth J. Yobaccio. 1999. "Evidence of Psychological Barriers in the Conditional Moments of Major World Stock Indices." *Review of Financial Economics* 8(1): 73–91.

De Munck, Jean. 2020. "Sociologie et médiation. La voie peircienne." *SociologieS*. https://doi.org/10.4000/sociologies.14882

Duterme, Tom. 2021. "Comment émerge un indice boursier ? Histoire du BEL 20." *Revue française de socio-économie* 27(2): 157–174.

Duterme, Tom. 2023a. "The engineering of stock market indices: winners and losers." *Journal of Cultural Economy* 16(1): 17–31.

Duterme, Tom. 2023b. "Bloomberg and the GameStop saga: The fear of stock market democracy." *Economy and Society* 52(3): 373–398.

Edwards, Robert D., Magee, John, and W. H. C. Bassetti. 2018. *Technical Analysis of Stock Trends*. Boca Raton, FL: CRC Press.

Elder-Vass, Dave. 2022. *Inventing Value: The Social Construction of Monetary Worth*. Cambridge: Cambridge University Press.

Godechot, Olivier. 2016. "Back in the Bazaar: Taking Pierre Bourdieu to a Trading Room." *Journal of Cultural Economy* 9(4): 410–429.

Goede, Marieke de. 2005. *Virtue, Fortune and Faith: A Genealogy of Finance*. Minneapolis, MN: University of Minnesota Press.

Goshima, Keiichi, and Yusuke Kumano. 2019. “Monetary Policy Announcements and Algorithmic News Trading in the Foreign Exchange Market.” *Monetary and Economic Studies* 37: 71–98.

Haug, Espen Gaarder, and Nassim Nicholas Taleb. 2011. “Option Traders Use (Very) Sophisticated Heuristics, Never the Black–Scholes–Merton Formula.” *Journal of Economic Behavior & Organization* 77(2): 97–106.

Hautcoeur, Pierre-Cyrille. 2006. “Why and How to Measure Stock Market Fluctuations? The Early History of Stock Market Indices, with Special Reference to the French Case.” Working Paper 10. Paris: Jourdan Sciences Économiques.

Holmes, Douglas. 2013. *Economy of Words: Communicative Imperatives in Central Banks*. Chicago, IL: University of Chicago Press.

Janney, Jay J., and Timothy B. Folta. 2003. “Signaling through Private Equity Placements and Its Impact on the Valuation of Biotechnology Firms.” *Journal of Business Venturing* 18(3): 361–380.

Johnson, Timothy. 2017. “Some Implications of a Pragmatic Approach to Finance.” In *Ethics in Quantitative Finance: A Pragmatic Financial Market Theory*, edited by Timothy Johnson, 271–293. Cham: Springer International.

Keynes, John Maynard. 1936. *The General Theory of Employment, Interest and Money*. London: MacMillan.

Kim, Kyoung-jae, and Ingoo Han. 2000. “Genetic Algorithms Approach to Feature Discretization in Artificial Neural Networks for the Prediction of Stock Price Index.” *Expert Systems with Applications* 19(2): 125–132.

Kockelman, Paul. 2005. “The Semiotic Stance.” *Semiotica* 2005(157): 233–304.

Lee, Benjamin. 2018. “Deriving the Derivative.” *Signs and Society* 6(1): 225–255.

Lobão, Júlio, and Cristiano Pereira. 2016. “Looking for Psychological Barriers in Nine European Stock Market Indices.” *Dutch Journal of Finance and Management* 1(1): 39.

Lorino, Philippe. 2018. *Pragmatism and Organization Studies*. Oxford: Oxford University Press.

MacKenzie, Donald. 2006a. *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge, MA: MIT Press.

MacKenzie, Donald. 2006b. “Is Economics Performative? Option Theory and the Construction of Derivatives Markets.” J*ournal of the History of Economic Thought* 28(1): 29–55.

MacKenzie, Donald. 2018. “Material Signals: A Historical Sociology of High-Frequency Trading.” *American Journal of Sociology* 123(6): 1635-1683.

Millo, Yuval. 2007. “Making Things Deliverable: The Origins of Index-Based Derivatives.” *The Sociological Review* 55: 196–214.

Mitchell, Jason. 2001. "Clustering and Psychological Barriers: The Importance of Numbers." *Journal of Futures Markets* 21(5): 395–428.

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

Muniesa, Fabian. 2011a. "15. Comment la Bourse fait ses prix. Ethnographie d'un cours d'action boursière." In *Humains, non-humains*, 176–190. Paris: La Découverte.

Muniesa, Fabian. 2011b. "A Flank Movement in the Understanding of Valuation." *The Sociological Review* 59: 24–38.

Muniesa, Fabian. 2014. *The Provoked Economy: Economic Reality and The Performative Turn*. London: Routledge.

Nazareth, Rita. 2022a. "Stocks Take Breather After Furious Rally From Low: Markets Wrap." *Bloomberg* (retrieved from the Bloomberg Terminal).

Nazareth, Rita. 2022b. "Risk Assets Crushed With Few Signs Drama Is Over: Markets Wrap." *Bloomberg* (retrieved from the Bloomberg Terminal).

Peirce, Charles Sanders. 1931–5. *Collected Papers*. Cambridge, MA: Harvard University Press.

Petry, Johannes. 2021. "From National Marketplaces to Global Providers of Financial Infrastructures: Exchanges, Infrastructures and Structural Power in Global Finance." *New Political Economy* 26(4): 574–597.

Petry, Johannes, Jan Fichtner, and Eelke Heemskerk. 2021. "Steering Capital: The Growing Private Authority of Index Providers in the Age of Passive Asset Management." *Review of International Political Economy* 28(1): 152–176.

Pinzur, David. 2016. "Making the Grade: Infrastructural Semiotics and Derivative Market Outcomes on the Chicago Board of Trade and New Orleans Cotton Exchange, 1856–1909." *Economy and Society* 45(3–4): 431–453.

Schinckus, Christophe. 2010. "Semiotics of Financial Marketplace." *Journal of Interdisciplinary Economics* 22(4): 317–333.

Simmel, Georg. 1995. "The Metropolis and Mental Life." In *Metropolis*, edited by Philip Kasinitz, 30–45. London: Palgrave Macmillan.

Smith, Charles W. 2011. "Coping with Contingencies in Equity Option Markets: The 'Rationality' of Pricing." In *The Worth of Goods: Valuation and Pricing in the Economy*, edited by Jens Beckert and Patrik Aspers, 272-294. Oxford: Oxford University Press.

Sorensen, Eric H., Keith L. Miller, and Vele Samak. 1998. "Allocating between Active and Passive Management." *Financial Analysts Journal* 54(5): 18–31.

Souleles, Daniel. 2020. "Trading Options and the Unattainable Dream: Some Reflections on Semiotic Ideologies." *Signs and Society* 8(2): 243–261.

Sparsam, Jan. 2019. *Wie ökonomisches Wissen wirksam wird. Von der Performativitäts - zur Verwendungsforschung*. Wiesbaden: Springer VS.

Statista. 2023. "Development of assets of global exchange traded funds (ETFs) from 2003 to 2022. Exchange Traded Funds Worldwide". Financial Instruments & Investments. *Statista* 14 September. https://www.

statista.com/statistics/224579/worldwide-etf-assets-under-management-since-1997/, accessed 10 November 2023.

Stillman, Richard Joseph. 1986. *Dow Jones Industrial Average: History and Role in an Investment Strategy*. Homewood, Illinois: Dow Jones-Irwin.

Viola, Tullio. 2018. “Comment naît un symbole ? Une comparaison entre Charles S. Peirce et George H. Mead.” *Pragmata* 1: 32.

White, Simon. 2022. “Bear-Market Rally Has Legs With Powerful Move Off the Bottom.” *Bloomberg* (retrieved from the Bloomberg Terminal).

Woodhouse, Sam Alan, Harminder Singh, Sukanto Bhattacharya, and Kuldeep Kumar. 2016. “Invisible Walls: Do Psychological Barriers Really Exist in Stock Index Levels?” *The North American Journal of Economics and Finance* 36: 267–278.

Zaloom, Caitlin. 2003. “Ambiguous Numbers.” *American Ethnologist* 30(2): 258–272.

Tom Duterme is a researcher in economic sociology at FNRS, Centre de recherches interdisciplinaires, Démocratie, Institutions, Subjectivité (CriDIS) and Louvain Finance (LFIN), University of Louvain. At the crossroads of the social studies of finance and the economics of conventions, his work focuses on the devices on which traders and asset managers rely to base their decisions, such as stock market indices. He has published on these topics in the *Journal of Cultural Economy* and *Economy and Society*.

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Theme issue contribution

"What is Design Worth?" Narrating the Assetization of Design

Ulises Navarro Aguiar

Abstract
This article explores how financial logics and investment rationalities are intersecting with and shaping the expert discourse and practice of professional design. It uses "assetization" as a conceptual category to make sense of recent efforts to account for the value of design in financial terms. Specifically, the article provides a narrative-semiotic analysis of a report on "The Business Value of Design" published by McKinsey & Company, unfolding how design is valued in terms of its capacity to deliver future earnings for shareholders, and thus made to acquire the asset form. The article foregrounds how can the assetization of design be understood not only as evidence of the gradual spread of financialized valuations, but also as an organizing act underpinned by a script that activates characters and defines frames of action around the use of design in firms. It shows how this script entangles the coordinated expansion and monitoring of design activities within firms with the fervor for shareholder value maximization and capital gains, drawing a convenient line of causation between them as a near certainty. The article contributes to our understanding of how the cultural condition that makes the spread of assetization possible is to an important extent established in the ongoing and everyday work of striving to systematize and increase creativity in organizations.

Keywords: assetization; design; narrative; script; reports; organization

Ulises Navarro Aguiar is Lecturer in Design at HDK-Valand Academy of Art and Design, University of Gothenburg.

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Introduction

"What is design worth?" The question is posed in the opening paragraphs of a widely circulated report published in 2018 by McKinsey & Company entitled "The Business Value of Design" (Sheppard et al. 2018: 4). The report boasts of providing an answer to the question through "the most extensive and rigorous research undertaken anywhere" consisting in an analysis of "the design practices of 300 publicly listed companies over a five-year period in multiple countries and industries," and resulting in the creation of the McKinsey Design Index (MDI), an indicator that "rates companies by how strong they are at design and […] how that links up with the financial performance of each company" (Sheppard et al. 2018: 4). The bottom line: companies with the best MDI scores "increased their revenues and total returns to shareholders (TRS) substantially faster than their industry counterparts" (Sheppard et al. 2018: 5). The McKinsey report acknowledges and builds upon the work of the Design Management Institute (DMI), an international professional association that has been actively engaged in efforts to promote the value of design in the business world. The DMI has developed a series of toolkits and indicators which they assembled under a framework called "The Design Value System" in order to, among other things, "communicate the value of investment in design," as stated on their website.[1] Their bottom line is hardly any different: "good design drives shareholder value" (Rae 2015; see also Rae 2013, 2016; Westcott et al. 2013). Similarly, non- and quasi-governmental organizations engaged in the promotion of design, such as the UK Design Council, the Danish Design Center, Design and Architecture Norway, and Design Forum Finland have produced reports with varied articulations of essentially the same claim: investment in design yields sizable financial returns to organizations and the economy.

These efforts to measure and promote the value of design in financial terms must be situated in a moment of remarkable growth and cultural vogue for design in both the private and public sectors (Julier 2017; Valtonen 2020), whereby design has come to typify a certain ideal of creativity that promises to "solve" complex problems (Gerosa 2021) and meet a rampant imperative of innovation whose demands are increasingly aesthetic in nature (Lash and Urry 1994; Reckwitz 2017). In the public sector this is reflected, for instance, in the spread of design practices in governmental agencies (McGann et al. 2018), as well as in the emergence of initiatives such as the European

[1] https://www.dmi.org/page/DesignValue, accessed 31 March 2021.

Commission's "New European Bauhaus."[2] In the private sector, this vogue is evidenced in the massive interest in and uptake of design approaches in business, which is tied to the emergence and triumph of "design thinking" in managerial discourse (Johansson-Sköldberg et al. 2013). So much has design captured the business imagination that various management consulting firms (such as McKinsey, Deloitte, Ernst & Young, Capgemini, Accenture, Wipro) have in recent years gone on to acquire and scale up the operations of renowned design agencies (such as Veryday, Doblin, Doberman, frog, Idean, Fjord, Insitum, Designit), further cementing design's status as a paradigmatic discipline in the "knowledge economy" (Reckwitz 2017). This newfound valorization and ascendancy of design in contemporary economic and organizational life seems to have given a new elan to discussions about the "real" or "true" value of design. Indeed, as design climbs the corporate ladder under the impulse of this moment of vogue[3] and gets turned into a "managerial knowledge product" (Suddaby and Greenwood 2001) under the tutelage of management consultancies, it would seem like the need to justify its value has become more pressing than ever, as borne out by the production of this plethora of reports and toolkits. These accounts of value tend to foreground performance indices, profitability, and return-on-investment metrics, tapping into the legitimation powers of financial vocabularies and imaginaries to articulate the worth of design.

This article mobilizes "assetization" as an analytical resource for making sense of such accounts of value in relation to design by focusing on McKinsey's influential report. It follows Birch and Muniesa's (2020: 18) understanding of assetization as "a process of narrative transformation" through which things are considered in terms of their capacity to generate future earnings (i.e., as assets). From this narrative viewpoint, an asset is not a thing, but rather a form (Birch and Muniesa 2020: 4). In this article, this form is characterized as a script that is used to account for things and whose

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[2] Inspired in the Bauhaus movement that shaped design practice and education in twentieth-century Europe and North America, the New European Bauhaus was launched in 2020 to "combine design, sustainability, accessibility, affordability and investment in order to help deliver the European Green Deal" (European Commission 2021).

[3] Here the influence of corporate mythologies around Apple Inc. as the quintessence of the "design-driven" company and Steve Jobs as the archetypal incarnation of the "design leader" has been crucial. According to such narratives, Jobs is notorious, among other things, for having empowered the design team led by Jonathan Ive, an industrial designer at Apple who is credited with helping the firm achieve its mythical status as a design powerhouse—the key to Apple's turnaround. In his biography of the late Steve Jobs, Walter Isaacson reports Jobs as saying: "[Ive] works directly for me. He has more operational power than anyone else at Apple except me" (Isaacson 2011: 342).

felicitous enactment reframes and alters the social actors assembled in this accounting. To conceive of the asset in this narrative-semiotic key thus invites an identification and analysis of the associated plot and characters that are prescribed in its form and which unfold in the drama of assetization. Specifically, this article consists in a narrative analysis of said report, adopting an approach that has been characterized as "reading with the text" (Jensen and Lauritsen 2005) whereby texts are read as material–semiotic actors that move extratextually between practices. The analysis thus unfolds how the assetization of design is narrated in the text, conceiving of this narrative as a semiotics of action that exceeds the textual, playing out organizationally in the manner of Latour (2012, 2013). That is, the article foregrounds how the assetization of design can be understood not only as evidence of the gradual spread of "financialized valuations" (Chiapello 2015), but also as an "organizing act" (Latour 2013: 391) insofar as the script of design-as-asset circulates, delegates roles, and defines frames of action that reorganize and propel the ascendancy of design practices and expertise in organizations – an ascendancy, then, which finds its legitimacy in the claim that design can be put to work in the best interest of shareholders.

A narrative-semiotic approach to assetization

The notion of "the asset" has of late been gaining importance in political-economic and sociological accounts of contemporary capitalism. In a landmark book, Adkins et al. (2020) show how decades of asset inflation and cuts to taxes on capital gains coupled with sustained wage stagnation have produced a fierce cocktail that has deeply aggravated inequalities in Anglo-capitalist countries; they call this phenomenon "the asset economy." Braun (2021) speaks of "asset manager capitalism" to describe how shareholding is now concentrated in the hands of a few asset management firms that wield outsized influence in the corporate world. The asset form, then, seems to be the emblem of a new condition in financialized capitalism in which the figure of the investor and the logic of the return on investment have become dominant (Birch and Muniesa 2020; Langley 2020). This condition seems to have exhausted the analytical import of concepts like commodification or marketization (Langley 2020), prompting a new research agenda built around the notion of assetization, that is, the various processes through which all types of things are turned into assets (Birch 2017; Birch and Muniesa 2020). As a phenomenon, assetization can be understood as a form of "financialized valuation" (Chiapello 2015) adhering to a "capital" version of value wherein the value of X is considered in terms of X's anticipated capacity to generate future revenues, as opposed to a "market" version of value chiefly reliant upon price setting mechanisms in market situations (Muniesa 2017). As an analytical lens, assetization is well placed to unfold the configuration of political economies based on investment and rentiership (Birch 2017, 2020; Langley 2020; Birch and Ward 2022); but also, in its more ethnographic tonality, it stands as an ideal entry point to investigate the asset condition as a particular "cultural syndrome" with its imaginaries and narratives (Muniesa et al. 2017).

This article finds inspiration in the latter approach and adopts a narrative take on assetization. Birch and Muniesa (2020: 18) conceptualize assetization as "a process of narrative transformation" by which a thing is reshaped into an asset, defined in turn as "something that can be owned or controlled, traded, and capitalized as a revenue stream" (Birch and Muniesa 2020: 2). In narratology, a narrative transformation happens in the tension of difference and resemblance, wherein an action (denoted in the predicate of a proposition) is modified by adding an operator or a second predicate grafted onto the first one (Todorov 1971a). Assetization can thus be viewed as a narrative plot about value, whereby a series of modifications in the actions undergone by an object culminate in its becoming an asset. Consider, for example, a mundane digital image (e.g., a JPEG or GIF) which, depending on the situation, may or may not hold some form of value (sentimental, monetary, or other). Let us say the image gets minted as a so-called non-fungible token through a blockchain authenticating its ownership, then gets traded and capitalized as a revenue stream. The digital image has gone through a series of actions modifying the way it is valued; it is the same but different, having undergone the plot of assetization (see Juárez 2021). An asset is, in this sense, a narrative accomplishment, the effect of a felicitous plot that forces others to act or be activated in ways that endow the object in question with the faculties of an asset (Suaste Cherizola 2021), which invites a consideration of the scenarios and characters partaking in this unfolding (Muniesa et al. 2017). Therefore, crucially, an asset is not a thing; that is, nothing is intrinsically an asset by virtue of an inherent substance or value. Rather, an asset can be better grasped as a form, which denotes the processual and narrative character of assetization (Birch and Muniesa 2020: 4).

As Muniesa et al. (2017) argue, the examination of the asset condition as a cultural syndrome requires going beyond the field of finance proper and branching off into the metaphorical to better understand how the peculiar form of valuation enacted through capitalization and assetization increasingly shapes critical aspects of contemporary organizational and social life (see also Leyshon and Thrift 2007). Approaching assetization narratively is particularly befitting for this orientation toward the metaphorical. One the one hand, the "same-but-different" that characterizes narrative transformation in the sense of Todorov (1971a) can contribute to an analytic avenue concerned with grasping how things (e.g., buildings, nature, land, infrastructure, patents, or JPEGs as in the example above) can be made to acquire the asset form (i.e., *literally* become financial asset classes); on the other hand, taking into account that the "same-but-different" is quite precisely the province of metaphor (Brooks 1977), it can also contribute to an analytic avenue focused on exploring assetization *metaphorically*. Taking this cue, this article unfolds the assetization of design as a process of narrative transformation, not by analyzing how design is turned into a financial asset class in the strict sense of a tradable rent-bearing property that is owned or controlled under law (Birch and Ward 2022), but by describing how design is narrated, valued, and subjected to calculative operations that transform it into an object of investment promising future returns—much like a financial asset yet different in that the entity in question (i.e., design) is not strictly turned into property in the alienable sense and traded in financial (or financial-like) markets. In short, this article treats assetization metaphorically by showing how design is made analogous to, yet not exactly, a financial asset class.

The analysis focuses on a specific document, McKinsey & Company's report entitled "The Business Value of Design" (Sheppard et al. 2018). Whatever it may be, the report is first and foremost a text, which, like any text, can be analyzed narratively. Indeed, narrativity is "the very organizing principle of all discourse, whether narrative (identified in the first instance, as figurative discourse) or non-narrative" (Greimas and Courtés 1982: 209). As ethnographic artifacts, reports offer more than a written record; they encode a world into a text and participate in the constitution of that world by enacting particular relationships (Tischer et al. 2019). Crucially, relationships enacted by texts are not simply discursive or symbolic but emphatically material, which is what strands of narrative and semiotic approaches in the social sciences have long foregrounded (Czarniawska-Joerges and Joerges 1988; Akrich and Latour 1992; Law 1996). Texts exercise a world-making capacity insofar as they intervene and shape social life in a variety of ways (Asdal 2015); they produce and define frames of action for a host of delegated characters (or actants in semiotic parlance) (Greimas and Courtés 1982; Latour 1988). In other words, texts perform "something;" they produce change or bring about transformation from one state to another (Cooren 2004). From this perspective, a document is not simply a bearer of information, but can be better grasped as "an event, which has the same activity, the same materiality, the same complexity, the same historicity as any other event" (Latour 1993a: 130). This transformative, event-like quality of texts is not given; rather, it is, by necessity, a narrative accomplishment (Todorov 1971a).

To see and construe texts in this way necessitates reading *with* them, rather than *against* them (Jensen and Lauritsen 2005). Such reading recognizes that texts are themselves actors on the move, multiplying links that may exceed their textual functions. From this angle, rather than being embedded in "contexts," texts reside in material–semiotic networks in whose weaving they actively partake. The analytic strategy of "reading with the text" is thus never a matter of putting text in its context, but of investigating how the text summons actants and connects practices across space and time. In other words, unfolding the text as event entails bracketing out the reference to an "outside" context or reality "behind" the text, in favor of a concern with what the text – read *à la lettre* – enacts and how extratextual practices are playing into, taking part in, and being modified in the text (Asdal 2015). From this perspective, what is defined and distinguished as the "context" of a text in the analysis of a given report or document is as much a semiotic production as the text itself. As Latour (1988: 27) points out, "context is always made up of shifted characters inside another text," so there is no distinction to be made in principle between the content and context of texts. In semiotics, "shifting out" or "disengaging" refers to the narrative operation through which a writer or enunciator shifts attention away from them by delegating action to a new character in a different place and time, thus creating a new narrative plane (Greimas and Courtés 1982; Latour 1993a). The reverse operation is called "shifting in" or "engaging" whereby the enunciator engages back into the narrative as an actor. The actants or characters populating the different narrative planes (including writers and readers) cannot *escape* from the text, but only *add* one text to another (Latour 1988: 27). Here texts are granted an unconventional autonomy, since the continual shifting across narrative planes expands characters' domain of action from the realm of texts to the realm of practices and back. This is an insight from semiotics that early on was key to the development of actor–network theory (ANT) as a material–semiotic approach radically opposed to the reduction of events and actors to a given context that would purportedly explain them. Interestingly, although subsequent iterations and evolutions of ANT have retained this irreductionist ethos, they have tended to be more concerned with the material side of the material–semiotic (Asdal 2015), often losing sight of the "radical autonomization of discourse

(Latour 1993b: 264) at the heart of the expanded semiotics that animated early ANT accounts.[4]

The analytic strategy pursued in this article aims at recovering this semiotic and narrative edge by painstakingly describing what the text in the McKinsey report does and with what effects and implications for the issue at stake: the valuation of design as asset. To bring into effect this autonomization, the analysis relies on the notion of script, which held much importance in early articulations of ANT but has lately been given much less attention – a fate similar to that of the cognate notion of inscription (Asdal 2015: 75). Scripts can be understood as narrative prompts or dictates moving continuously between textuality and extratextuality and which define a framework of action for the actors they assemble. More latterly, Latour (2012, 2013) redeployed the notion of script in his description of organization as a mode of existence. To wit, he speaks of the act of organizing as a "'flip-flopping' of scripts" that generates the object called organization (Latour 2012: 170). In this semiotics of action, organizations are considered to be traversed through and through by a plethora of circulating scripts, often contradictory, that impel actors to become specific characters and act in specific ways at different junctures and deadlines; but in an oscillating shifting maneuver, these scripts that delegate are also generated and modified by the very same actors who perform as delegates. Scripts are thus always competing against other scripts, always defining frames of action and designating characters, always reorganizing and disorganizing, and always forcing actors to position themselves in relation to their instructions—"under" or "above" (Latour 2012, 2013). This article employs the notion of script to discuss how, in accounting for the value of design, the text in the McKinsey report carries a script that bears the asset form, and how such script acts organizationally in and beyond the text.

Narrating the value of design

The publication of the McKinsey & Co. report on "The Business Value of Design" follows the formidable irruption of management consultancies into the design consulting field via a series of acquisitions (see Hurst 2013; Xu et al. 2017). In the case of McKinsey, the firm

[4] Latour (1993c) notably criticized the autonomization of discourse operated in linguistic and semiotic turns for their tendency to totalize language and subsume reality under an unsurpassable sphere of meaning, which left materiality out of analytic consideration. Yet, when relieved from the burden of meaning and context, he viewed in the autonomization of discourse afforded by semiotics - and more particularly Greimasian semiotics - a radical and useful way to treat ontological questions and describe the constitution and transformation of entities and worlds by freely moving between signs and things in the analysis (see also Akrich and Latour 1992).

acquired the Silicon Valley-based design studio Lunar in 2015 and the Stockholm-based design studio Veryday in 2017 which led to the establishment of McKinsey Design as a business function of its own, resulting also in the appointment of a number of Design Partners over the years. The current emphasis on and interest in design on the part of management consultancies comes at a time in which the power of these firms is considerably expanding (Hurl and Vogelpohl 2021). Today their influence extends across the global economy in both private and public sectors, playing a key role in the construction of organizational and economic realities (Chong 2018). As Thrift (2005) argues, management consulting firms emerged as central figures in the "cultural circuit of capital" that developed in the post-1960s period, in time consolidating themselves as key sites where particular discursive formations and moral imaginaries are instituted and legitimated as managerial orthodoxy. In the management consulting industry, the purview of what "management" means and entails has changed over time, as these firms continuously work "to expand the scale and scope of their managerial knowledge products" (Suddaby and Greenwood 2001: 935). Indeed, their orientation has gradually evolved from an early focus on cost accounting and organizational restructuring, to formulating strategies and fashioning corporate cultures, to promoting shareholder value and private equity, and most recently, to "facilitating the development and extension of new financial assets, products, and markets" (Roitman 2021: 138). So, at a time when design is gaining significant prominence among the range of professional discourses to which management consultancies appeal in framing their work (McKenna 2006), these firms have effectively become agents of financialization (Chong 2018; Roitman 2021). The McKinsey report at the center of the present analysis is eloquent of this convergence.

The report itself is obviously a sales pitch. It is a document produced to showcase expertise and lure clients into hiring their services. It is targeted at CEOs and corporate executives, and thus, not surprisingly, its prose style is reminiscent of Harvard Business Review articles, providing easily digestible information backed by claims of rigorous research. As is typical in the genre of consulting reports, the document is stacked with "exhibits" in the shape of charts and tables, which contribute to its robustness and trustworthiness. Yet, in this particular case these elements are hardly evocative of the standard corporate aesthetic and are accompanied by conceptual illustrations and photographs of designers at work in studios, giving the report the aura of a sleek brochure that exudes a stylishness atypical of the genre. This being a document concerned with the value of design, its form seems to be as important as its content. In fact, McKinsey Design won a Red Dot Award, a prestigious international design prize, in 2020 for the visual identity of the report series on "The Business Value of Design."[5]

But what does the McKinsey report narrate?[6] And what does this narrative accomplish? The text in the report is organized around a story that bears some markers of the detective genre. The plot begins with a mystery or puzzling situation that begs to be explained and solved through an investigation. The mystery is somewhat delineated in the third paragraph of the report:

> Despite the obvious commercial benefits of designing great products and services, consistently realizing this goal is notoriously hard—and getting harder. Only the very best designs now stand out from the crowd, given the rapid rise in consumer expectations driven by the likes of Amazon; instant access to global information and reviews; and the blurring of lines between hardware, software, and services. Companies need stronger design capabilities than ever before. So how do companies deliver exceptional designs, launch after launch? What is design worth? (Sheppard et al. 2018: 4).

Underlying these questions, which sketch the contours of the mystery, is the premise that design is worth *something* and this worth can consistently be realized *somehow*; indeed, one paragraph earlier, the reader is guided to concur that it suffices to think of "iconic designs" to be reminded of "the way strong design can be at the heart of both disruptive and sustained commercial success in physical, service, and digital settings" (Sheppard et al. 2018: 4). The crime, as it were, is that up until now design has not been properly valued, and thus its "true" worth remains unknown to most, with only a canny few having realized and deciphered this value. In short, design is valuable yet mystifying, and so what remains to be done to lift the veil of mystery is to establish exactly how valuable and how it can be made

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5 https://www.red-dot.org/project/the-business-value-of-design-48995, accessed 1 April 2022. As it happens, a report that appraises and promotes the value of design to business leaders is prized and awarded by design industry experts as a design object. This award contributes to the legitimization of McKinsey as a bona fide player in the design industry, and though its conferral pertains to the report's graphic design, it is also possible in this particular case to read it as an endorsement of the report's substance.

6 As stated in the document, the authors of the report are Benedict Sheppard (a partner in McKinsey's London office), Garen Kouyoumjian (a consultant), Hugo Sarrazin (a senior partner in McKinsey's Silicon Valley office), and Fabricio Dore (an associate partner in McKinsey's São Paulo office). However, in line with the narrative–semiotic approach here developed, the present analysis is less concerned with the authors-in-the-flesh (as the humans "behind" the text), and far more concerned with the authors-built-into-the-text of the report (as actants summoned by and within the text) (see Latour 1993a), who are in this case inscribed as a unified narrator via the repetitive use of 'we' throughout the report.

so. In this case, the narrator built into the text is like a detective who undertakes the investigation, making a series of discoveries along the way, the sum of which culminates in the solution of the mystery: the ascertaining of the something and the somehow. Here the mystery or puzzling situation that calls upon investigation has the twofold quality of being simultaneously circumscribed and open-ended. It is as much a matter of calculating the financial value of design as it is a matter of exploring the generative conditions that can enable the realization of such value. Ultimately, as we shall see, the investigation carried out by the narrator/detective[7] reveals the worth of design *as asset* with reference to specific indicators, while at the same time providing prescriptive indications for how this worth can be realized *organizationally*. There is thus a progression from ignorance to knowledge operated in the text, the sort of narrative transformation that is typical of detective stories "in which the importance of the event is less than that of our perception of the event, of the degree of knowledge that we have about it" (Todorov 1971b: 40).[8]

In this detective story, wherein the mystery of a crime is replaced by one of capitalization or assetization, the dénouement is partially revealed from the outset. Appearing prior to any prose, the report in fact opens with a teaser question that in its phrasing already stakes a claim for the asset nature of design: "How do the best design performers increase their revenues and shareholder returns at nearly twice the rate of their industry counterparts?" (Sheppard et al. 2018: 2). The ideal reader inscribed in the narrative, who may also be called narratee (Greimas and Courtés 1982), is a C-level executive interested in the maximization of returns who clearly has a stake in the resolution of the mystery. Here, the text delegates the faculties of an investor to the narratee. That is, the narrator is not simply solving a mystery for knowledge's sake; rather, the solution is presented as an investment idea of which the narratee can only make sense by adopting an investor's gaze (Muniesa et al. 2017). That C-level executives are addressed as investors is hardly surprising. Nowadays, with the establishment of shareholder value as a general model of corporate governance, the firm is enacted as a bundle of financial assets (Styhre 2016) and the incentives of top management are geared

[7] This striking resemblance between the literary figure of the detective solving a mystery and the consultant prescribing a solution has previously been noted by Barbara Czarniawska (1999).

[8] Todorov (1971b) terms this type of narrative transformation at the heart of detective fiction a gnoseological transformation. Interestingly, the historical moment in which detective fiction triumphs as a literary genre coincides with the consolidation of the case-study method as a modern technology of knowledge production (see Ossandón 2020) – one that is widely used in the world of management consulting.

toward the maximization of shareholder returns, namely through performance-related pay schemes featuring stock options and bonuses (Kornelakis and Gospel 2018). These incentives ensure the strategic primacy of financial profitability, instilling among top managers a logic of capital investment oriented toward share price boost and short-term returns (Davis 2019). The shareholder model finds its underpinning in agency theory, which has undergone a conceptual evolution in its portrayal of the CEO from an unruly employee in need of reining in by incentive alignment (see e.g., Jensen 1986) to an investor with substantial wealth tied up in the firm (see e.g., Nyberg et al. 2010). Management consultancies such as McKinsey have, as a matter of fact, played a central role in these changes (Froud et al. 2000).

So viewed, intermingling with the detective metaphor, the McKinsey report, already in its opening lines, sets a scene that bears the plot of capitalization (Muniesa et al. 2017); it stages an encounter between two characters: a narratee/investor and a narrator/seller. Some additional interdependencies between the characters can be discerned from this angle. The narratee/investor (C-level executives), it is assumed, has a portfolio of financial assets under their tutelage (the firm) and is attentive to new investment opportunities that fit their expectations of high returns (and low to moderate risks). The narrator/seller (McKinsey consultants) is looking to present such an investment opportunity by appealing to the specific interests of the investor; hence the opening question hinting at a promise of capitalization by reference to an increase in revenues and shareholder returns. In this respect, the report itself takes on the character of a "pitchbook", a document that guides the investor's assessment of a particular financial product or asset by providing concise information on its key characteristics and earning potential with the aim of enticing investment (Tischer et al. 2019). Importantly, the promise of capitalization implied in the opening question hinges upon an additional mysterious character, one that has yet to be fleshed out: the so-called "design performer."

The intrigue is set for the drama to unfold. There are two principal narrative planes in the story. In one plane, the narratee is explicitly inserted in the story by the narrator (e.g., "by measuring and leading your company's performance …;" "nurture your top design people …;" "whether your company focuses on …;" "Want to know how your organization compares?"). At the same time, not only does the narrator directly address the narratee, but they are also active as a main character, drawing attention to their own investigative actions and prescriptions (e.g., "We have conducted …;" "We tracked the design practices …;" "We found a strong correlation …;" "Our results, however, show …;" "Through interviews and our experience working with companies to transform their strength in design, we've also discovered …"). Like a confident detective with multiple cases under their belt, the narrator does not hesitate to foreground their own methodological prowess at the beginning of the report:

> [W]e have conducted what we believe to be (at the time of writing) the most extensive and rigorous research undertaken anywhere to study the design actions that leaders can make to unlock business value. (Sheppard et al. 2018: 4)

> We tracked the design practices of 300 publicly listed companies over a five-year period in multiple countries and industries. Their senior business and design leaders were interviewed or surveyed. Our team collected more than two million pieces of financial data and recorded more than 100,000 design actions. (Sheppard et al. 2018: 4)

The series of discoveries subsequently made by the narrator/detective over the course of the investigation appear not so much as causally related episodes building up to a final solution, but more as a set of interlocking themes: "Advanced regression analysis uncovered the 12 actions showing the greatest correlation with improved financial performance and clustered these actions into four broad themes" (Sheppard et al. 2018: 4).

These themes are then largely unpacked in another narrative plane in the main part of the report. Indeed, there is such a plane insofar as the narrator constantly shifts out or disengages from the narrative by delegating action to another main character (Greimas and Courtés 1982; Latour 1988): the "performer," who oscillates between attributive modifiers throughout the narrative ("leading financial performers;" "top financial performers;" "the best design performers;" "top quartile of design performers"). In the beginning, this character is not clearcut; it is one and many and, as the story develops, appears in different guises with its own set of delegated characters: "design-driven companies," "design-centric companies," "T-Mobile," "Spotify," "IKEA," "Pixar," "one of the world's largest banks," "one medical-equipment group," "one cruise company," "one online gaming company," "one big hotel chain." By its very designation, this character emerges as a corollary of performances, that is, the design performer acquires its flesh and form through trials carried out as part of the investigation (i.e., the performance of advanced regression analysis and scoring operations). At the center of these performances is the MDI, "which rates companies by how strong they are at design and – for the first time – how that links up with the financial performance of each company" (Sheppard et al. 2018: 4). The MDI stands as the passageway from one narrative plane to the other. To wit, the narrator/detective actively engages in the narrative by performing and applying the MDI, only to disengage a moment later and let the "performer" figure forth on its own. Aspiring actors counted as worthy of the "performer" designation are attributed a number of "design actions" that set them apart from "industry counterparts," such as "putting someone on the executive board with a responsibility for design" or "tying management bonuses to design quality or customer-satisfaction metrics" (Sheppard et al. 2018: 5). As a character, the design performer is thus an effect that is then made to stand as a cause or origin of those actions. This gesture is what Latour (1993a) referred to as the move from a "name of action" to a "name of thing," from a predicate to a subject, from an attribute to a substance.

The character (in both the narrative and moral senses of the term) of the performer is crucial to the storyline in that it conjures up an aspirational figure for the narratee to identify with and emulate. The moral gravitas incarnated in this character largely rests upon the rapprochement between financial value and design execution that the MDI effectuates. Indeed, the MDI reveals that the "design performer" and the "financial performer" are in fact one and the same: "high MDI scorers" (i.e., companies that excel at design according to the indicator) turned out to be "leading financial performers" (i.e., companies that increased their revenues and total returns to shareholders higher and faster than their industry counterparts). Viewed from the angle of capitalization, not only is the performer hailed as an exemplar of strong performance, but of strong performance *underpinned by* savvy investorship. That is, the character of the performer, its ontological and moral significance, is predicated on the consideration of design as an asset class. In other words, performers perform proficiently because they act as asset managers who capitalize on design. This points to the most pivotal transformation going on in the text: on the whole, across these two narrative planes, the story modifies the status of design from a notoriously elusive capability to a full-blown financialized asset. The four themes revealed by the investigation perform a series of movements or transformations that are crucial for understanding how design acquires this asset form. Each theme sets a particular scene in which design is transformed in the direction of demystification and heightened performance through the identification of specific "design actions." These scenes can be seen as attempts by the narrator/detective to dispel falsities that hinder the realization of value supposedly latent in design. This becomes apparent in the way in which the themes are introduced at each juncture, clearly signaling a move from one state to another. In what follows, we shall explore these themes and the transformations wrought through them.

Theme 1: More than a feeling – it's analytical leadership

At the beginning of the scene set in this theme, design is in a dire state, its defenders and representatives are misguided and powerless, its fate is left to the arbitrary whims of leaders devoid of vision who operate on impulse and feeling. Indeed, according to the report, in many businesses …

> … design leaders say they are treated as second-class citizens. Design issues remain stuck in middle management, rarely rising to the C-suite. When they do, senior executives make decisions based on gut feeling rather than concrete evidence. (Sheppard et al. 2018: 17).

> Designers themselves have been partly to blame in the past: they have not always embraced design metrics or actively shown management how their designs tie to meeting business goals. (Sheppard et al. 2018: 17).

In this world, the majority of leaders fail to make "objective design decisions (for example, to develop new products or enter new sectors)" (Sheppard et al. 2018: 18). Against this ominous backdrop, the narrator begins to sketch some traits of the design performer that have been made to appear through the MDI:

> The companies in our index that performed best financially understood that design is a top-management issue, and assessed their design performance with the same rigor they used to track revenues and costs. (Sheppard et al. 2018: 17).

> What our survey unambiguously shows [...] is that the companies with the best financial returns have combined design and business leadership through a bold, design-centric vision clearly embedded in the deliberations of their top teams. (Sheppard et al. 2018: 17).

This indicates that another world is possible, one where design is not simply the province of designers but also of visionary executives who make decisions based on metrics, not feelings. This is a world where performance indicators abound and design is duly assessed, that is, managed with the precision of the accountant and the clairvoyance of the financier. To do otherwise would be inconceivable: "In an age of ubiquitous online tools and data-driven customer feedback, it seems surprising that design still isn't measured with the same rigor as time or costs (emphasis in the original)" (Sheppard et al. 2018: 18).

This scene detaches design from emotive associations and emancipates it from a secondary role in organizations, making it emerge as an upper management concern that has to be subject to increasing levels of audit and measurement to "unlock" its value.

Theme 2: More than a product – it's user experience

In this scene, the narrow purview of industrial-era design presents itself as an outmoded yet entrenched world that needs surpassing. In this world, design is solely concerned with manufactured goods, new product development boils down to "'copy and paste' technical specs from the last product" (Sheppard et al. 2018: 21), and the needs of potential users are not considered.

The performer, on the other hand, treats design in a different fashion:

> Top-quartile companies embrace the full user experience; they break down internal barriers among physical, digital, and service design. The importance of user-centricity, demands a broad-based view of where design can make a difference [...] The boundaries between products and services are merging into integrated experiences. (Sheppard et al. 2018: 21).

> This design approach requires solid customer insights gathered firsthand by observing and – more importantly – understanding the underlying needs of potential users in their own environments. (Sheppard et al. 2018: 21).

In the design-driven world of the performer, design's scope of work is not constrained by arbitrary categories (e.g., physical, digital, service) that curtail the sheer breadth of experience undergone in consumption or usage situations. The performer uses design "to capture this range of experience" (Sheppard et al. 2018: 21). This scene dissociates design from a narrow focus on product, reorienting it to a broader notion of experience, thus modifying what the object of design is.

Theme 3: More than a department – it's cross-functional talent

At the beginning of this scene, the narrator paints a picture of "traditional design departments":

> [A] group of tattooed and aloof people operate under the radar, cut off from the rest of the organization. Considered renegades or mavericks by their colleagues, these employees (in the caricature) guard access to their ideas, complaining that they have too often been burned by narrow-minded engineering or marketing heads unwilling to (or incapable of) realizing the designers' grand visions. (Sheppard et al. 2018: 22).

Although a caricature, this picture, as it turns out, "can be surprisingly resilient" (Sheppard et al. 2018: 22). The narrator adds more reality to this caricature by describing another scene within the scene:

> One company we know, for example, unveiled a new flagship design studio to much jubilation from the design community. Before long, all the designers had moved their desks inside the studio, and had deactivated door access for the marketing, engineering, and quality teams. These moves drastically reduced the level of cooperative work and undermined the performance of the business as a whole. (Sheppard et al. 2018: 21).

This is the world of design as a "siloed function." It is populated by designers whose "isolationist tendencies" hurt the business bottom line. Against this orientation, the performer lives in an obverse world where functional silos are broken down and designers are integrated with other functions in a manner that is "extremely valuable" for the business. The designers who operate in this world are hybrid creatures "who work across functions while retaining their depth of design savvy" (Sheppard et al. 2018: 24), enabling them to have "a tangible impact through their work" (Sheppard et al. 2018: 24).

In this world, the performance of designers is boosted with specific incentives "tied to design outcomes, such as user-satisfaction metrics or major awards" (Sheppard et al. 2018: 23). Importantly, these incentives are not restricted to bonuses or paths to career advancement into managerial positions:

> Carrots such as these are not enough to retain top design talent if not accompanied by the freedom to work on projects that stir their passion, time to speak at conferences attended by their peers, and opportunities to stay connected to the broader design community. (Sheppard et al. 2018: 23).

In the world of the performer, all these "carrots" are dangled in a "working environment characterized by diversity, fun, and speed to market" (Sheppard et al. 2018: 24) and backed by investment in tools and infrastructure that "drive productivity and accelerate design iterations" (Sheppard et al. 2018: 24). Here investment in design is not subsumed under other functions or concerns: "Formal design allocations should be agreed to in partnership with design leaders instead of appearing (as they often do) as line items in the marketing or engineering budgets" (Sheppard et al. 2018: 24).

This scene frees design from the narrow spatial and functional boundaries of the organizational department, transforming it into an organization-wide concern and a distinct object of investment. It puts designers into the spotlight as professionals whose work can make an outsized contribution to the business bottom line, provided that the right "carrots" dangle before them.

Theme 4: More than a phase – it's continuous iteration

In this scene, the issue of temporality comes to the fore. It begins with a world of "compartmentalization" where design is approached in a manner that emphasizes "discrete and irreversible design phases in product development" (Sheppard et al. 2018: 26). In this world, design is a lesser one-off event in a larger chain of events where the voice of the user is either lost or poorly echoed.

By contrast, in the world of the performer, design is an ongoing event covering all phases of development and beyond, where designers act as loyal spokespersons that advance the interests of users. Indeed, design here is predicated on "… learning, testing, and iterating with users – practices that boost the odds of creating breakthrough products and services while simultaneously reducing the risk of big, costly misses"(Sheppard et al. 2018: 26).

It is in this extended temporality that "design flourishes," as the performer actively fosters "a culture of sharing early prototypes with outsiders and celebrating embryonic ideas" (Sheppard et al. 2018: 27) in a recursive fashion. This scene thus modifies the temporality of design from a clearly demarcated episode to an ever-unfolding continuum mediating between users and companies.

The script of design-as-asset

These themes and the actions they prescribe – from measuring design performance to breaking down internal silos to appointing design executives, among other things – accumulatively constitute the revelation of the mystery at the center of our detective story. The transformations accomplished through these themes modify the status of design, enabling its emergence as a financialized asset. That is, the narrative of the report accounts for the value of design by presenting it as an object of investment that ensures future flows of revenue, on condition that design is enacted according to specific prescriptions. Indeed, the report concludes by pointing out that companies that prioritize the actions prescribed in these four themes …

> … boost their odds of becoming more creative organizations that consistently design great products and services. For companies that make it into the top quartile of MDI scorers, the prizes are as rich as doublinßπg their revenue growth and shareholder returns over those of their industry counterparts. (Sheppard et al. 2018: 29).

From this narrative–semiotic viewpoint, design's acquisition of the asset form is not simply a matter of calculating the monetary earnings it could potentially yield, but of defining particular frames of action that bring characters into being and activate them in particular ways, so that the value of design may be realized as a result. In this case, the asset form can, therefore, be seen as a script that calls upon a particular way of organizing actors around this thing called design. It is in this sense that the script of design-as-asset can be said to play out organizationally (Latour 2012, 2013); it is a particular script that circulates through a set of actors, delegating them to do many different tasks and operations that extend the reach and influence of design practices and expertise in and across organizations. The script entangles the coordinated expansion and monitoring of design activities within firms with the fervor for shareholder value maximization and capital gains, drawing a coπnvenient line of causation between them as a near certainty.

The felicitous performance of this script can be perceived in extratextual practices beyond the pages of the report in documented developments such as the increasing number of designers appointed to executive roles in organizations in conjunction with the emergence of the C-level corporate title of "Chief Design Officer" (Wilson 2020), the growing pressure and amount of mechanisms to evaluate and measure design work (Moor and Julier 2009; Navarro Aguiar 2020), or the rising corporate and venture capital investment in design (Xu et al. 2017). These ongoing developments are manifestations of the "design actions" delineated in the report. To be sure, the McKinsey report is not the originator of this script but merely an instantiation that adds reality and agency to it, since the report now stands as a reference point to justify decisions and implement practices associated with this script. The script itself, however, has been moving in extratextual practices and multiplying links across a variety of organizations even before the report had ever come to be (see e.g., the work of the DMI previously alluded to in the Introduction). What this suggests is that the script of design-as-asset is embedded in a web of practices and instituted documents that ultimately refer to design as a valuable asset whose value-creating power largely depends on its gaining organizational ascendancy and getting properly "managed." Much of the research – scholarly and otherwise – that falls under the umbrella of "design management" has been crucial to producing the wider text on which the script of design-as-asset originates. The project of design management as a field of knowledge has long been preoccupied with casting design as a strategic asset for business success without much concern for questioning the prevalent economic cosmology on which "success" is predicated (Julier 2017), and so the process of assetization here described is a financialized iteration of this orientation.

The analysis reveals two dimensions that take an important part in the script of design-as-asset: one is financial, the other organizational. The script accounts for the value of design as an asset that boosts shareholder dividends, while concomitantly delegating design a major role in organizational development, effectively recasting design as a "total management foundation for successful businesses" (Reckwitz

2017: 119) or as "a central feature of management that ranges from goods and services, to operations, to vision and strategy" (Buchanan 2015: 16). In the script, these two dimensions are causally conjoined with narratively contrived certainty: the organized totalization of design in the corporation results in maximum financial profitability. The significance of this relation becomes even more salient when considering that design is an asset that can be "used to create assets" (Julier 2017: 79). That is to say, design can be valued and managed as a financial asset class in a metaphorical sense, partly inasmuch as it acts as a creative force for producing assets in a more literal sense, that is, things that are themselves "designed in order to achieve investment and with an eye on future value" (Julier 2017: 80). Therefore, if the metaphorical assetization of design narrated in the report reveals design itself to be a driver of not-so-metaphorical assetization, then the optimal organization of design is of vital concern for those interested in maximizing the potential earnings. Hence no wonder that discussions around the value of design often appeal to a logic of "best practices" in relation to so-called "design-centric" organizations (Westcott et al. 2013; Buchanan 2015; Heskett 2017). It is this very appeal to "best practices" as a form of ethical injunction that underpins and justifies the project of management consulting and has served as a vehicle to propagate financial logics and investment rationalities in organizations and the economy at large (Chong 2018).

Now, up to this point, the issue of what design is has not been dissected, and purposefully so. What is "really" being assetized in the assetization of design? Is it an actor called "design," as in the design industry, the design profession, or the design discipline? Is it the act of designing itself, whether considered as a mindset, a craft, an expertise, or a process? Is it the thing being designed, whether a material artifact, a digital interaction, a service, or a system? The script of design-as-asset allows for all these different interpretations. The actor, the act, the thing can all be alluded to in the narrative process through which design is made to acquire the asset form. While studies of assetization have tended to focus on the transformation of clearly bounded things into financial assets classes, this article shows how the script of design-as-asset thrives in this ambiguity around the notion of design and its tension between the literal and the metaphorical, contributing to its wider circulation as a shifting actant ready to assume various figurations in the performance of value.

Conclusion

Professional design is nowadays entangled in an ostensible paradox: as design grows in value and recognition in organizational settings, it undergoes increasing degrees of "audit, measurement, accountability, codification and systematization," which seems to go against the expert discourse of design, wrapped as it is in a "creative" mystique characterized by a commitment to "differentiation and non-normative action" (Moor and Julier 2009: 7). Indeed, whereas the idea of "creativity" may well be the "currency of designers" that to some extent underlies the global rise of design (Moor and Julier 2009: 6), creativity, as enacted in design practice, does not seem to contain within itself the justificatory apparatus to maintain or increase interest and investment in design, unless represented by quantified measurement and valued in financial terms. This could lead one to conclude that "creativity" as incarnated in professional design has just become another object of the gradual colonization of supposedly non-financial activities by financialized valuations that has come to characterize contemporary capitalism (Chiapello 2015). Indeed, the narrative analysis at the heart of this article unfolded how design acquires the asset form by reference to a set of organizational prescriptions and delegated actions, which were conceptualized as a circulating script. The script of design-as-asset issues a promise of capitalization that vows to turn companies into more creative organizations while increasing revenue growth and shareholder returns. In a sense, this script is symptomatic of how the established vocabularies and conceptual frameworks of financial valuation are indeed intersecting with and shaping the expert practice and discourse of design.

However, rather than maintaining a duality between the cultural and the economic, our narrative–semiotic approach to the assetization of design does more than simply signal the colonizing feats of financialized techniques of governance and valuation into the supposedly non-financial terrains of professional design and suggests a more co-constitutive relation, thus aligning with research proposing that financialization "drives and is driven by an economy pathologically addicted to the performance of creativity" (Haiven 2014: 124). Through the emblematic case of design, this article contributes to our understanding of how the cultural condition that makes the spread of assetization possible is to an important extent established in the ongoing and everyday work of striving to systematize and increase creativity in organizations, what Reckwitz (2017: 222) refers to as "the compulsion of creative heightening." In this light, the fact that the widespread rise of design coincides with the advent of the asset economy and the consolidation of asset manager capitalism is hardly perplexing. As Yates (2017: 24) aptly points out, "[n]ever far from the concern with innovation and creativity is the language of measurement, return-on-investment scores, rankings, performance indicators, and social impact metrics." So there is no paradox at work here after all.

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References

Adkins, Lisa, Melinda Cooper, and Martijn Konings. 2020. T*he Asset Economy: Property Ownership and the New Logic of Inequality*. Cambridge: Polity.

Akrich, Madeleine, and Bruno Latour. 1992. "A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies." In *Shaping Technology, Building Society: Studies in Sociotechnical Change*, edited by Wiebe E. Bijker and John Law, 259–264. Cambridge, MA: The MIT Press.

Asdal, Kristin. 2015. "What is the Issue? The Transformative Capacity of Documents." *Distinktion: Journal of Social Theory* 16(1): 74–90.

Birch, Kean. 2017. "Rethinking Value in the Bio-Economy: Finance, Assetization, and the Management of Value." *Science, Technology & Human Values* 42(3): 460–490.

Birch, Kean. 2020. "Technoscience Rent: Toward a Theory of Rentiership for Technoscientific Capitalism." *Science, Technology & Human Values* 45(1): 3–33.

Birch, Kean, and Fabian Muniesa. 2020. "Introduction: Assetization and Technoscientific Capitalism." *In Assetization: Turning Things into Assets in Technoscientific Capitalism*, edited by Kean Birch and Fabian Muniesa, 1–41. Cambridge, MA: The MIT Press.

Birch, Kean, and Callum Ward. 2022. "Assetization and the 'New Asset Geographies.'" *Dialogues in Human Geography* (Online first).

Braun, Benjamin. 2021. "Asset Manager Capitalism as a Corporate Governance Regime." In *The American Political Economy: Politics, Markets, and Power*, edited by Jacob S. Hacker, Alexander Hertel-Fernandez, Paul Pierson, and Kathleen Thelen, 270–294. Cambridge: Cambridge University Press.

Brooks, Peter. 1977. "Freud's Masterplot." *Yale French Studies* 55/56: 280–300.

Buchanan, Richard. 2015. "Worlds in the Making: Design, Management, and the Reform of Organizational Culture." *She Ji: The Journal of Design, Economics, and Innovation* 1(1): 5–21.

Chiapello, Eve. 2015. "Financialisation of Valuation." *Human Studies* 38: 13–35.

Chong, Kimberly. 2018. B*est Practice: Management Consulting and the Ethics of Financialization in China*. Durham, NC: Duke University Press.

Cooren, François. 2004. "Textual Agency: How Texts Do Things in Organizational Settings." *Organization* 11(3): 373–393.

Czarniawska, Barbara. 1999. "Management She Wrote: Organization Studies and Detective Stories." S*tudies in Cultures, Organizations & Societies* 5(1): 13–41.

Czarniawska-Joerges, Barbara, and Bernward Joerges. 1988. "How to Control Things with Words: Organizational Talk and Control." *Management Communication Quarterly* 2(2): 170–193.

Davis, Aeron. 2019. "Top CEOs, Financialization, and the Creation of the Super-Rich Economy." *Cultural Politics* 15(1): 88–104.

European Commission. 2021. "New European Bauhaus: Commission Launches Design Phase." *European Commission* 18 January. https://ec.europa.eu/commission/presscorner/detail/en/ip21111, accessed 31 March 2021.

Froud, Julie, Colin Haslam, Sukhdev Johal, and Karel Williams. 2000. "Shareholder Value and Financialization: Consultancy Promises, Management Moves." *Economy and Society* 29(1): 80–110.

Gerosa, Alessandro. 2021. "The Hidden Roots of the Creative Economy: A Critical History of the Concept Along the Twentieth Century." *International Journal of Cultural Policy* 28(2): 131–144.

Greimas, Algirdas J., and Joseph Courtés. 1982. *Semiotics and Language: An Analytical Dictionary*. Bloomington, IN: Indiana University Press.

Haiven, Max. 2014. "The Creative and the Derivative: Historicizing Creativity under Post-Bretton Woods Financialization." *Radical History Review* 118: 113–138.

Heskett, John. 2017. *Design and the Creation of Value*. London: Bloomsbury Academic.

Hurl, Chris, and Anne Vogelpohl. 2021. "Introduction: The Rise of Professional Service Firms as Public Policy Actors." In *Professional Service Firms and Politics in a Global Era: Public Policy, Private Expertise*, edited by Chris Hurl and Anne Vogelpohl, 1–25. Cham: Palgrave Macmillan.

Hurst, Nathan. 2013. "Big Corporations Are Buying Design Firms in Droves." *Wired Magazine* 15 May. https://www.wired.com/2013/05/accenture-fjord/, accessed 14 September 2020.

Isaacson, Walter. 2011. *Steve Jobs*. New York: Simon & Schuster.

Jensen, Casper Bruun, and Peter Lauritsen. 2005. "Reading Digital Denmark: IT Reports as Material-Semiotic Actors." *Science, Technology & Human Values* 30(3): 352–373.

Jensen, Michael C. 1986. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." *The American Economic Review* 76(2): 323–329.

Johansson-Sköldberg, Ulla, Jill Woodilla, and Mehves Çetinkaya. 2013. "Design Thinking: Past, Present and Possible Futures." *Creativity and Innovation Management* 22(2): 121-146.

Juárez, Geraldine. 2021. "The Ghostchain (Or Taking Things For What They Are)." *Paletten* Nr. 325. https://paletten.net/artiklar/the-ghostchain, accessed 1 April 2022.

Julier, Guy. 2017. *Economies of Design*. London: Sage.

Kornelakis, Andreas, and Howard Frederick Gospel. 2018. "CEO Pay and Corporate Financialization: The UK in Comparative Perspective." In *The Routledge Companion to Reward Management*, edited by Stephen J. Perkins, 298–308. London: Routledge.

Langley, Paul. 2020. "Assets and Assetization in Financialized Capitalism." *Review of International Political Economy* 24(7): 1–12.

Lash, Scott, and John Urry. 1994. *Economies of Signs and Space*. London: Sage.

Latour, Bruno. 1988. "A Relativistic Account of Einstein's Relativity." *Social Studies of Science* 18(1): 3–44.

Latour, Bruno. 1993a. "Pasteur on Lactic Acid Yeast: A Partial Semiotic Analysis." *Configurations* 1(1): 129–146.

Latour, Bruno. 1993b. "An Interview with Bruno Latour." By Thomas Hugh Crawford. *Configurations* 1(2): 247–268.

Latour, Bruno. 1993c. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press.

Latour, Bruno. 2012. "'What's the Story?' Organizing as a Mode of Existence." In *Agency without Actors? New Approaches to Collective Action*, edited by Jan-Hendrik Passoth, Birgit Peuker, and Michael Schillmeier, 163–177. London: Routledge.

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

Law, John. 1996. "Organization and Semiotics: Technology, Agency and Representation." In *Accountability: Power, Ethos and the Technologies of Managing*, edited by Rolland Munro and Jan Mouritsen, 283–306. London: International Thomson Business Press.

Leyshon, Andrew, and Nigel Thrift. 2007. "The Capitalization of Almost Everything: The Future of Finance and Capitalism." *Theory, Culture & Society* 24(7–8): 97–115.

McGann, Michael, Emma Blomkamp, and Jenny M. Lewis. 2018. "The Rise of Public Sector Innovation Labs: Experiments in Design Thinking for Policy." *Policy Sciences* 51(3): 249–267.

McKenna, Christopher D. 2006. *The World's Newest Profession: Management Consulting in the Twentieth Century*. Cambridge: Cambridge University Press.

Moor, Liz, and Guy Julier (eds.). 2009. Design and Creativity: *Policy, Management and Practice*. Oxford: Berg.

Muniesa, Fabian. 2017. "On the Political Vernaculars of Value Creation." *Science as Culture* 89(1): 1–10.

Muniesa, Fabian, Liliana Doganova, Horacio Ortiz, Álvaro Pina-Stranger, Florence Paterson, Alaric Bourgoin, Véra Ehrenstein, Pierre-André Juven, David Pontille, Başak Saraç-Lesavre, and Guillaume Yon. 2017. *Capitalization: A Cultural Guide*. Paris: Presses des Mines.

Navarro Aguiar, Ulises. 2020. "A Number is Worth More Than a Thousand Pictures: The Case of Designers' Cynical Resistance Through Quantification." *ephemera* 20(3): 153–186.

Nyberg, Anthony J., Ingrid Smithey Fulmer, Barry Gerhart, and Mason A. Carpenter. 2010. "Agency Theory Revisited: CEO Return and Shareholder Interest Alignment." T*he Academy of Management Journal* 53(5): 1029–1049.

Ossandón, José. 2020. "Reading as Theorizing: A Conjecture Based on The Savage Detectives' Mode of Inquiry." In *Organization 2666: Literary Troubling, Undoing and Refusal*, edited by Christian De Cock, Damian O'Doherty, Christian Huber, and Sine N. Just, 45–61. Wiesbaden: Springer VS.

Rae, Jeneanne. 2013. "What is the Real Value of Design?" *dmi:Review* 24(4): 30–37.

Rae, Jeneanne. 2015. "Good Design Derives Shareholder Value." *Design Management Institute* May. https://www.dmi.org/page/DesignDrivesValue, accessed 31 March, 2021.

Rae, Jeneanne. 2016. "Design Value Index Exemplars Outperform the S&P 500 Index (Again) and a New Crop of Design Leaders Emerge." *dmi:Review* 27(4): 4–11.

Reckwitz, Andreas. 2017. *The Invention of Creativity: Modern Society and the Culture of the New*. Cambridge: Polity Press.

Roitman, Janet. 2021. "International Consultancy Firms and African States: New Debt Bonds." In *Professional Service Firms and Politics in a Global Era: Public Policy, Private Expertise*, edited by Chris Hurl and Anne Vogelpohl, 137–152. Cham: Palgrave Macmillan.

Sheppard, Benedict, Garen Kouyoumjian, Hugo Sarrazin, and Fabricio Dore. 2018. "The Business Value of Design." *McKinsey & Company* 25 October. https://www.mckinsey.com/business-functions/mckinsey-design/our-insights/the-business-value-of-design, accessed 14 September 2020.

Styhre, Alexander. 2016. C*orporate Governance, The Firm and Investor Capitalism: Legal-Political and Economic Views*. Cheltenham: Edward Elgar.

Suaste Cherizola, Jesús. 2021. "From Commodities to Assets: Capital as Power and the Ontology of Finance." *Review of Capital as Power* 2(1): 1–29.

Suddaby, Roy, and Royston Greenwood. 2001. "Colonizing Knowledge: Commodification as a Dynamic of Jurisdictional Expansion in Professional Service Firms." *Human Relations* 54(7): 933–953.

Thrift, Nigel. 2005. *Knowing Capitalism*. London: Sage.

Tischer, Daniel, Bill Maurer, and Adam Leaver. 2019. "Finance as 'Bizarre Bazaar': Using Documents as a Source of Ethnographic Knowledge." *Organization* 26(4): 553–577.

Todorov, Tzvetan. 1971a. *Poétique de la Prose*. Paris: Seuil.

Todorov, Tzvetan. 1971b. "The 2 Principles of Narrative." *Diacritics* 1(1): 37–44.

Valtonen, Anna. 2020. "Approaching Change with and in Design." She Ji: *The Journal of Design, Economics, and Innovation* 6(4): 505–529.

Westcott, Michael, Steve Sato, Deb Mrazek, Rob Wallace, Surya Vanka, Carole Bilson, and Diane Hardin. 2013. "The DMI Design Value Scorecard: A New Design Measurement and Management Model." *dmi:Review* 24(4): 10–16.

Wilson, Mark. 2020. "McKinsey Study of 1,700 Companies Reveals CEOs Don't Understand Design Leadership at All." *Fast Company* 19 February. https://www.fastcompany.com/90464950/mckinsey-study-of-1700-companies-reveals-ceos-dont-understand-design-leadership-at-all, accessed 31 March 2021.

Xu, Jackie, Aviv Gilboa, Justin Sayarath, Fatimah Kabba, and John Maeda. 2017. "Design In Tech Report 2017." *Design In Tech Reports* 11 March. https://designintech.report/2017/03/11/design-in-tech-report-2017/, accessed 31 March 2021.

Yates, Joshua J. 2017. "Saving the Soul of the Smart City." T*he Hedgehog Review* 19(2): 18–35.

Ulises Navarro Aguiar is Lecturer in Design at HDK-Valand Academy of Art and Design, University of Gothenburg, and a member of the research collective Origens Media Lab. His work lies at the crossroads of design studies, organization studies, and STS-infused economic sociology, and deals with questions around the relation of design to social and economic life.

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Theme issue contribution

The Emergence of the Academic Candidate: Evaluation as textual dramaturgy

Julian Hamann and Kathia Serrano Velarde

Abstract
Our contribution sheds light on the dramaturgies of evaluation that precede candidate selection in academic organizations. The dramaturgies unfold across committee meetings, reviews, and reports that funnel the pool of candidates into a shortlist of prospective members. Because they are prolonged and not all stages involve copresence, the continuity and consistency of evaluative processes is a central dramaturgical problem. It highlights the constitutive role of written documents for the continuity and consistency of organizational evaluation processes. We marshal evidence from a comparative study on academic candidacy in two organizational settings: grantmakers, who select candidates for funding, and universities, who select candidates for professorships. Drawing on archived records produced in the context of research grant applications and professorial recruitments between 1950 and 2000, we distinguish two regimes of textual agency throughout the processes of evaluation: documents structure the process of candidate selection throughout dramaturgical stages, and they act as relays that transfer assessments of human actors across dramaturgical stages and time. In addition, by focusing on organizational access and showing how organizations make people before even hiring them, we draw attention to the emergence of a highly scripted dramatic figure in academic life: the candidate.

Keywords: academia; candidates; documents; dramaturgy; organizations; textual agency

Julian Hamann is Junior Professor at the Department of Educational Sciences, Humboldt-Universität zu Berlin.
Kathia Serrano Velarde is Professor at the Max-Weber-Institute of Sociology, Heidelberg University.

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Introduction

Academia takes place in various organizational settings, and academics have to juggle different membership statuses in their daily work: they can be members of universities and colleges, they have contractual relationships with funding agencies and publishers, and they engage in professional associations. Academic organizations grant researchers access to material resources as well as the possibility to capitalize on the organization's visibility and legitimacy to the outside world. However, in times of scarce public funding for research and performance-based research governance, academics increasingly have to apply for resources inside and outside of the academic institution they belong to (Whitley and Gläser 2014). Being a candidate has thus become a pervasive feature of contemporary academic life. Because they are almost in a continuous state of candidacy, academics have to perform the role of the worthy candidate in different contexts and for a variety of purposes to forge their position in the academic world.

Although candidacy plays an important role in academic life, we know little about the process throughout which academics present themselves as candidates for organizational resources, and about the evaluative problems academic organizations face when they have to select prospective members. Crucially, prospective members are not selected based on ad-hoc decisions but through evaluative processes. Throughout these processes, evaluators with heterogeneous interests mobilize different criteria and principles to identify their "ideal candidate" (Lamont et al. 2000), while, in turn, candidates attempt a performance that is molded to meet these expectations and thus "offer their observers an impression that is idealized" (Goffman 1959: 23).

Following Goffman, we conceptualize the candidate selection process as a dramaturgy that is shaped by a specific – in our case, organizational – environment and which unfolds throughout a series of committee meetings, reviews, and reports that funnel the pool of candidates into a shortlist of prospective members. Because not all stages of the dramaturgy involve copresence, and academic evaluation is not only diachronic but also notoriously prolonged, the continuity and consistency of the performance is a central dramaturgical problem. In this article, we investigate how written documents remedy this problem. Our focus on "textual agency" (Cooren 2004) reveals how documents facilitate the continuity and consistency of organizational evaluation processes by establishing two regimes of agency: they provide a structure that lends the candidate selection process coherence and unity, and they act as relays that document, establish, and transfer assessments of human actors across a series of dramaturgical stages.

We marshal evidence from a comparative study on academic candidacy in two organizational settings: grantmaking organizations and universities. Both organizations are relevant cases for the regulation of access to resources. They represent highly bureaucratized settings that provide ample evidence for textual agency. We gathered and analyzed archived records produced in the context of research grant applications and professorial recruitments between 1950 and 2000, a period that represents major changes in the German academic funding landscape and career system. The corpus comprises a total of over 2,000 documents, including job advertisements, application guidelines, motivation letters as well as grant proposals, and allows us to develop a comparative and longitudinal perspective on academic evaluation.

In highlighting the constitutive role of documents for the dramaturgy of evaluation, we hope to expand the analytical and methodological repertoire of valuation studies. In addition, by focusing on organizational access and showing how organizations make people before even hiring them, we draw attention to the emergence of a highly scripted dramatic figure in academic life: the candidate.

Literature review: Evaluation as a process and the role of non-human actors

Competition has always been an inherent feature of science (Merton 1996). Yet empirical accounts abound that observe a change in the way science is organized (Whitley and Gläser 2007; Shattock 2014). Competition, it is argued, is no longer an inherent logic of the profession – rather, it has become a managerial principle of the research organization (Musselin 2010a, 2021; Espeland and Sauder 2016; Board of Editors 2021). It is both the chosen mean to allocate scarce symbolic and material resources and serves as a controversial index for quality (Hicks et al. 2015): the worth of research, the researcher and the research institution reveals itself through comparison with others. With the multiplication of competition comes the necessity to compete and, hence, to apply, to evaluate and to select (Stark 2020).

This article investigates competitions for access to organizational resources such as (grant) funding, to publication space, prizes, fellowships, or academic positions. It takes a processual and comparative view of the evaluation of academic candidates stretching from the moment of application to the final decision of the jury. Scholars interested in the (e)valuation of academics have analyzed, for instance, how funding panels reach consensus in face of uncertainty and disagreement in the group (Roumbanis 2017), or how panels mobilize criteria like "originality" (Guetzkow et al. 2004), "excellence" (Lamont 2009), or "impact" (Derrick and Samuel 2016) to argue for the quality of grant proposals. Regarding the recruitment of professors, research has revealed how different academic criteria like networks and publications (Combes et al. 2008) intertwine in the decision-making process with non-academic criteria like gender (van den Brink and Benschop 2012) and how reviewers weave together disparate evaluative criteria into coherent trajectories (Hammarfelt et al. 2020). Yet, the literature on evaluation – and especially evaluation in academia – tends to focus on evaluative "situations," i.e., time constrained moments of interaction in a copresent group. Although the "situationalism" of valuation studies has recently been challenged (Waibel et al. 2021), most empirical studies continue to conceptualize evaluation as a situated practice (see also Krüger and Reinhart 2017). The current article proposes to open up analytical perspectives by conceptualizing evaluation as a dramaturgical process that spans across evaluative stages. The concept of dramaturgy suggests the existence of a collective plot, or a script, enacted by those engaged in academic evaluation. The plot is designed to justify a collective decision to grant or not grant a person access to organizational resources. Our cases of candidate selection in professorial recruitment and grantmaking convey that this process can be more or less formalized and vary in length. For this reason, it is essential to focus on how the drama may be sustained over different evaluative situations or "stages."

We therefore turn our attention to the role of written documents as a neglected aspect of agency in valuation studies. The field of valuation studies has become increasingly interested in the evaluative agency of non-human actors such as indicators (Hammarfelt and Rushforth 2017; Kullenberg and Nelhans 2017), infrastructures (Krüger and Petersohn 2022), algorithms (Baka 2015), and rankings (Espeland and Sauder 2007; Brankovic et al. 2022). In most of these cases, things with agency are conceptualized as "devices" (Muniesa et al. 2007; Hamann et al. 2023). Few studies attend to written documents as things that have agency and that can make a difference in evaluation. Examples of such approaches are Latour's analysis of the role that the anatomy of scientific articles plays in the construction of facts (Latour 1988), Winsor's study on the organizing capacity of "work orders" in a laboratory (Winsor 2000), Hamann and Kaltenbrunner's analysis of how curricula vitae affect biographical representation in evaluative settings (Hamann and Kaltenbrunner 2022), and Ehrenstein and Muniesa's account of how carbon offsetting projects rely on "paper devices" like financial contracts (Ehrenstein and Muniesa 2013). It is this strand of literature that we contribute to in order to further valuation studies' understanding of the agentic role of documents. To this end we draw on the textual agency approach (Cooren 2004; Ashcraft et al. 2009). Anchored in organization studies, this approach highlights the agentic capacity of written documents in organizational processes. Informed by speech act theory and its notion of performativity (Austin 1962; Searle 1969) as well as actor–network theory (ANT) and its emphasis of socio-material practices (Latour

1999; MacKenzie et al. 2008), the textual agency approach offers to the field of valuation studies notions of performativity and agency that transcend the notion of human actorhood and recognize both the material and the temporal dimension in the constitution of value. Our cases show how, throughout the evaluative dramaturgy of candidate selection, written documents provide a structure and act as relays for evaluations.

The current article proposes three contributions to valuation studies more generally and the literature on academic evaluation in particular. First, we strive to emphasize the role of written documents for academic evaluation by showing how they organize its processual dimension. Second, we argue that written documents construct a specific dramatization that constitutes candidates. Third, it became evident that the dramaturgy of evaluation varies with regard to the type of membership it targets. The following section will discuss how we mobilize these contributions to study different cases of academic evaluation: candidate selection in grantmaking and professorial recruitment.

Theory: Candidate selection as an evaluative dramaturgy

Academic evaluation, like many other forms of cultural valuation, deals with incommensurables. Academic achievements and worth are notoriously difficult to grasp, measure, and assess (Lamont 2009; Karpik 2011). One consequence is that academic assessments are hard to replicate due to the uniqueness of both reviewers and the reviewed (Chubin and Hackett 1990; Cicchetti 1991; Langfeldt 2001). Attempts to formalize evaluative practices have resulted in complex arrangements including a multitude of actors: candidates, papers, and grant proposals are funneled into an elaborate evaluative process featuring reviews and reports, as well as jury and committee meetings, before being ranked and selected (or not) (Hirschauer 2010; Serrano Velarde 2018). We propose to frame this evaluative process as a "dramaturgy."

Goffman (1959) developed the concept of dramaturgy as an all-encompassing conceptual metaphor to capture how social situations are organized around issues of performance and framing (Oswick et al. 2001; Boje et al. 2003; Manning 2008). While he argued that elements of the dramatic seep into everyday life via a multitude of forms and channels, he developed his most systematic account of the dramaturgy of organizations in *Asylums* (Goffman 1961). In this particular form of organization – a total institution – people are constrained in clearly defined roles that afford little room for discretion. The organization foresees a particular way to process patients, molding them to organizational routines until no trace of the former self is left

(Sundberg forthcoming). Borrowing on Goffman's insights into the organizational processing of people, we propose to focus on the way organizations select new members. The application process thereby encompasses the actual application of prospective candidates as well as their evaluation. The dramaturgy of evaluation develops on three dimensions: the dimension of the plot, the role dimension, and the textual dimension.

First, the heuristic of the dramaturgy underlines that processes of evaluation are purposefully arranged in a specific order and toward a common goal. Conceiving of evaluations as having a "plot" counters the prevailing situationalism of valuation studies and emphasizes that evaluations proceed throughout different stages that span across time and space while building on each other. For the current article, the notion of evaluative dramaturgies conveys recursive assessment of the candidates at different points in time in view of reaching a final decision regarding candidate selection.

Second, just as Goffman's dramaturgical theory suggests that a person's identity is not stable but constantly remade as the person interacts with others, the notion of candidate selection as a dramaturgy emphasizes that candidates' qualities and traits, expertise and reputation, rights and duties – and, ultimately, worth – are not determined in a onetime act of evaluation. Rather, they emerge as a function of organizational expectations – which are conveyed to the candidates as a role – and the degree to which the candidates' performance responds to these expectations and values (Goffman 1959). In line with newer research on figures of dramatization such as Callon's "homo economicus" (Callon 1999; MacKenzie et al. 2008) or Lezaun and Muniesa's "business self" (Lezaun and Muniesa 2016), we argue that the academic "candidate" emerges as a leading dramatic figure in the process of evaluation.

Third, because candidates' achievements and worth are notoriously difficult to assess and because organizations have to form a coherent set of expectations toward candidates, the continuity and consistency of candidate selection is a central dramaturgical problem. This problem is further aggravated because candidate selection is usually a prolonged process that does not involve copresence throughout all stages of the process. Yet, candidate selection has to conclude with a legitimate decision that is recognized by the circle of direct participants and beyond (Boltanski and Thévenot 2006). We argue that written documents play a crucial role for the organization of candidate selection by ensuring continuity and consistency of assessments throughout time and space (Asdal and Reinertsen 2022). While human actors evaluate, assess, and decide over candidates, written documents act both as a structure by stabilizing and organizing the evaluative process and as a relay that connects stages of the dramaturgy by transferring human assessments throughout the evaluative process

(Cooren 2004). Highlighting the constitutive nature of documents for evaluative dramaturgies such as academic evaluation implies that the organization of such dramaturgies is an ongoing, interactive achievement transcending situated forms of human agency (Asdal 2015). Thus, particular attention will be paid to how written documents relate to each other to stabilize and structure the evaluation of candidates. Relatedly, the agency of documents extends to the human actors partaking in the evaluation because documents explicate and transfer candidates' performances, as well as the evaluations and decisions of reviewers and jury members. In highlighting the constitutive role of written documents for the dramaturgy of evaluation and the constitution of the dramatic figure of the "candidate," we join scholarship in valuation studies that has been concerned with the agency of written documents and hope to expand the analytical and methodological repertoire of valuation studies.

Data and methods

This study builds on the systematic comparison of how candidates are evaluated and selected in two "most different" organizational settings within academia (Otner 2010): German grantmakers, who select candidates for funding, and universities, which select candidates for professorships. The two cases differ with regard to the temporal dimension of resource allocation (Bakker et al. 2016). Grantmakers establish a temporary relation to their candidates in the sense that the successful applicant will receive funding as well as the symbolic benefits of being considered the funder's "grantee" for the duration of the research project. The plot of this dramaturgy is geared toward granting successful candidates temporally limited access to organizational resources. In comparison, becoming a full professor at a German university usually entails a lifetime position in both the university and the civil service apparatus of the German state, which universities are legally part of. Thus, the plot aims at granting selected candidates permanent access to material resources as well as the symbolic benefits the professorial status entails. To trace changes in the evaluative dramaturgy over time, we use archival data that documents the evaluation and selection of candidates over a period of 55 years. We chose to concentrate on the years between 1950 and 2005 for they represent, historically speaking, a period of major change for the governance of German academia:[1] While university reforms in the

[1] While we managed to gather application documentation from grantmaking institutions for the entire period of observation, data access to professorial appointment procedures was constrained by law. Due to the German law on data privacy, we were unable to access archival records on professorial recruitment for the past 30 years. This limits our data access in the case of professorial appointment procedures to the years between 1950 and 1985.

1970s expanded access to tertiary education, the period from the 1980s onward was marked by continuous financial cutbacks and the implementation of competition-based managerial practices (Wolter 2004; Schimank 2005). Simply put: the available funding for research decreased. Our data thus covers a period of time in which academics increasingly had to apply for organizational resources to do research and in which being a candidate thus became a pervasive feature of academic life. By embracing a longitudinal perspective on evaluation dramaturgies, we shed light on the historical constitution of evaluative situations and the roles, expectations, and normative ascriptions attached to it.

The case of grantmaking

Our analysis of grantmakers draws on written documents produced in the framework of the renowned "open call" program (Normalverfahren) at the German Research Foundation, DFG (Deutsche Forschungsgemeinschaft) between 1959 and 2005.[2] With a budget of €3.3 billion per annum (DFG 2019) and a nearly 100-year-old history, the DFG is by far the most influential grantmaker in Germany. The beginning of modern grant writing practices dates back to the DFG's introduction of the first application guideline in 1959. Application guidelines – and more specifically those published by the DFG – have played a crucial part in the rationalization and professionalization of grant writing practices by formalizing the rules of interaction between the grantmaker and the candidate. By the mid-1970s, most German funding organizations worked with application guidelines. The introduction of such guidelines changed the evaluative dramaturgy because it demanded that the proposals would go through peer review if they were deemed "complete" and "in order."

Following Goffman, application guidelines set the stage for the evaluative dramaturgy by explicating the funder's expectations. Because they bring forth the formal requirements that "candidates" (Serrano Velarde et al. 2018) have to adhere to when they apply for funding by writing grant proposals, these documents may be considered a form of "staging talk" (Goffman 1959). Application guidelines provide information about the general terms of funding as well as concrete, action-oriented messages about the grant-writing and evaluation process (Kastberg 2008). Rather than just stipulating ways in which candidates ought to frame grant proposals, the agency of application guidelines consists in laying out specific expectations regarding the role of the candidate. These then form the backdrop against which candidates' performance and impressions are assessed in

[2] The "open call" program is not only the oldest but also one of the most important tools for funding basic research in Germany.

the following stages. To grasp the performance of candidates throughout the evaluative dramaturgy, we marshaled three main data sources: all DFG application guidelines issued in the "open call" program from 1959 to 2005, archival data from the DFG, and 80 grant proposals written by organic chemists and political scientists between 1975 and 2005 (sampling the documents in 10-year intervals). The corpus contains about 1,000 pages of material.

The case of professorial hiring

Our second case analyzes the archival records from 145 appointment procedures that took place at 16 universities between 1950 and 1985. The corpus we have analyzed comprises a total of over 1,500 documents, including job advertisements, applications, reviews on candidates, and laudations in which committees explain their choices for the shortlist. Appointing professors in Germany is an intricate and rather bureaucratic procedure that often takes a year or more (Musselin 2010b). Since full professors are civil servants of the state, the formal appointment is carried out by the respective state government, while the scholarly evaluation that precedes the formal decision is made on behalf of the state in an appointment procedure.

The evaluative dramaturgy of professorial appointments developed in the 1950s, became a standard routine by the early 1960s and, although the evaluative criteria for professorial hiring changed, the process itself did not undergo radical changes throughout our period of study. The plot of the dramaturgy opens with the job advertisement, a document that explicates the expectations of the appointment committee (and the department it represents). Following Goffman, candidates' applications, which include at least a cover letter, a curriculum vitae (CV), and a list of publications, are crafted to convey an impression that is consonant with these expectations. The application documents guide the appointment committee's decisions on which candidates make the longlist to be invited for a job interview. The candidate's performance at the job interview is supplemented by another crucial type of document: external reviews that the appointment committee solicits from peers. Drawing on the application documents, external reviews, and the impression from the job interview, the committee concludes its work by deciding on a shortlist of two to three candidates. This shortlist is given coherence and stabilized by a document called "laudation", which explains the committee's decisions and the precise order of candidates on the shortlist. Together with the shortlist, the laudation is submitted to the subsequent decision-making bodies in the university. Just as candidate selection of grantmakers is fundamentally carried by written documents, several documents play a constitutive role for professorial appointments: job advertisements, candidates' applications, external reviews, and laudations.

Methodology

Our analysis of the archival material draws on a grounded theory perspective (Strauss and Corbin 1990; Denzin 2000) with an emphasis on iterative analysis that goes back and forth between data and theoretical concepts. We conducted multiple rounds of systematic coding which allowed us to identify the main processes through which candidates are evaluated and selected. In a first phase of open coding, we categorized data according to content in order to identify prevalent themes in the assessment of candidates. Several recurring codes, for example, regarding organizational expectations or candidates' performance, emerged in this initial step. In a second round of axial coding, we condensed and interconnected the codes in order to establish connections within and across different types of documents. The intra- and intertextual approach of our analysis has proven to be particularly fruitful in studying the constitutive role of written documents for the evaluative dramaturgies of candidate selection.

We proceeded from the assumption that the textual agency that shapes the evaluative dramaturgy of candidate selection in both professorial recruitment and research grants can be reconstructed via archived records. Our approach emphasizes the agency of job announcements, application guidelines, applications, reviews, or laudations (Cooren 2004; Prior 2012). In order to uncover the relational aspect in these texts, we crafted an analytical framework that targets the dramaturgies of candidate selection both within and across different documents. The framework is particularly sensitized for the "local translocation" (Cooren 2004: 374) of assessments because it allows us to trace how the evaluation of candidates is structured both by a document's purpose at a specific stage in the plot and by references to assessments made at previous stages of the process.

Findings: Two cases of academic candidate selection

Textual agency in the evaluative dramaturgy of grantmaking

The following section is concerned with the constitutive role of written documents for the dramaturgy of candidate selection for research grants. The section first shows how application guidelines shape the dramaturgy of candidate selection by conveying organizational expectations toward candidates. Second, it illustrates how grant proposals take up these cues and herald the next step of the dramaturgy by constituting a dramaturgical front that allows the grantmaker to make sense of the applicants (Goffman 1959: 13–19). The section concludes by discussing how the organizational expectations and the resulting evaluative dramaturgy have changed throughout our period of study.

How application guidelines explicate expectations toward candidates' performance

The first application guideline published in 1959 presents the DFG as a membership-based organization that aims at supporting the work of scientists and engaging in community-building (Torka 2009). Early application guidelines exert little "directive dominance" (Goffman 1959: 62). Rather than prescribing a standardized repertoire for the role that is to be assumed by candidates, the dominant modality of early application guidelines is permissive and enabling. Candidates are addressed as "researcher," "professor," or "scholar" in search of rightful support for their research ideas. This reflects the wide range of expectations toward candidates. In line with this, early application guidelines also give rather cursory instructions for candidates' performance. They do not decidedly pre-structure the subsequent steps of the evaluative dramaturgy but merely highlight the options

candidates have when they write a grant proposal. These options are conveyed by a list of bullet points that candidates should address in their texts (Figure 1).

Anträge können jederzeit gestellt werden. Sie sollen enthalten:

1. **das Thema des Forschungsvorhabens,**
2. **das Arbeitsprogramm,**
3. **die voraussichtliche Dauer der Arbeit,**
4. **eine Aufgliederung der erbetenen Forschungsmittel. Die einzelnen Anforderungen sind zu begründen.**

Figure 1: DFG application guideline 1959

Translation: Grant proposals can be submitted at any time and should include: (1) the topic of the research endeavor; (2) the work program; (3) planned duration of the work; (4) a list of the required resources. These are to be justified.

Source: Deutsche Forschungsgemeinschaft. 1959. Hinweise für Antragsteller. Franz Steiner Verlag: Wiesbaden

The guidelines were published every year (with minor changes only), until a completely new application guideline was issued in 1981. Following a massive increase in applicants, the grantmaker was confronted with the need to be more selective and transparent about decision-making.[3] The 1981 application guideline responds to this need: it is not only more detailed but also compulsory for all, thus structuring the evaluative dramaturgy more decidedly and standardizing grant proposals toward greater continuity. This consistency between applications, in turn, would allow peers and decision-makers to compare different grant proposals. The new application guideline states the grantmaker's expectations toward candidates more clearly and in form of a role: "the applicant" (der Antragsteller). Since 1981 and in all the successive revisions of the application guidelines, "the applicant" is increasingly disciplined into fulfilling a growing list of expectations with regard to the grant proposal. While in 1959, the applicant was "free to write the proposal the way he chooses" (DFG 1959), the 1981 guideline features predominantly directives – that is, speech acts – that are to cause the reader to take a particular action (Austin 1962). Applicants are supposed to take responsibility over budget and establish a work plan including a clear repartition of tasks. In the proposal, "the applicant must make explicit where he positions his work and what type of contributions he is going to make to the existing literature" (DFG 1981). Moreover, the guidelines convey that the grantmaker expects "detailed information regarding the methodological framework of the study and existing methodological competencies at the institute or the applicant's work group" as well as a "short description of the main research findings and publications of the applicant" (DFG 1981). Guidelines articulate these expectations with the help of modal verbs indicating obligation and constraint such as "must" and "should." Whereas early application guidelines emphasized the rights of candidates to apply for resources and express their thoughts freely, application guidelines published after 1981 stress candidates' duties. As expectations toward candidates and the complexity of the role they have to perform increase over the following years, so does the size of application guidelines. By the end of our observation period, guidelines confront prospective candidates with 40 pages of instructions indicating how to perform their role, that is, what to write, when, and how.

Throughout the years, what emerges from the ever-expanding guidelines is a value framework that spells out a more and more coherent set of organizational expectations and expects the candidate – i.e., the "applicant" – to perform an increasing number of duties. An updated version of the application guideline issued in 1995 specifies these duties, and disciplines candidates to become both reliable project managers and productive researchers. On the one hand, candidates are

[3] In the 1970s, the German university system witnessed a massive expansion of both student and staff numbers (Wolter 2004). As a result, the number of grant applications increased, as did the sums of money for which researchers applied.

made responsible for managerial aspects of the project: "The quality of the work program is of paramount importance for the evaluation of this proposal. The work program should show what part of the budget is dedicated to which specific work task" (DFG 1995). At the same time, the application guideline issued in 1995 highlights the importance of the project output and making a novel contribution to research. Thus, the role of the productive researcher conveys another expectation to which candidates-turned-applicants have to adjust.

The development outlined thus far reveals that application guidelines exert textual agency by structuring the candidate selection process and lending coherence to the evaluative dramaturgy. First, they standardize grant writing techniques. For example, the page limit for grant proposals is reduced to 20 pages and the candidate is constrained "to answer the questions included in the application guidelines and only those" (DFG 2003). Second, guidelines structure the evaluative dramaturgy by establishing "the applicant" as a taken-for-granted role and ascribing an elaborated set of rights, duties, and expectations to this role.

How grant proposals endorse the role of the ideal candidate

In the next step of the dramaturgy, grant writers have attuned their performance of "the applicant" to the guidelines and the inherent value framework. Their grant proposals lend the candidate selection process coherence and unity by responding precisely to the expectations that have been explicated by the application guidelines: proposals position candidates as competent, reliable, and productive project managers. Being geared toward the funder's expectations, grant proposals constitute a dramaturgical front that allows the funder to make sense of the candidate (Goffman 1959: 13–19).

Grant proposals dating from before the publication of the first compulsory application guidelines in 1981 tend to be heterogeneous with regard to both content and style. They have in common that they offer precious little details with regard to the work program, expected results, or even the project's budget. Driven by a belief that research is an open-ended, exploratory, and holistic process that is difficult to plan, early proposals focus instead on the research problem. They document the applicant's knowledgeability and competence by discussing the existing literature and describing the phenomenon that is to be investigated in great detail. As a result, the actual grant proposal reads more like a book manuscript or a paper than a modern project outline.

The 1981 application guidelines brought a sharp turn in the way candidates could adjust their performance to the funder's expectations. Because the new application guidelines confront them with the need to justify the relevance of their planned contribution and the soundness of their work plan, grant writers assume a role that is supposed to meet the funder's expectations. Grant proposals written in the 1980s document this performance by featuring, for instance, detailed literature reviews of up to 40 pages in order to demonstrate the applicant's level of expertise. While they also include punctual information on the planned division of tasks, it is only in the 1990s that grant proposals firmly position the candidate as a competent project manager:

> The project will be implemented by the applicant and the research assistant. However, the research assistant will be responsible for the larger share of work since the applicant is constrained by his teaching duties. (Grant proposal, 1985, political sciences).

> The following work division is based on the scientific background and competences of the research team: [the applicant] will focus on establishing the theoretical framework of the research project and lead the empirical investigation. (Grant proposal, 1995, political sciences).

As illustrated by the quotes, later proposals provide more details regarding the allocation of tasks and responsibilities within the project team. Proposals establish the candidates' managerial skills by documenting, for example, how the efficacy of task allocation is ensured through the recruitment of competent team members. The fact that proposals take up the expectations they find articulated in the guidelines underlines that documents do not only structure the evaluative dramaturgy but also act as relays that connect different stages of the dramaturgy and thus lend coherence to the evaluative process.

Grant proposals submitted after 1981 also respond to the expectations established by the guidelines by signaling the "reliability" of applicants – that is, their ability to ensure the project's success and feasibility. Especially in the life sciences, risks of failure refer to the potential occurrence of errors or inconclusive outcomes in a series of trials. While failure is considered an integral part of the experimental research process in early proposals, the norm is challenged over time, as the following quotes suggest:

> (…) many research groups have worked on the structural analysis without success. Given these risks, it is understandable that our work plan provides but a first orientation. Instead, it must continually evolve and adapt analysis to the research process. (Grant proposal, 1975, organic chemistry).

> As the collision took place in a strong electric field, […] it was impossible to measure the angular distribution of the ions. This is why the applicant has worked these last two years on improving the reflection collider by

> developing an apparatus that allows for capture and analysis of the diffusion of cluster ions while checking [...] for angular distribution. (Grant proposal, 1995, organic chemistry).

While the first quote from 1975 names sources of failure, the second quote from 1995 features a sophisticated contingency plan. The proposal not only documents the contingency measure. Rather, it assures evaluators that the necessary steps have been taken to facilitate optimal trial conditions before even receiving the funding. In both the disciplines we investigated – organic chemistry and political sciences – contingency plans included a combination of preliminary studies and financial cross-subsidization – thus signaling a deep commitment on behalf of the applicant to the success of the project.

The role of the applicant as a competent and reliable project manager goes hand in hand with expectations regarding research performance and project output. The promise of future research outcomes in the form of "expected results" is a significant dimension in grant proposals – especially in the 1990s and early 2000s. By framing applicants as productive and successful researchers, grant proposals suggest a strong correlation between a proposal's projected results and their past research record, as the following quote suggests.

> In a recently finished research project funded by the DFG [name of research project] [selfreference, self-reference], the applicant and his research team developed an interactionist analytical framework that allows mapping of the dynamic exchange between foreign trade and the existence of supranational governance structures. (Grant proposal, 2005, political sciences).

The second step of the evaluative dramaturgy reveals the textual agency of grant proposals. They take up the expectations laid out in the application guidelines and allow for candidates to perform the role of "the applicant" in a way that is supposed to match the expectations of the funder. In doing so, grant proposals organize candidates' performance and give coherence to this stage of the evaluative dramaturgy.

Changing organizational expectations in the evaluative dramaturgy of grantmaking

Nowadays, "the applicant" has become a taken-for-granted role academics assume when becoming candidates for research grants. The historical analysis of application guidelines and grant proposals reveals that the constitution of this role was not immediate. Rather, "the applicant" is the result of an incremental process throughout which guidelines and proposals established a role that fits the expectations of the grantmaker: application guidelines have become more decided and resolute in establishing more – and more specific – expectations toward candidates. Grant proposals have responded to these expectations and constituted a dramaturgical front that allows both the candidate to perform according to the funder's expectations and the funder to make sense of the candidate (Serrano Velarde 2018).

With regard to the subsequent steps of the evaluative dramaturgy, i.e., the review process and the DFG's final decision, we have to concede that we were not granted access to the reviews or to the jury decisions. Nevertheless, we assume two things: first, although peers were not given concise guidelines for the evaluation of the grant proposal in the timeframe we studied, their reviews could hardly stray from the value framework articulated in both application guidelines and grant proposals. If they were to give a qualitative judgment, it was on the backdrop of the expectations and values established by the two documents. Second, peers qualify as reviewers because they have been successful with grant proposals themselves. The funder thus selects peers for the review of grant proposals that have already worked with (and thus internalized) the positions presented in the funder's documentation. It is thus highly likely that the next steps of the evaluative dramaturgy reproduce the value framework articulated by the application guideline.

Textual agency in the evaluative dramaturgy of professorial hiring

This section is concerned with the constitutive role of written documents for the dramaturgy of candidate selection for professorships. It first reveals that job advertisements kick off the evaluative dramaturgy but leave the organizational expectations toward candidates rather underspecified. Accordingly, application documents do not take up the specific expectations of the appointing department and establish a rather general performance. Second, the section shows how reviews and laudations specify expectations toward candidates' performance in the subsequent dramaturgical steps. It concludes by discussing how organizational expectations and the resulting evaluative dramaturgy have changed throughout our period of study.

How job advertisements and applications leave expectations toward candidates underspecified

The beginning of the evaluative dramaturgy for the appointment of professors is strikingly similar to our case of grant writing. A first similarity is that application guidelines in the previous case consist only of a few bullet points during the first decades of our period of study (see Figure 1) and establish increasingly detailed expectations toward candidates from the 1980s onwards. Our analysis reveals a similar development for job advertisements, the documents that kick off the evaluative dramaturgy for professorial hiring. Until the late 1970s, job advertisements had not specified expectations toward candidates in a systematic way. Rather than prescribing a standardized repertoire for the role that is to be assumed by candidates, job advertisements exert little "directive dominance" (Goffman 1959: 62). They merely state the research field of the vacant professorship and outline the minimum formal requirements for the job (habilitation, research interest, experience in the field of the vacant position, teaching experience). Beyond this, job advertisements do not offer conclusive information regarding the expectations of the appointing department. As a second similarity with application guidelines for grant proposals, early job advertisements address candidates as "personality," "applicant," "scholar," or "holder of the position." This vagueness indicates that the role candidates are expected to assume in the plot are not clearly defined (see Figure 2).

Ausschreibung

Die Fakultät für Geistes- und Sozialwissenschaften der Universität Fridericiana Karlsruhe (TH) hat die Stelle des o. Professors für Geschichte und Direktors des historischen Seminars zu besetzen.

Gesucht wird eine Persönlichkeit mit abgeschlossener wissenschaftlicher Ausbildung (Neuhistoriker), Habilitation und Lehrerfahrung sowie mit Interesse für die wirtschaftlichen u. gesellschaftlichen Probleme des technischen Zeitalters.

Bewerbungen mit Lebenslauf, Schriftenverzeichnis und Referenzen von Fachvertretern an wissenschaftlichen Hochschulen werden bis 10. 12. 1968 an den Dekan der Fakultät erbeten.

Figure 2: Exemplary job announcement for modern history, 1968

Translation: The Faculty of Humanities and Social Sciences of the University Fridericiana of Karlsruhe (Technical University) has a vacancy for a full professor in history and director of the department of history. A personality is sought with completed scholarly education (modern history), habilitation and teaching experience as well as an interest in the economic and societal problems of the technical age. Applications including CV, publications list and references from experts at institutions of higher education are requested to be sent to the dean of faculty by 10.12.1968.

Source: Published in Frankfurter Allgemeine Zeitung, Nr. 266, 14. Nov. 1968

In the 1980s, job advertisements become more comprehensive. They go beyond stating the mere minimum formal requirements and indicate more clearly how candidates are expected to perform their role. Job advertisements now distinguish formal requirements and qualitative expectations of the committee regarding research and teaching experience of the candidates. An example of the latter would be the following quote from a job advertisement in 1981: "The focus of the applicant's research and teaching should be social history of

Eastern Europe. It is expected that he [sic] can read seminars on the history of Southeastern Europe" (job advertisement, 1981, history). However, roles evoked by job advertisements are still diverse, reaching from "applicant" to "prospective holder of the position."

In the 1980s, the typical job advertisement is considerably more extensive than advertisements in the earlier decades of our sample. Although our data on professorial appointment procedures ends in 1985 (see note 1), research on current job advertisements suggests that these have become even more extensive and include an increasing number of requirements (Klawitter 2017). In terms of textual agency, more recent job advertisements thus pre-structure the subsequent steps of the evaluative dramaturgy more decidedly.

Throughout our period of study, job advertisements were usually formulated in a passive, proclaiming voice that does not address the candidate directly (e.g., "a position at University X is to be filled"; job advertisement, 1983, German studies). Even the last paragraph of job advertisements, which lists the documents candidates should include in their application, maintains the passive voice. A typical example from 1982 reads: "Applications in German language […] are to be sent to […]" (job advertisement, 1982, history).

Responding to rather underdetermined job advertisements that do not address them directly and give merely cursory instructions for their performance, candidates enter the evaluative dramaturgy with few clues about the specific expectations of the appointing department. The value framework in which candidates can position themselves is thus rather wide. Consequently, candidates' applications in our sample are not geared to the specific expectations of the committee or the department. At this point, the consistency and coherence of the evaluation process has to be considered rather low.

Just as job advertisements stipulate more requirements and expectations from the 1980s onward, applications become more extensive and differentiated throughout our period of study. This development is reflected by a major shift in the format of CVs (Hamann and Kaltenbrunner 2022). The main documents in candidates' applications until the 1970s are narrative CVs in which candidates develop their biography as a coherent course of events that is presented through selective storytelling. From the 1970s onwards, CVs transition into the form of a list, which breaks up coherent narratives into bullet points and keywords that cover biographical events in an increasingly differentiated fashion. With regard to textual agency, the application is no longer carried by the CV alone but complemented by a number of additional documents that have gained importance (and length) over time. From the 1970s onward, CVs are complemented by extensive, internally structured lists of publications and of taught seminars. These additional documents open up a space for intertextual relations. Numerous relations are established between the different documents of the application: CVs often reference specific positions on the publications and seminar lists. For example, one CV reads: “My main research is archeology of the Middle Ages, some journal articles on medieval realia have appeared, cf. publication list Nr. 35, 40, 42, 45” (CV, 1981, history).

In contrast to our first case, the textual agency during the first stages of the evaluative dramaturgy is rather weak. Neither job advertisements nor applications decidedly structure the candidate selection process toward greater coherence and consistency. First, they do not establish a taken-for-granted role that candidates could assume but convey a variety of different roles. Second, the documents introduce a wide value framework and give few clues about the specific expectations candidates have to meet with their performances. Job advertisements leave organizational expectations toward candidates rather underdetermined, prompting applications that do not explicitly relate to the vacant position. Specific expectations toward candidates only evolve and consolidate in the subsequent stages of the evaluative dramaturgy, to which we will now attend.

How reviews and laudations explicate expectations toward candidates’ performance

In order to arrive at a shortlist of candidates, committees have to narrow down the hitherto wide value framework and agree on a common vision of an “ideal candidate” (Lamont et al. 2000). This is coherent with what Goffman writes about a set of performers – which he coins a “performance team” – needing to cooperate in a single dramaturgy. Instead of a rich and diverse definition of the dramaturgical situation, the performance team has to commit to a common definition of the situation (Goffman 1959: 53). Reviews and laudations, the two documents that shape the dramaturgy at this point in time, play a crucial role for establishing a common stance and give coherence to the evaluative dramaturgy.

Reviews, solicited from two to five peers, then narrow the value framework by assessing the most promising candidates from the scholarly perspective that is anchored in a specific scientific community. It is from this perspective that reviews put a strong focus on the candidates’ research rather than other academic credentials concerning, for example, teaching or administrative skills. For instance, one review praises a candidate’s “rare double-talent to combine extensive, educated theoretical interests with perseverant empirical work” (review, 1972, history). Reviews mobilize detailed expert judgments on the candidate’s research at length, discussing, for example, mastery of methods, originality of research, contributions to the literature, or the overview of research fields. Sometimes these accounts are complemented by brief assessments of a candidate’s teaching experience or on their personality: "He is a benevolent human being, and one wishes that the less benevolent students would appreciate this" (review, 1969, German studies). These examples convey how reviews constitute a dramaturgical front to allow the committee to make sense of the candidate. This front is informed by a scholarly perspective rooted in a scientific community.

After job advertisements and applications left expectations toward candidates underspecified at the previous stage of the dramaturgy, reviews exert textual agency by introducing a scholarly perspective that provides a structure and orients the candidate selection process. Sometimes the agency of reviews extends to establishing intertextual relations with other documents. In these cases, reviews refer to the application documents of the candidates. For example, one review documents that a candidate's "publication list […] is extensive and quite impressive" (review, 1962, German studies). Other relations between reviews and application documents are even closer, although less explicit. Some reviews in our sample contain passages, for example, on a candidate's employment career that match the text of the candidate's CV word for word and are thus likely copied from one document to the other. These variations of intertextuality not only show how the different steps of the evaluative dramaturgy interact but, more importantly, how written documents act as relays that transfer the assessments human actors make across different stages of the dramaturgy and thus lend coherence to the evaluative process.

In the next and final step of the evaluative dramaturgy, laudations are another type of document that contributes to further narrowing the value framework. The domestic concerns of the appointing department may have been discussed in committee meetings, but thus far they have not been documented in the dramaturgy. Because coherent expectations are unlikely to emerge in heterogeneous recruitment committees, there are bound to be different visions of how candidates should perform for a given departmental context. From this follows the need to settle a coherent collective position that all members can subscribe to. The textual agency of laudations is to establish this coherent perspective. Laudations gloss over any conflicting visions of the appropriate candidate that are likely to occur between human actors at committee meetings and undertake an ostentatiously unanimous and unambiguous assessment of shortlisted candidates. For example, laudations establish that committees "have unanimously decided" (laudation, 1972, history) on the candidates' order on the shortlist, or that candidates at the top of the shortlist are "by a long shot the most qualified of the candidates" (laudation, 1974, history). By inscribing such definite assessments into the evaluative dramaturgy, laudations conceal any heterogeneity and ambiguity in the committee's assessment. In doing so, they lend further coherence to the candidate selection process and stabilize the plot.

When laudations justify the selection of candidates for the shortlist, they extensively position candidates according to their professional capabilities and research productivity. In doing so, laudations routinely reference the reviews. Establishing these intertextual relations allows laudations to tap the evaluative authority of scholarly expertise explicated in the reviews. For example, one laudation states:

> As demonstrated by the attached reviews from [reviewer 1] and [reviewer 2], [the candidate] today enjoys broad recognition by leading historians as an established researcher. (Laudation, 1959, history).

Another example of how laudations relate to reviews reads like this:

> Faculty has arrived at the conclusion – a conclusion that has been confirmed by the judgment of external peers – that it would be impossible to attract a better or even equivalent candidate. (Laudation, 1958, German studies).

By establishing intertextual relations with reviews, laudations act as relays that transfer assessments of candidates' performance across different steps of the evaluative dramaturgy, thereby lending coherence to the overall process. Yet, laudations do not merely tie together existing information on candidates that has cumulated throughout the procedure. While reviewers and candidates themselves can only ever assume expectations of the appointing department, laudations allow committees to make explicit the specific domestic expectations toward candidates. For example, one laudation states that a committee's

> suggestion for the appointment has been led by the consideration that this chair […] has to cope with a press of over 700 students of German studies. Therefore, the committee has given those personalities the preference for the shortlist that are not only renowned as scholars, but that, by predisposition and penchant, are up to the special pedagogical and organizational tasks that result from this emergency situation. (Laudation, 1955, German studies).

This example conveys that specific organizational circumstances, local tradition, and domestic hierarchies are important contextual factors for the formation of expectations toward candidates. Yet, notably, these expectations had not been established at the beginning of the evaluative dramaturgy and thus could not be conveyed to candidates as a role they should assume.

Changing organizational expectations in the evaluative dramaturgy of professorial recruitment

Historical analysis of professorial hiring reveals two main aspects. First, organizational expectations toward candidates have changed throughout our period of study. The most obvious change is that laudations increasingly include teaching and administration in their assessments of candidates. Since the 1960s, candidates are not only evaluated according to their capabilities as researchers but increasingly also according to the breadth of their teaching portfolio and their teaching experience, especially regarding bigger lectures. From the mid-1960s onward, research is not the only criterion for appropriate candidates, and different professional capacities have to be weighed against each other. These changes in expectation toward candidates have to be seen in light of the massive expansion of tertiary education in Germany that both challenged organizational structures and shifted attention to the teaching duties of academics. For example, one committee estimates a candidate's publication output to be "smaller both in scope and in weight," but states that this shortcoming is "compensated by his administrative and pedagogical capabilities, which preponderate in an overcrowded subject like German studies" (laudation, 1962, German studies). The differentiation of expectations toward candidates means that the role candidates have to perform in the evaluative dramaturgy becomes more complex over time.

At the same time, and second, the role candidates have to perform materializes only toward the later stages of the evaluative dramaturgy. While the application guidelines in our first case establish rather specific expectations and thus a tangible role for candidates to assume already at the beginning of the plot, the value framework in the case of professorial hiring remains broad for most of the candidate selection process. It is only later in the plot that candidate selection is given coherence. From this it follows that major aspects of the role candidates are expected to perform come about only after they have already performed in the dramaturgy.

Discussion and conclusion

While textual agency in evaluation remains more or less invisible for research that is confined to human practices, to single written documents, or to the decision that forms at best the endpoint of an evaluative process, our approach contributes to the strand of valuation studies that emphasizes the constitutive role of written documents. Our case studies have demonstrated that textual agency is particularly crucial for processes of evaluation that are diachronic, prolonged, and do not always involve copresence. Throughout these processes, evaluators with heterogeneous interests mobilize different criteria to identify their "ideal candidate" (Lamont et al. 2000) and candidates attempt a performance that meets these expectations and thus "offer their observers an impression that is idealized" (Goffman 1959: 23). In other words: it is human actors that assess candidates, convey their assessments over time, and ultimately try to reach legitimate decisions on candidate selection. However, human evaluators are both enabled and disciplined by written documents. More precisely, we have found that, across our two cases of candidate selection in grantmaking and professorial hiring, documents employ two regimes of agency: they both provide a structure and act as relays.

Regarding the first regime of agency, written documents provide a structure that lends the process of candidate selection coherence and unity. In the case of grantmaking, we have seen how this regime of agency develops over time, following a carefully scripted plot. While earlier application guidelines give merely cursory instructions for the candidates' performance, guidelines after 1981 are compulsory for all candidates and give rather detailed instructions. This gives the subsequent stages of the dramaturgy coherence and direction. This coherence is evident in grant proposals, which respond to the expectations documented in the guidelines. For the case of professorial hiring, our analysis reveals that the structuring agency of written documents only emerges during the later stages of the plot. While job advertisements lend the dramaturgy little coherence because they do not explicate a detailed set of expectations toward candidates, reviews introduce a specific scholarly perspective for the assessment of candidates, and laudations establish a coherent collective position for the decision of the committee. Both documents provide a unifying structure for the candidate selection process.

As a second regime of agency, documents act as relays that establish and transfer assessments and decisions of human actors across the stages of the evaluative dramaturgy. In the case of grantmaking, our analysis shows how proposals take up the expectations explicated in the guidelines. This suggests that guidelines and proposals establish values and expectations of the funder and transfer them across the stages of the evaluative dramaturgy. In the case of professorial hiring, we have seen how reviews refer to application documents and how laudations refer to reviews to transfer assessments across the stages of the dramaturgy. Across both cases, these intertextual relations show how documents enable the "local translocation of constraints and abilities" (Cooren 2004: 374). Yet, the two cases also convey different modes in which texts can act as relays: in the case of professorial hiring, reviews and laudations regularly link different stages of a dramaturgy to transfer assessments of human actors across these stages. However, this regime of agency is confined to the specific evaluation the reviews and laudations are used in. We see no evidence in our data that the documents link different professorial appointment procedures across time. In contrast, application guidelines also act as relays across evaluative dramaturgies – i.e., between different grant proposals – by linking them to the very value framework explicated in the guidelines.

Through the interplay of human evaluators and the two regimes of textual agency emerges a value framework, a corridor of values and norms in which the candidates' performance is assumed to take place and which is geared toward the organization's specific expectations and requirements. The emerging framework can provide both candidates with cues about the role they are expected to assume and human evaluators with cues about how to assess candidates and ultimately reach legitimate decisions.

Our comparative study on academic candidacy in two organizational settings reveals that the value framework emerges in very different ways. In the case of grantmaking, the intertextual dimension of the evaluative dramaturgy reproduces the value framework articulated by the funder's application guideline. Even though a certain degree of deviation from and variation of these values is possible at the stage of peer review or during the jury committee meeting, the legitimate funding decision tends to mirror positions presented in the application guidelines, i.e., at the first stage of the dramaturgy. Written from an authoritative position (Lammers 2011), application guidelines inform potential candidates about the role they are expected to assume and the rights and duties that come with this role. Because it is rare that grant applicants interact directly with the organization, grantmakers govern access to a temporal membership at a distance during the application phase. It is through the application guidelines that grantmakers demarcate the discursive realm within which academics can effectively perform their role as worthy candidates via their grant proposals (Figure 3).

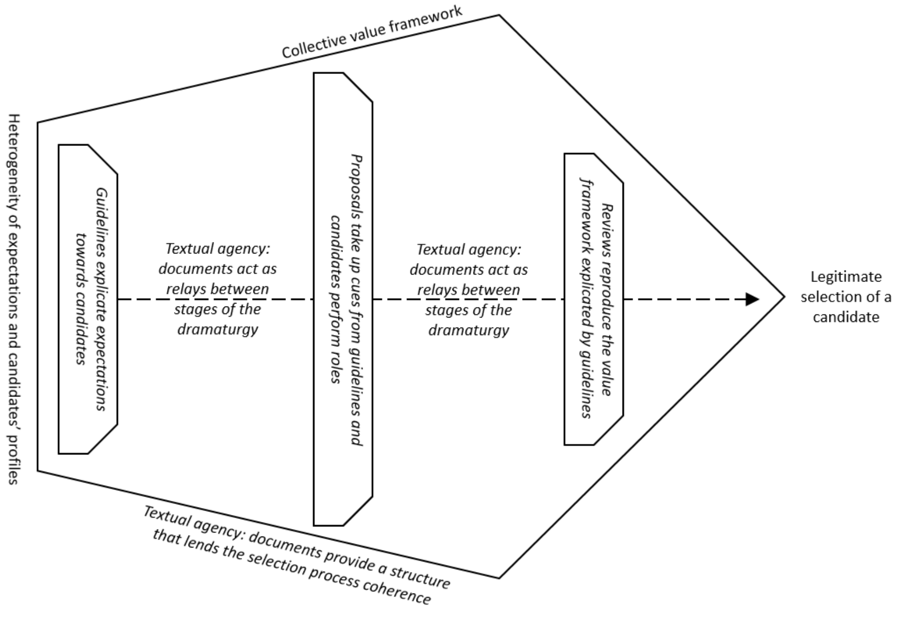

Figure 3 The evaluative dramaturgy in research granting
Source: Authors' own work

In the case of professorial hiring, the value framework remains open and tacit at the beginning. Prospective candidates cannot correctly anticipate the specific expectations of the recruiting department and thus perform their role in a rather general way, emphasizing a broad range of experiences in research, teaching, and administration. It is through the different stages of the evaluative dramaturgy that the value framework is refined and narrowed across different documents. The list of prospective candidates is filtered, round after round, until a shortlist is agreed upon. The different perspectives and the incoherence of the evaluative dramaturgy are concealed by laudations at the final stage. By referencing other documents written throughout the evaluation process, the laudation creates the illusion of a coherent value framework encompassing all stages and all participants (direct and indirect) of the evaluation, thus facilitating a legitimate decision on candidate selection (Figure 4).

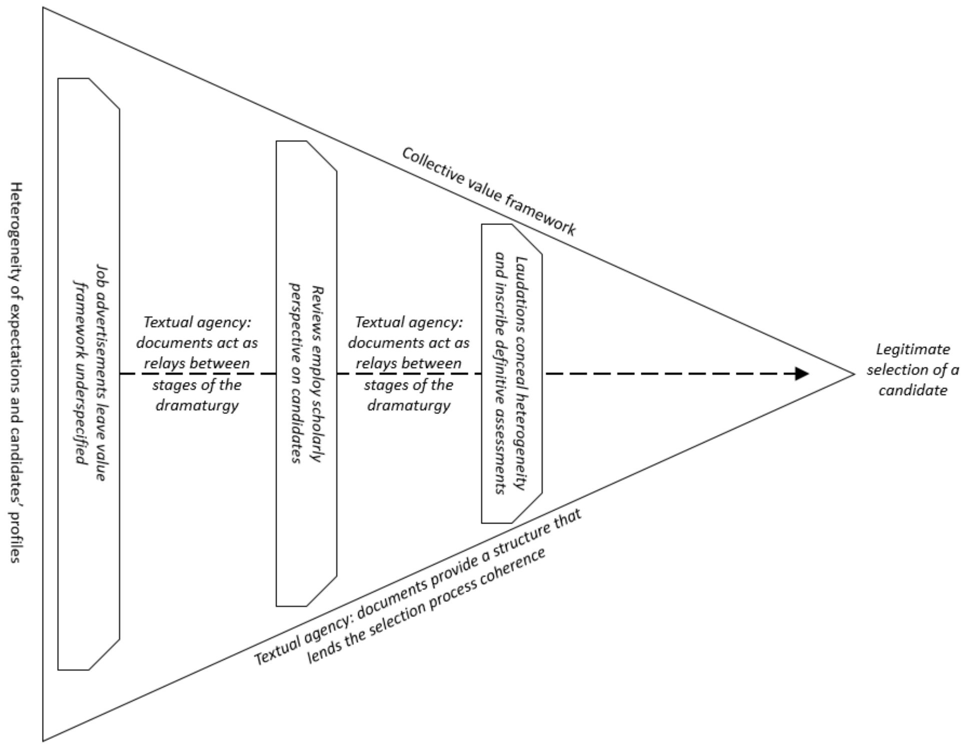

Figure 4 The evaluative dramaturgy of professorial appointment procedures
Source: Authors' own work

Our two cases illustrate how textual agency contributes to solving a central dramaturgical problem: the continuity and consistency of organizational evaluation processes. In both cases, written documents both establish and transfer evaluative statements as well as structure evaluative processes and lend them coherence. But how should we explain the variation of the dramaturgy of evaluation in our two cases? We started by assuming that the type and duration of membership (temporary versus permanent) would bear on the dramaturgy of evaluation. Based on the empirical insights we gathered, we can now argue that temporary membership requires the academic organization to ensure a commitment to its value framework from the very onset of the evaluation process. Given the high fluctuation of temporary and voluntary members such as grantees, reviewers, jury committee, and senate members, grantmakers need to be able to select people and projects that fit their organizational agenda and accept to work toward a common goal: selecting the right type of applicant for a limited duration of time. Thus, application guidelines spell out roles, rights, duties, and expectations that serve as normative script for the subsequent stages of the evaluative dramaturgy. As a result, guidelines have a disciplining effect on the assessment of all participants of the evaluation process.

In the case of professorial hiring, however, the membership in question is a potential lifetime position.[4] Participants of the dramaturgy are permanent members of the organization. The performance in this case is thus shaped by different expectations and affordances. The value framework that includes the organization's expectations is emergent insofar as the members need to claim their relevance and act collectively to work toward a more or less consensual recruitment decision. In this case, the appointing organization can afford not to impose a clearly defined value framework right at the beginning of the assessment. Instead, the protagonists of the dramaturgy can be left to figure out the value framework on their own because the organization can rely on long-term members to act on its behalf. If the evaluative dramaturgy has disciplining effects, they are of a procedural nature: written documents relay the evaluative compromise reached at different points, thereby committing the participants to a degree of procedural (and normative) coherence.

Our contribution addresses research gaps that scholarship on textual agency may investigate further. First, future research is needed to better comprehend the complicated dynamics between different regimes of agency as well as intra- and intertextual agency in evaluation. Special attention should be paid to comparative research designs that allow for systematic theory building regarding the observed variation of evaluation processes and dramaturgies. Second, future research on the agency of written documents in evaluative processes may pave the way for historically minded research of (e)valuation that focuses on the constitution and change of value frameworks, roles, and practices. Third, the article hints to the

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[4] All appointment procedures in our sample were for full professorships.

emergence of a new figure of dramatization. In the time period we observed, we witnessed the emergence of a concrete set of role expectations regarding applicants. In dramatizing the figure of "the candidate" as focal point of the plot, textual agency not only provides the means to discipline both peers and applicants to play their part in candidate selection. Rather, the figure of "the candidate" has developed into a leading character of the social drama that is academic competition. Even before the stage of selection is being reached, even before applicants gain access to the organization's resources, they have to comply with organizational expectations regarding candidacy. As candidacy has become an important moment in academia and academics are almost in a continuous state of candidacy, they increasingly find themselves in situations of evaluation, submitting themselves to – and simultaneously being subjected to – a multiplicity of value frameworks. Academics can engage playfully with the diverse opportunities of positioning that open up throughout their careers, reinventing themselves with each candidacy. At the same time, the need to embrace the normative affordances of candidacy can also exert disciplining effects on academics whose identity is regulated time and again in various organizational contexts and according to differing organizational expectations. This raises a number of empirical questions: how far-reaching are the disciplining effects of temporary membership for the self-perception and the work of researchers? How do the normative constraints of temporary membership bear on the primary institutional affiliation of academics? More research is needed to comprehend the coping strategies and effects of candidacy on academics.

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References

Asdal, Kristin. 2015. "What is the issue? The Transformative Capacity of Documents." *Distinktion: Journal of Social Theory* 16(1): 74–90.

Asdal, Kristin, and Hilde Reinertsen. 2022. *Doing Document Analysis. A Practice-Oriented Method*. London: SAGE.

Ashcraft, Karen Lee, Timothy Kuhn, and François Cooren. 2009. "Constitutional Amendments: 'Materializing' Organizational Communication." *The Academy of Management Annals* 3(1): 1–64.

Austin, John L. 1962. *How to Do Things with Words*. Oxford: Clarendon Press.

Baka, Vasiliki. 2015. "Understanding Valuing Devices in Tourism through 'Place-making'." *Valuation Studies* 3(2): 149–180.

Bakker, Rene M., Robert J. DeFillippi, Andreas Schwab, and Jörg Sydow. 2016. "Temporary Organizing: Promises, Processes, Problems." *Organisation Studies* 37(12): 1703–1719.

Board of Editors. 2021. "Valuation Studies and the Drama of University Quality." *Valuation Studies* 8(2): 1–4.

Boje, David M., John T. Luhman, and Ann L. Cunliffe. 2003. "A Dialectic Perspective on the Organization Theatre Metaphor." *American Communication Journal* 6(2): 1–16.

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

Brankovic, Jelena, Leopold Ringel, and Tobias Werron. 2022. "Spreading the Gospel: Legitimating University Rankings as Boundary Work." *Research Evaluation* 31(4): 463–474.

Callon, Michel. 1999. "Actor-Network Theory—The Market Test." T*he Sociological Review* 47(1): 181–195.

Chubin, Daryl E., and Edward J. Hackett. 1990. *Peerless Science. Peer Review and U.S. Science Policy*. New York: SUNY Press.

Cicchetti, Domenic V. 1991. "The Reliability of Peer Review for Manuscript and Grant Submissions: A Cross-Disciplinary Investigation." *Behavioral and Brain Sciences* 14(1): 119–135.

Combes, Pierre-Philippe, Laurent Linnemer, and Michael Visser. 2008. "Publish or Peer-Rich? The Role of Skills and Networks in Hiring Economics Professors." *Labour Economics* 15(2008): 423–441.

Cooren, François. 2004. "Textual Agency: How Texts Do Things in Organizational Settings." *Organization* 11(3): 373–393.

Denzin, Norman K. 2000. "The Practices and Politics of Interpretation." In *Handbook of Qualitative Research*, edited by Norman K. Denzin and Yvonna S. Lincoln, 897–922. London: SAGE.

Derrick, Gemma E., and Gabrielle N. Samuel. 2016. "The Evaluation Scale: Exploring Decisions about Societal Impact in Peer Review Panels." *Minerva* 54(1): 75–97.

Ehrenstein, Véra, and Fabian Muniesa. 2013. "The Conditional Sink: Counterfactual Display in the Valuation of a Carbon Offsetting Reforestation Project." *Valuation Studies* 1(2): 161–188.

Espeland, Wendy N., and Michael Sauder. 2007. "Rankings and Reactivity: How Public Measures Recreate Social Worlds." *American Journal of Sociology* 113(1): 1–40.

Espeland, Wendy N., and Michael Sauder. 2016. *Engines of Anxiety: Academic Rankings, Reputation, and Accountability*. New York: Russell Sage Foundation.

Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. Edinburgh: University of Edinburgh Social Sciences Research Centre.

Goffman, Erving. 1961. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Garden City, NY: Doubleday.

Guetzkow, Joshua, Michèle Lamont, and Grégoire Mallard. 2004. "What is Originality in the Humanities and the Social Sciences?" *American Sociological Review* 69(2): 190–212.

Hamann, Julian, and Wolfgang Kaltenbrunner. 2022. "Biographical Representation, from Narrative to List: The Evolution of Curricula Vitae in the Humanities, 1950 to 2010." *Research Evaluation* 31(4): 438–451.

Hamann, Julian, Frerk Blome, and Anna Kosmützky. 2023. "Devices of Evaluation: Institutionalization and Impact. Introduction to the special issue." *Research Evaluation* 31(4): 423–428.

Hammarfelt, Björn, and Alex D. Rushforth. 2017. "Indicators as Judgment Devices: An Empirical Study of Citizen Bibliometrics in Research Evaluation." *Research Evaluation* 26(3): 169–180.

Hammarfelt, Björn, Alex D. Rushforth, and Sarah De Rijcke. 2020. "Temporality in Academic Evaluation. 'Trajectoral Thinking' in the Assessment of Biomedical Researchers." *Valuation Studies* 7(1): 33–63.

Hicks, Diana, Paul Wouters, Ludo Waltman, Sarah de Rijcke, and Ismael Rafols. 2015. "Bibliometrics: The Leiden Manifesto for Research Metrics." *Nature* 520: 429–431.

Hirschauer, Stefan. 2010. "Editorial Judgements: A Praxeology of 'Voting' in Peer Review." *Social Studies of Science* 40(1): 71–103.

Karpik, Lucien. 2011. "What is the Price of a Scientific Paper?" In *The Worth of Goods. Valuation and Pricing in the Economy*, edited by Jens Beckert and Patrick Aspers, 61–85. Oxford: Oxford University Press.

Kastberg, Gustaf. 2008. "The Blind Spots of Quasi-market Regulators." *Public Organization Review* 8(4): 347–363.

Klawitter, Maren. 2017. *Die Besetzung von Professuren an deutschen Universitäten. Empirische Analysen zum Wandel von Stellenprofilen und zur Bewerber(innen)auswahl*. Dissertation: University of Kassel.

Krüger, Anne K., and Sabrina Petersohn. 2022. "'I want to be able to do what I know the tools will allow us to do': Practicing Evaluative Bibliometrics through Digital Infrastructure." *Research Evaluation* 31(4): 475–485.

Krüger, Anne K., and Martin Reinhart. 2017. "Theories of Valuation – Building Blocks for Conceptualizing Valuation between Practice and Structure." *Historical Social Research* 42(1): 263–285.

Kullenberg, Christopher, and Gustaf Nelhans. 2017. "Measuring Welfare beyond GDP: 'Objective' and 'Subjective' Indicators in Sweden, 1968-2015." *Valuation Studies* 5(1): 7–38.

Lammers, John C. 2011. "How Institutions Communicate: Institutional Messages, Institutional Logics, and Organizational Communication." *Management Communication Quarterly* 25(1): 154–182.
Lamont, Michèle. 2009. *How Professors Think. Inside the Curious World of Academic Judgement*. Cambridge, MA: Harvard University Press.
Lamont, Michèle, Jason Kaufman, and Michael Moody. 2000. "The Best of the Brightest: Definitions of the Ideal Self Among Prize-Winning Students." *Sociological Forum* 15(2): 187–224.
Langfeldt, Liv. 2001. "The Decision-Making Constraints and Processes of Grant Peer Review, and Their Effects on the Review Outcome." *Social Studies of Science* 31(6): 820–841.
Latour, Bruno. 1988. *Science in Action. How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press.
Latour, Bruno. 1999. P*andora's Hope. Essays on the Reality of Science Studies*. Cambridge, MA; London: Harvard University Press.
Lezaun, Javier, and Fabian Muniesa. 2016. "Twilight in the Leadership Playground: Subrealism and the Training of the Business Self." *Journal of Cultural Economy* 10(3): 265–279.
MacKenzie, Donald, Fabian Muniesa, and Lucia Siu (eds.). 2008. *Do Economists Make Markets? On the Performativity of Economics*. Princeton, NJ: Princeton University Press.
Manning, Peter K. 2008. "Goffman on Organizations." *Organization Studies* 29(5): 677–699.
Merton, Robert K. 1996. *On Social Structure and Science*. Chicago, IL: University of Chicago Press.
Muniesa, Fabian, Yuval Millo, and Michel Callon. 2007. "An Introduction to Market Devices." *The Sociological Review* 55(2): 1–12.
Musselin, Christine. 2010a. "Universities and Pricing on Higher Education Markets." In C*hanging Educational Landscapes*, edited by Dimitris Mattheou, 75–90. Dordrecht: Springer.
Musselin, Christine. 2010b. *The Market for Academics*. New York, NY: Routledge.
Musselin, Christine. 2021. "Evaluation and Merit-Based Increase in Academia: A Case Study in the First Person." *Valuation Studies* 8(2): 73–88.
Oswick, Cliff, Tom Keenoy, and David Grant. 2001. "Dramatizing and Organizing: Acting and Being." *Journal of Organizational Change Management* 14(3): 218–224.
Otner, Sarah M.G. 2010. "Most Different Systems Design." In *Encyclopedia of Case Study Research*, edited by Albert J. Mills, Gabrielle Durepos, and Elden Wiebe, 571–572. London: SAGE.
Prior, Lindsay. 2012. *Using Documents in Research*. Los Angeles, CA: SAGE.
Roumbanis, Lambros. 2017. "Academic Judgments under Uncertainty: A Study of Collective Anchoring Effects in Swedish Research Council Panel Groups." *Social Studies of Science* 47(1): 95–116.

Schimank, Uwe. 2005. "'New Public Management' and the Academic Profession: Reflections on the German Situation." *Minerva* 43(4): 361–376.

Searle, John R. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Serrano Velarde, Kathia. 2018. "The Way We Ask For Money … The Emergence and Institutionalization of Grant Writing Practices in Academia." *Minerva* 56(1): 85–107.

Serrano Velarde, Kathia, Martin Hölz, and Miriam Schwarz. 2018. "Zuschreibungsprozesse in der wissenschaftlichen Antragstellung. Eine historisch vergleichende Untersuchung der Antragsrichtlinien zur Drittmittelförderung." *Soziale Welt* 69(4): 427–461.

Shattock, Michael (ed.). 2014. *International Trends in University Governance: Autonomy, Self-Government and the Distribution of Authority*. New York: Routledge.

Stark, David (ed.) 2020. T*he Performance Complex: Competition and Competitions in Social Life*. Oxford: Oxford University Press.

Strauss, Anselm L., and Juliet M. Corbin. 1990. *Basics of Qualitative Research. Grounded Theory Procedures and Techniques*. Thousand Oaks, CA: SAGE.

Sundberg, Mikaela. Forthcoming. "The Promise of Total Institutions in Sociology of Organizations." In *Sociological Thinking in Contemporary Organizational Scholarship. Research in the Sociology of Organizations*, edited by Steward Clegg, Michael Grothe Hammer, and Kathia Serrano Velarde. Bingley: Emerald.

Torka, Marc. 2009. *Die Projektförmigkeit der Forschung*. Baden-Baden: Nomos.

van den Brink, Marieke, and Yvonne Benschop. 2012. "Gender Practices in the Construction of Academic Excellence: Sheep with Five Legs." *Organization* 19(4): 507–524.

Waibel, Désirée, Thorsten Peetz, and Frank Meier. 2021. "Valuation Constellations." *Valuation Studies* 8(1): 33–66.

Whitley, Richard D., and Jochen Gläser. 2007. *The Changing Governance of the Sciences. Sociology of the Sciences Yearbook* 26. Dordrecht: Springer.

Whitley, Richard D., and Jochen Gläser (eds.). 2014. *Organizational Transformation and Scientific Change: The Impact of Institutional Restructuring on Universities and Intellectual Innovation. Research in the Sociology of Organizations*, 42. Bingley: Emerald.

Winsor, Dorothy. 2000. "Ordering Work. Blue-Collar Literacy and the Political Nature of Genre." *Written Communication* 17: 155–184.

Wolter, Andrä. 2004. "From State Control to Competition: German Higher Education Transformed." *Canadian Journal of Higher Education* 34(4): 73–104.

Julian Hamann is a sociologist and Junior Professor for Higher Education Research at Humboldt-Universität zu Berlin, Germany. He has been a Feodor Lynen Postdoctoral Fellow of the Alexander von Humboldt Foundation at Warwick University, UK, Northeastern University, MA, USA, and Harvard University, MA, USA. His research is concerned with academic careers, disciplines, and evaluation. His current research project in collaboration with Kathia Serrano Velarde is funded by the German Research Foundation and concerned with socialization at the postdoc career stage.

Kathia Serrano Velarde is a Professor of Sociology at the Max-Weber-Institute of Sociology at Heidelberg University. She is an expert on new modes of organizing and financing research, academic careers, and organizational learning. She is especially interested in the changing nature of discursive practices, epistemic communities, and academic identities. Kathia is vice-president of the Research Committee on Sociology of Organization of the International Sociological Association (ISA). Her current research project in collaboration with Julian Hamann is funded by the German Research Foundation and concerned with socialization at the postdoc career stage.

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Theme issue contribution

Interpellating Finance – a dramaturgical model for green bond pricing

Alessandro Maresca, Giulia Dal Maso, and Aneil Tripathy

Abstract
Global financial governance is turning green. Attempting to tackle climate change, financial elites seem to swing confusingly between hesitant and action aimed at relieving the contradictions that led to the crisis, and opportunistic co-optation of critical discourse. Drawing on the work of Althusser, Laclau and Butler, we describe the historical emergence of this green financial apparatus and the related proliferation of green labels and signifiers. Green labels serve as the malleable ground on which a diversity of meanings and positions are articulated and temporarily fixed. Labels are the names through which financiers are interpellated and constituted as green ideological subjects. Through an analysis of the mechanisms of green bonds pricing, and of the actors involved in a green bond boot camp, we contend that the added value of green financial instruments, called the *greenium*, cannot merely be attributed to the performativity of models and formulas for risk engineering. Rather, it is the material effect of a subjectivation apparatus attuned to the existing relations of production. Ultimately, the greenness which becomes encrypted in the *greenium* is a process of translation of language of capital valorisation, performed through the tendency of capital to reproduce relations of exploitation in transitional time.

Keywords: green bonds; labels; interpellation; Althusser; Laclau; Butler

Alessandro Maresca is Research Fellow at the University of Bologna.
Giulia Dal Maso is a Marie Skłodowska-Curie Fellow at the Ca' Foscari University of Venice and at the National University of Singapore.
Aneil Tripathy is an Impact Fellow at the Massachusetts Institute of Technology.

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Introduction

Global financial governance is turning green. Since the early 2010s, global and regional institutional financial actors and corporations have been involved in the making of a new apparatus for the purpose of governing climate change. Initially centred around a few key financial figures and institutions, discourses are now proliferating on the urgency of intervening at a global level. Since the Great Financial Crisis of 2008, and with the increasing evidence of an impending climate catastrophe, delegitimised elites, threatened in their privilege–yet increasingly aware of the unsustainability of the current system–are attempting to respond to social and environmental demands and claims. The tension in the current juncture, which dialectically opposes an enduring old to a not mature 'very new', recalls an organic crisis where the 'viscous forces of society' resist the processes of transition and struggle to keep hegemony (Gramsci 1975; see Burgio 2020: 41). Transported back to Bourbon Sicily in the film *The Leopard*, by Luchino Visconti, one hears Tancredi uttering to his uncle, the Prince of Salina, those memorable words: 'If we want everything to stay the same, everything must change' (Tomasi di Lampedusa [1957] 1969).

Acknowledging, at last, the urgency to tackle climate change, financial elites seem to swing confusingly between effective, if hesitant, actions, aimed at relieving the contradictions that led to the crisis, and opportunistic – 'trasformiste' – co-optations of critical discourse. Signalling the possibility of a historical energy transformation Pearse (2021; see special issue) talks of a large-scale energy transition are triggering conspicuous investments for a more sustainable infrastructure. While global GHG emissions are steadily increasing, there are some signs of a historical inversion of this deadly tendency, if fragile, slow and limited to some industrialised regions (see Chancel and Piketty 2015: 18). The unequal distribution of carbon emissions, while still outrageous, seems to have been improving over the last few years (Semieniuk and Yakovenko 2020: 4; Bruckner et al. 2022).

In order to mobilise the enormous capital necessary to drive the transition, old financial instruments such as bonds are being redesigned and adapted for the new requirements. Born in the Middle Ages as 'promises of future repayments' (Goetzmann 2016), they allowed governments to borrow from wealthy citizens and pay interest. Their present form is epitomised by labelled (in particular, 'green') bonds, whose market is led by the public sector.[1] Combining the financial promise of vanilla bonds to pay fixed interest, with the promise to only use the proceeds for sustainable projects, green bonds are a key policy instrument to implement the energy transition required to tackle the climate crisis. But if the Italian city-states that

[1] Each of the first 10 'all-time top issuers' of bonds variously labelled as 'sustainable' are from the public sector.

pioneered this technology, notably Venice and Genoa, recruited wealthy lenders through increasingly compulsory or forced loans, paradoxically 'imposing a profit' on them (Martines 1988: 177; Pezzolo 2007); modern investors seem to be recruited through the potent forces of labelling and branding mobilised by green bonds.

Indeed, drawing on Althusser, we define the bourgeoning green finance apparatus in the form of an ideology which has been shaped by discourses, practices and standards originated by the financial markets' attempts to include environmental and green objectives into its own operations. This green ideology revolves around financial labels and signifiers, which play a dual, entangled, role. On the one hand, they serve as the flexible, malleable ground on which hegemonic articulations take place, enacting or performing rather than describing what they name (Laclau 2014; see also Butler 1997). Federating and temporarily fixating a diversity of meanings and positions 'around which common affects can crystallize' (Mouffe 2022: 9.35; emphasis added), the green label, as we will suggest in the following sections, is becoming hegemonic. This means that through a 'discursive construction with a symbolic and libidinal dimension' (Mouffe 2022), it is increasingly inscribing and co-opting heterogenous signifiers in an equivalential, hegemonic chain (Laclau and Mouffe 2001). As it becomes representative of the totality of the field, the green label, in turn, loses its differential identity as an increasingly floating signifier (Zizek 1989; Laclau 2014). Through this hegemonic signifier, financiers can identify themselves as 'green', a 'we' who can take common actions to tackle climate change.

On the other, labels are the names through which financiers are interpellated. Through interpellation, which Althusser defines as the scene where the subject is constituted, we show how financial practitioners become to see themselves and perform as green ideological subjects (2014). This is visible in the way they respond to emerging green finance imaginaries, rituals, and standards that define the green bonds market. Mobilising Althusser's dramaturgical model for interpellation (Althusser 2014; see also Balibar 2015; Butler 2015). We suggest that bond pricing events[2] are the setting where these moments of hegemonic articulation and subjectivation take place. They are the site where performative acts of interpellation (Althusser 2014) hail financiers, constituting them as 'green'. Once identified as green, financiers evaluate green assets differently from brown ones, attaching a distinct green premium (also called 'the greenium').

Inserting into wider debates on the financialisation of nature (Sullivan 2013; Bracking 2015) and its increasing spectacularisation (Levidow 2020; Igoe 2021), we add two fundamental points. First, through the concept of hegemony, we add a political dimension to the

[2] Events whereby a bond is first sold on the market.

current proliferation of 'green' labels and signifiers and to their scope in shaping the new current capitalist 'green' worldview. As we show, this ideological apparatus is not a fixed and stable domain, rather it configures as a battleground inherently linked to the social and economic reproductive ambition of the dominant ideology and their continual political and financial interests (Althusser 2014). If 'linguistic conventions', 'fictional expectations' and the related creation of 'authoritative narratives' have been deemed central for the 'market struggle' (Beckert 2016; Leins 2020), a flat, dispersed, understanding of power – as is now customary – might miss, as a vanishing point, the articulation of hegemonic strategies put forth by the financial ISA. While at the micro level, rituals of pricing might look erratic and self-referential, they often seem to aggregate and produce, like for green bonds, wider structures whose rhetoric points to veritable hegemonic formations (Laclau 2014). Through this analysis, we aim to complicate debates on the performativity of green labels within or outside the economic sphere by stressing the coercive and political dimension of the financial market.

Second, and related to the first point, by focusing on green bonds, we aim to draw attention to the peculiar performativity of acts of interpellation. While Austinian performatives, in their illocutionary or perlocutionary versions, have been widely invoked for their explanatory potential, 'to supply an alternative to causal frameworks for thinking about effects' (Butler 2010; see special issue); nevertheless, the 'self-grounding' performativity of acts of interpellations (Kockelman 2013: 91) which produces financial subjectivities – and how valuation ultimately coincides with these acts of subjectivation/subjection – has been less explored. We observe this process in the mechanism of green bonds pricing.

This article is organised as follows. First, we set the stage by presenting the recent move by the German government to issue a green bond paired with its vanilla counterpart (called 'twin'). By showcasing the difference between green and plain vanilla bonds, the German government calls investors to price or evaluate the twins differently. Second, taking stock of the proliferation of both public and private actors, national and supranational, governmental and non-governmental organisations, we describe Sustainable Finance as a self-grounding Ideological State Apparatus (ISA) performatively or recursively defined by the very ideology it materialises. To this end, we outline the contingent, aleatory constitution of the green label as a hegemonic signifier, and how it is embodied in practices and rituals of pricing and auditing. Third, we apply Althusser's dramaturgy model to green bond pricing and show how a felicitous valuation of a green bond primarily depends on acts of interpellation of this ISA. Fourth, we examine a green bond boot camp training programme. We show how a role play exercise that portrays the drama of pricing events stages a story of value creation where fictional personae – 'green' investors, bond issuers, and other practitioners – are constituted, and in turn recruited to materialise the greenium (Muniesa et al. 2017). The charged semiotic space of this rehearsal produces complex subjectivities, with participants motivated both by expertise, financial profit and from desires to have a positive impact on the world. We underline how these ethical struggles point to complex individual and social processes.

Hey, you there – look at these German twins!

Although the German Federal Government was not the first sovereign issuer to tap into the green bond market, in September 2020 it made a significant move by issuing its first green sovereign bond. By doing so, the German Treasury developed a novel financial comparison in the green bond market aimed at establishing a precedent for sustainable investments. Leveraging its role as a public sector issuer of risk-free securities in the eurozone, Germany announced its intention to create 'added value for the sustainable finance market in Europe' and serve as a reference 'green' issuer for the Eurozone (BMF 2020).

In order to fully grasp the intentions of the German government, an understanding of bond yield curves is key. In their simplest application, yield curves plot the interest rate of various bonds with different maturities. If we assume, for example, that a bond which expires in 10 years is issued and priced by investors to give a yield or interest rate of 2%, then the point (10 years, 2%) – a pricing event – will be plotted on a graph. For n different pricing events, the graph will contain n points (maturity, yield). Through mathematical tools for curve-fitting, this historical series of bond pricing events will be used to estimate a smooth curve which best approximates the yield vs maturity datapoints.[3] Since investors price differently bonds issued by different institutions and for different maturities, yield curves are thought to provide a simple representation of the present and future financial performance of an institution. Indeed, they are often considered to be a core indicator for asset pricing and valuation: the baseline against which new bond issuances are priced.

For example, a financial analyst can compare the yield curves of two issuers with different credit ratings and analyse how differently the risk of default is priced. More importantly, since it is a representation of how the remuneration of existing bonds varies as a function of their duration, the yield curve of reference issuers like the US treasury or the German government is often considered to indicate the future trend of short-term interest rates – whether they are expected to rise or fall –, and with them, inflation and business cycles.

[3] Note that the curve is not fixed but will dynamically adapt at every pricing event.

A steeply upward-sloping yield curve, where the yield of bonds with longer maturity exceeds that of those with shorter maturity, would imply that future interest rates are expected to increase with respect to current ones. In this sense, 'the curve offers a way to understand the market's collective assessment of the future (i.e. whether the economy is weak or strong)' (Zaloom 2009: 247; see also Christophers 2017).

Thus, in order to 'establish a green yield curve' and create added value for the market of sustainable bonds in the EU, the German treasury decided to issue green bonds at the same time as a twin conventional vanilla bonds with the same financial characteristics but whose proceeds are not linked to sustainable projects. In order to ensure the same level of liquidity[4] for the two securities, investors are always allowed to exchange their green bonds for the vanilla twin (BMF 2020). Finally, and even more crucially, 'switch trades' between twins are performed on the secondary market by the Federal Government aiming at 'reflecting the higher value of green federal securities compared with their conventional twins'.

Institutions that issue both green and vanilla bonds can be characterised by two distinct yield curves, the green and the conventional one. The difference between the two is the premium investors pay for the green ones. This is often referred to as the 'greenium' (Tripathy 2017; Harrison et al. 2020). Why should bonds with similar financial characteristics be priced differently? The answer given by financial models consists in pointing to climate risks, as climate change is thought to imply a greater devaluation of brown assets than green ones (see for example Agliardi and Agliardi 2019). This risk would be priced by investors, leading to a positive difference in yields between brown and green assets. The measure of this risk differential raises the greenium. But the issue is controverted, especially in the case of the same institution issuing both green and vanilla bonds. Why should the risk of default of the same institution be priced differently when issuing green and vanilla bonds, which both share identical financial characteristics and are guaranteed by the same institution?

In the next section, we will paint a more complex picture, pointing to the complicated underlying practices of valuation which mainly rely on mechanisms of subjectification. In particular, we speculate that the latest bond issuances from the German Federal Government are acts of interpellation of an Ideological State Apparatus (ISA) (Althusser 2014).

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[4] Note that the curve is not fixed but will dynamically adapt at every pricing event.

The emergence of the Green ISA and the green bonds market

In this section we outline the contours of the emergence of this Green ISA and describe the discursive shifts in ideas of sustainability that are materialised in its financial signifiers and labels. Although we will be forced to linearise a story of successive translations – the diachronic articulation of multiple heterogenous demands into the green bond label – each moment of this 'outer' sequence is entangled with 'internal' synchronic acts of subjectivation or interpellation. But these acts of subjectivation, in turn, depend on that diachronic articulation. As in the lithograph of MC Escher, *Drawing hands*, where each hand paradoxically provokes the existence of the other (see Hofstadter 1979: 685), a '"strange loop" will bring us unexpectedly right back where we started' (Hofstadter 1979: 10).

First phase, mid 2000s – Patient green development

Characterised by the action of highly ranked development banks (the EIB and the World Bank), responding to requests mainly from environmentally-minded institutional investors (pension funds, an 'involuntary wall of money'), the first phase of the green bond market can be located in the second half of the 2000s. In July 2007, the European Investment Bank (EIB), 'the lending arm' of the European Union, issued its first Climate Awareness Bond, within the 2007 'EU Action Plan for energy policy' (EIB 2007). EIB bonds were followed in 2008 by an issuance of the World Bank, organised to meet the request of Swedish pension funds. Other development banks such as the International Finance Corporation (IFC) soon followed. Crucially, at the down of the market, green bonds were marketed especially for pension funds.

Indeed, starting in 2001, following a legislative reform, the five largest state-controlled Swedish pension funds, soon followed by other countries, were forced by law to include (and, importantly, report on) 'environment and ethics' in their investment policies (Richardson 2013). Clumsily accommodating instances of various (non-financial) NGOs, the Church, and Trade Unions (Bengtsson 2008), the bill prescribed: 'a high rate of return in the long term in relation to the investment risk' but 'required to take environmental and ethical considerations into account in their investment activities *without deviating* from the overall objective of a high rate of return' (Swedish Government Official Reports 2009; emphasis added). It is no wonder that the bill was followed by various parliamentary motions calling for more specific guidelines on how exactly pension fund managers were supposed to fulfil the task (Swedish Government 2009: 57). Indeed, explicitly excluding any attempt of mediation, the bill seemed to merely juxtapose the ethical agenda variously advocated by the wider movement for responsible investment[5] in Scandinavian countries, with the traditional 'fiduciary duty'[6] of pension funds to maximise their return. And yet, the catch-22 was successfully solved or dissolved by the few financial institutions which could ensure green infrastructure development alongside a high financial ranking and long-term profitability (such as the EIB and the World Bank).

Interestingly, the contradictory (at that time), and opaque at best, Swedish pension reform is still reflected by the curious structure (if one thinks of it) of green bonds as financial instruments. Formally designed as 'plain vanilla' bonds, the most traditional fixed income instruments, green bonds not only merely *juxtapose* financial characteristics with environmental objectives without establishing any dependency between financial return and the achievement of the 'sustainable' targets, but they also often explicitly exclude any legal obligation for the green commitments[7].

Where regulators and financial engineers struggled, the rhetoric of the *labelling* of the bond proved indeed successful, providing the missing common ground between safe, constant, long-term financial returns, as demanded by pension funds, and ideas of socially responsible investing emergent in Nordic Countries in the 1990s (Bengstsson 2008). Through the label, a relation of mere contiguity 'shade[s] into analogy, transforming contingent articulation in *essential* belonging'.

As a result, during this first phase, the green bond label came to signify the promise of a safe, transparent, profitable, and long-term investment for the development of green infrastructure – as indeed offered by Development Financial Institutions (DFIs). Ultimately, this was rooted in ideas of 'sustainability' as first institutionalised by the Brundtland Commission, calling for a development without impairment of future generations (WCED 1987; see Brightman and Lewis 2017). In this discourse, the condition of possibility of an 'added value of sustainability' which investors would pay, the greenium, is explicitly negated.

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[5] Mainly focused on exclusions of weapons and tobacco as well as compliance to well-established international conventions (Bengtsson 2008).

[6] 'Fiduciary duties arise where the exercise of some discretionary power in the interests of another person gives rise to a relationship of trust. The fiduciary duties of loyalty and prudence require the trustee to manage assets wisely only on behalf the beneficiaries' (Richardson 2013).

[7] Whether the green commitments of the issuer are legally binding is still object of discussion. The Italian utility ENEL, for example, in its legally binding prospectus (the contract between issuer and investor) states: 'In addition, although ENEL and ENEL N.V. may agree at the time of issue of any Green Bonds to certain reporting and use of proceeds (including in the case of certain divestments described under 'Use of Proceeds') it would not be an event of default under the Notes if ENEL or ENEL N.V. were to fail to comply with such obligations' (ENEL 2020).

Second phase, 2010s – Black swans turn green

In the aftermath of the Great Financial Crisis (GFC), the near collapse of the global financial system was only avoided by unprecedented (and unpopular) public bailouts. As trillions of dollars of stranded assets were rescued in extremis through public money, concerns for the stability (and sustainability-qua-resilience) of the financial system gained momentum, leading to stricter regulations on credit risk, and a stronger 'disciplinarisation' of financial institutions through financial disclosures (Baud and Chiapello 2017). Furthermore, the long debate on Climate Change seemed to eventually come to a conclusion, 'the wheels starting to come off the denialist bus' (Mann and Wainwright 2019). As a result, discourses in the green bonds market began to include ideas of 'security' and 'resilience'.

Indeed, issues of 'security' became central to the actions of Mark Carney, an influential central banker (Bank of Canada and Bank of England), chairman of the powerful Financial Stability Board (FSB), educated at Goldman Sachs, who almost single-handedly elaborated the missing link between financial stability risks and climate change. In a ground-breaking speech at Lloyds, entitled 'The Tragedy of Horizon' (2015), this charismatic figure, a veritable *Prince of Sustainable Finance*, was able to provide the (re-)articulation of forces needed in 'catastrophic times' (see Gramsci 1975). 'Catastrophe' here, as well as being a quotation from the Sardinian political thinker, is a keyword in Carney's speech, not by chance delivered for an audience of insurers, soon before the COP21 in Paris. Articulating climate anxiety with concerns for the stability of the financial system, Carney developed a vernacular (see Callison 2015; Tripathy 2017) which established the 'analogy' between climate and finance systemic risk (see Aglietta and Espagne 2016). Leveraging on his position of supervisor and regulator (as governor of BoE) and influential policy maker (as chair of FSB), Carney provided an audience that was all too reminiscent of the GFC with the imaginary of what would later be called a Green Swan (Taleb 2007; BIS 2020), a catastrophic event in the financial market causally linked to the direct effects of climate change, or, indirectly, to the 'disorderly' transition it might imply[8] .

But Carney's action was not limited to speeches addressed to communities of practitioners. His leading role in a plethora of

[8] According to Carney, transition risks are 'the financial risks which could result from the process of adjustment towards a lower-carbon economy. Changes in policy, technology and physical risks could prompt a reassessment of the value of a large range of assets as costs and opportunities become apparent' (2015: 4). It is perhaps worth noting that the very concept of climate-related financial risks shifted somewhat in recent years. Due to extreme weather events, physical risks in the near future are now widely acknowledged. Yet, still in 2015, Carney's famous speech downplayed the importance of short-term physical risk imputable to climate change and could still point (already in the title) to a distant 'Tragedy of the horizon' (2015).

interlinked international initiatives profoundly reshaped the financial system, giving the ISA its present form. Indeed, around the Paris Agreement, and following the UNEP *Inquiry into a Sustainable Financial System* (2016), the mid-2010s saw an explosion of 'green finance study groups' (e.g. the G20 group in 2015) which prepared the ground for the Task force for Climate-related Financial Disclosure (TCFD, established by Carney as a spin-off of the FSB in 2015), and later the Network for the Greening of the Financial System (NGFS 2017 – again Carney is among the three founding members). Slowly but steadily, the rather generic references in *The Tragedy of the Horizon* (2015) to climate-related financial risk disclosure and scenario-based climate stress tests, were eventually codified and operationalised ('materialised' in Althusser's parlance) in these global institutions, through established rituals of auditing and pricing.

Quoting Gaston Bachelard, a report by the Bank for International Settlements[9] (BIS) later described Carney's achievement as 'an epistemological break' (BIS 2020). Indeed, by foreshadowing a near future of repressive policy making and supervision, long-term climate risks were actualized through the notion of 'transition risks' – risks resulting from the adjustment to a low-carbon economy – positing what we call the central theorem of green finance. According to this theorem, the reassessment of assets due to climate change is delegated to the market. 'Green' assets will be less exposed to de-valuation than brown ones. But such re-evaluation can only occur if policy makers put forth adequate environmental policies, and if transparency of the environmental impact is guaranteed.

And yet, as the apocalyptic report of the BIS proves, it would be misleading to reduce Carney's operation to one of financial risk engineering, where allegedly green assets would be included in a portfolio to hedge climate risks associated with brown ones. Not only would this miss his point that there is no 'individual' hedging against such systemic risks – something financiers knew all too well after 2008. But, and perhaps more crucially, Carney also succeeded because he translated the wider anxiety for climate change into a financially actionable (or profitable) discourse. Conflating apocalyptic imaginaries of the climate catastrophe with those, still vivid in the memory, of the 2008 financial meltdown, Carney exposed financial elites to the radical contingency of our age. Equivocating Greta Thunberg's incessantly ticking carbon clock, yet praising how she 'won't settle for financial institutions who can't tell whether their investments and loans are on the right or the wrong side of climate history' (Carney 2021), Carney operationalised through carbon scenarios a veritable CO2-fetishistic time-machine. The fetishist invocation of CO2, as Swyngedouw explains mobilising Laclau's and Laclan's vocabulary, 'simultaneously

[9] Also known as 'the bank of central banks', the BIS is a key player in the global financial market.

expresses our deepest fears and the desire for change', it acts as the quilting point ('point de capiton') through which a hegemonic, equivalential chain is emerging (Swyngedouw 2010: 220). And yet, partially contradicting Swyngedouw's diagnosis, Carney did not simply continue to preach an 'apocalypse for ever' (see 2010). By evoking gloomy scenarios of disorderly transition – in a millennial move – Carney also pointed to that only selectable scenario of an orderly (that is: profitable) redemption offered by this renewed financial order.

Thus, in the mid-2010s, climate change and financial value were articulated through ideas of security and resilience, organised around the pervasive CO2 fetishism of those years. In the process, sustainability and the green bond label simultaneously emerged to confront the spectre of the Apocalypse, to 'project a host of different codes on a single Master Signifier' (Jameson 1998: 82, echoing Laclau and Mouffe) which symbolically incarnates the 'enemy', providing this increasingly dominant discourse of its 'constitutive outside', to which all negativity can be attributed (Laclau 2014).

In January 2014, the Green Bond Principles (GBP) were established by a consortium of bond underwriting divisions at investment banks, including Bank of America Merrill Lynch, Citi, and BNP Paribas (EIB n.d.). After establishing the Green Bond Principles, the banks then searched for a third organization to be a secretariat for the principles, and coordinate communication and future work among the banks. They settled on the International Capital Markets Association (ICMA), an international association based in Switzerland, focused on promoting robust debt capital markets. With guidelines on how to issue a green bond now available to prospective green bond issuers, 2014 and 2015 continued the upward momentum in the green bond market. The year 2014 ended with US$36.6 billion issued by 73 institutions, bringing the market to a total of US$53.2 billion outstanding green bonds (CBI 2015). In 2016, supported by the People's Bank of China's green bond guidelines, 39% of 2016's green bonds were issued by Chinese State-Owned Enterprises (SOEs), totalling US$36.2 billion. By the end of 2015, the green bond market had reached US$100 billion (CBI 2015).

At a regional level, policymakers responded incorporating most of Carney's instances (non-financial disclosure, climate stress tests by Central Banks) in their regulations, empowering the global ISA with the local 'repressive' force – to use Althusserian language – it was still lacking . Crucially then, in this phase the green label started to also signify broad compliance to these practices, indexing the emerging power of the ISA, by then also increasingly repressive in terms of compulsory disclosures and requirements for green capital reserves. Recalling Carney's comment on 'climate history' reported above, it was then increasingly clear who was actually writing that history. Consequently, the market's growth kept accelerating, surpassing US$1 trillion in 2020. In this phase, talks of a greenium gain momentum, and quantitative analysis begin to point to its emergence (see for example (Zerbib 2016).

Green bonds on stage

In the preceding sections, we presented how the green bond label has increasingly enchained different positions in sustainable finance and beyond, allowing its value, the greenium, to hesitantly emerge. The need of pension funds for accountable, patient, green capital blurred into imperatives of 'security' and 'resilience', which are both terms that floated ambiguously between discourses of financial and climate crisis, and eventually satisfied the universal appetite for fee-based return of giant asset managers. In so doing, we mentioned a few, strongly connected institutions around which rituals of green valuation emerged: non-profit institutions like ICMA and CBI, Development Financial Institutions, national and supranational governments, and global surveillance organizations like the TCFD, the NGFS, the BIS. Thus, this is also the story of the emergence of an ISA, the site of a struggle where dominant financial elites hasten to rescue a critical situation which threatens to compromise the status-quo. The emergence of this green financial hegemony points to a new form of global sovereignty (Hardt and Negri 2019), one which has been tentatively described as a Climate Leviathan 'committed to the consolidation of capitalism via the organization of a form of planetary sovereignty that can overcome the collective action problem' (Mann 2018). As we will make clear in the last section, this is also a story of exclusions. But for the moment we turn to what was only mentioned previously – that is the fact that this process produced (and it has been produced by) green financial subjectivities.

Indeed, in this section we propose that the story of the green bond label, and the emergence of its financial value, the greenium, boots up through the reiteration and accumulation of bond pricing events. These are performative actions, which, building on Althusser, we call acts of interpellation.

The main hypothesis we have here is that this Green Ideological Apparatus works as a subjectivation device which informs practices of valuation and pricing of sustainable bonds. Indeed, Althusserian ISAs produce a 'subjectivity effect' (Montag 2013: 134). They structure 'modes of perception, affect, thought, desire, fear' (Ortner 2005: 31). These frameworks (and in general (post-)structuralist ones) share the assumption that 'the subject is determined by 'something' it internalizes but which is not under its own control' (Sato 2022: ch 1). Rather than a subject who is fully self-transparent and self-determined (Reckwitz 2012: 12), understood as 'a centre of initiatives, author of and responsible for its actions' (Althusser 2014: 269), the subject is formed and bent through a struggle with elements that are external to it and constitute 'an objective field to contradictions' (Althusser 2014: 88) which subjectivate in successive, shifting, contradictory ways, engendering 'the "contradictory unity" each subject must negotiate' (Bargu 2015). Drawing from Althusser, and in conversation with Ernesto Laclau and Slavoj Žižek, Judith Butler underscores the crucial role of practices of identification through interpellation for the constitution of a subject (1993). In her account, through signifiers (Butler gives 'women', 'democracy', 'freedom' as examples) the subject is called or interpellated. Designating various subject positions, these signifiers constitute the fabric of the ideological field.

Focusing on green finance, we suggest that environmental and climate labels and other financial green signifiers for financial products play a similar role in what we call a dual process of valuation-cum-subjectivation, whereby financiers identify themselves as 'green' and thus valuate differently green and brown assets. The performativity of these signifiers is fundamental for our argument. In fact, these signifiers are not descriptive. As famously shown by Judith Butler

> they do not represent pre-given constituencies […] Paradoxically, the political efficacy of the signifier does not consist in its representational capacity; the term neither represents nor expresses some already existing subjects or their interests. The signifier's efficacy is confirmed by its capacity to structure and constitute the political field, to create new subject-positions and new interests. (Butler 1993: 210).

Since they do not describe an established reality but retroactively perform it, these signifiers serve to 'gather together into a unity or identity elements that previously coexisted without any such relation' (Butler 1993: 210). When a particular signifier tends to take up a dominant signification – as we speculate it is happening for the green labels – it strives to be hegemonic. Building on Žižek's theory of nomination as a performative and not a descriptive operation, Laclau remarks: 'the essentially performative character of naming is the precondition for all hegemony' (Laclau's preface to Žižek 1989, 2019: 104; see also Butler 1993). On the one hand, green labels are the site of re-articulation of hegemonic strategies: they do not describe but 'retro-perform' (Appadurai 2016) a certain reality. On the other, they possibility of identification. Encoding and enacting ever-new interests, green labels are the 'names' by which investors are called.

Thus, we suggest that labels produce different subject positions, through that 'theatrical machine' (Balibar 2015; Butler 2015) Althusser baptized interpellation. Interpellations, in fact, are kinds of 'performatives' – signifying actions and practices 'which constitute that to which they refer' (Hollywood 2002: 113). Confined in the original elaboration by John Austin to linguistic utterances which, 'masqueraded' as mere statements of fact, do what they say (Austin 1962), they have since been expanded to refer in general to a ritual-like action which 'alters the very condition of felicity that they appeared to presuppose' (Appadurai 2016: 76).

Consider, for example, Althusser's paradigmatic *mise en scène* of how religious subjects are constituted through interpellation. Here, Althusser builds 'a little theoretical theatre' where a personified Christian religious ideology 'collects into a fictional discourse what it 'says' not only in its two Testaments, its Theologians, Sermons, but also in its practices, its rituals, its ceremonies and its sacraments' (2014: 194). It speaks to and calls a human individual: 'It says: This is who you are; you are Peter!' (2014: 194). In the moment when this fictional God names Peter, it brings its subject into being. Just as Austinian performatives, then, the success of this interpellation is bound to procedures and rituals – 'if everything does happen in this way (in the practices of the well-known rituals of baptism, confirmation, communion, confession and extreme unction, etc. ...)' (2014: 195). Only if these felicity conditions are met does religious ideology transform individuals into subjects (Butler 1997; Althusser 2014).

Just as in Althusser's account, an identity is constituted when an individual is addressed – interpellated – as a member of a group, so investors are 'hailed' and moulded by pricings events like the recent ones of the German treasury. Interpellated as 'green', their valuation of green bonds deviates from the conventional one, engendering the price differential which has become known as the *greenium*. Through the *répétition* (rehearsal) of such events, newborn 'green' financiers are ensnared in a loop through which they increasingly differentiate themselves from 'vanilla' ones. Drawing mainly on the work of Judith Butler, we propose that these acts of interpellation constitute chains of citations. New bond issues, we argue, cite each other, allowing the *greenium* to slowly come to matter as the limit of this series of citations. As a result, 'green' yield curves diverge from the normal ones. Crucially, then, the valuation or pricing of green bonds seems to rest fundamentally on the performativity of processes of social subjectivation – which ascribes roles across binary categories (green/vanilla, male/female etc.) – that propagate through an essentially citational mechanism. Precariously inscribing the addressee in a specific subject position, 'name-calling', is a performative in the specific sense that it exercises an interpellative function. This stages on the market a performance, where the story of creation of value conflates with the rise of fictional personae, where narratives about the *greenium* constitute green investors (Muniesa et al. 2017: 87).

In betwixt, in between?

The latest twin bonds issuance by the German Treasury aptly illustrates this process of subjectivation-cum-valuation. As Germany entered the Green Bond market with its twins in 2020, most commentators reacted enthusiastically to the perspective of getting a 'reliable measure' of the greenium. Indeed, as conventional financial literature on the topic proves (see Agliardi and Agliardi 2019 for a review), the comparison between a 'green' and a 'vanilla' curve had been deemed, until then, a delicate and ambiguous matter. The historical absence of simultaneous issues of green and vanilla bonds would render estimations difficult, dependent on diverse models. Furthermore, the amount issued, normally very different between green and vanilla bonds, would lead to different pricing, as this is thought to be related to the ease with which bonds can be traded on the market (its liquidity). Within these stories, the complex financial design of the twins aimed at exactly this: measuring the greenium and, in the process, sustaining it on the market through direct trade.

Althusser's dramaturgical model of interpellation, as it was recently re-proposed by Etienne Balibar (2015), opens an avenue to explore the details of the last twin bond issuance put in place by the German Treasury. Theatre, for Althusser, is both a 'theoretical dispositif or machine whose purpose is to resolve theoretical problems and identify the object of a theory [i.e: ideology]' (2015: 2) and a political practice which opens up the possibility of a critique of the dominant bourgeois ideology, if not a critique of ideology tout-court. On one hand, it constitutes the prototypical template for interpellations. Be it a street, a supermarket, or a pricing event, interpellations presuppose a staged situation, they happen on a scene. On the other, and especially in the case of Brecht's materialist theatre, through distancing effects which 'disrupt the latent structure of the play' (Balibar 2015), theatre might offer a place in between where 'I become double to myself, […] I can ask: what propels me to identify in this way and what grounds do I have for resisting that identification?' (Butler 2015: 27). If not a complete exit 'out of ideology' – which Althusser excludes: 'ideology is eternal' – political theatre offers the possibility to 'shift from one identification, one interpellation, to another' (Balibar 2015: 13).

What we propose, then, is to imitate here at least the first part of Althusser's move – politics as theatre, theatre as politics – and study pricing events 'as theatre'. In this sense, setting on stage a sequence of (partly, as we will discuss shortly) contradictory scenes or acts, the twin bond issue performs a sort of Brechtian *Verfremdungseffekt (V-effect)* which de-familiarises both the vanilla and the green label, and their crystallised ideologies. It prompts a situation where investors can distance themselves from their own identifications. It builds a space in-between, a gap, where investors can interrogate themselves on why they identify themselves in a certain way, thus opening up the possibility to be successfully hailed into green investors. By duplicating (or reiterating the usual 'representation', a theatrical dispositif introduces a 'play' in the mechanism (Balibar 2015, echoing Butler), which allows the investor/spectator to reconsider his/her position. In short, the twin issue builds a liminal space which displaces or dislocates investors, destabilising their identities.

Indeed, multiple ideologies never stop recruiting individuals – as Althusser tells us. Their 'play is superposed, criss-crossed, contradicts itself on the same subject' (2014: 193). As Banu Bargu suggests, these 'interpellating encounters' subjectivate in successive, shifting, contradictory ways, engendering 'a layered subjectivity' – the 'contradictory unity' each subject must negotiate (Bargu 2015). Yet, Althusser also comments that ISA interpellations are felicitous 'nine times out of ten'. And even if we wanted to concede more cautious statistics, for example allowing for the novelty and 'fragility' (Althusser 2014) of the new emerging green ISA, why then are investors responding en mass to the call, and why is the greenium emerging and stabilising itself on high values?

Our tentative sketch of an answer will draw on two arguments. First, we will underscore the ultimately repressive or 'disciplinary' (see Butler 1997: chap 4, 2015; Bargu 2019) quality of this green interpellation. Second, we will show how this theatrical machinery not only de-familiarises, at least in part, the old rituals of valuation (ideology). In a remarkable inversion of the Brechtian dispositiv, it works, at the same time, to make the new ones 'familiar', and thus further articulate the equivalence chain crystallised by the green bond label.

The tension between a repressive (based on violence) and an ideological component (based on consent) of interpellations, has been pointed out by Althusser himself in a much-quoted excerpt of the ISA essay:

> Hailing as an everyday practice governed by a precise ritual takes spectacular form in the police practice of hailing: 'Hey, you there' (It functions in very similar forms in interpellating or summoning at school.) Police hailing, however, unlike other kinds of hailing, is *repressive*: 'Your *papers*!' 'Papers' means above all identity papers […]. Identity, concentrated in first and last names, and so on, makes it possible to identify the subject (presumed in police hailing to be more or less suspect; initially presumed, that is, to be a 'bad sort') (Althusser 2014: 190; emphasis added).

Indeed, Judith Butler comments that what (normally) makes the individual prone to answer the call, is an 'anticipatory guilt', 'a passionate expectation of the law' (Butler 2015). As hinted in the German Treasury's Investor Presentation, specifically in the section 'Selection of key legislation, initiatives and instruments', it is easy to trace back the 'accusative nature' (Bargu 2015) of these interpellations to the increasingly compulsory nature of non-financial disclosure, the 'green papers' each investor is compelled to produce. After all, the EU directive on Sustainability-related disclosure in the financial service sector (SFDR) is rolling out as we write, making it clear at last which investor is on the right or the wrong side of climate history (Carney 2021).

But this spectacular mise en scène seems to exceed an explanation merely based on the ultimately disciplinary call of the German Agency. Still confused between the perhaps limited but real concessions of a delegitimised elite and their spectacular 'trasformismo', the concerned observer will not fail to notice a fundamental difference between the emancipatory theatrical dispositives Althusser (and Balibar) discuss in the quest of a revolutionary politic, and the device so skilfully arranged by the German Treasury. Rather than alienating effects of 'overdistanciantion' (Bargu 2015), akin to the Brechtian V-effect discussed by Althusser and his commenters, it seems that the German Agency mobilises conventional financial signifiers to familiarize the green label, achieving yet another moment in the articulation of the green label.

Among these financial signifiers, 'liquidity' figures most prominently. In this context, liquidity is best understood as a floating signifier (see Ortiz 2020), an affective sign which interpellates us, but whose exact meaning remains conceptually elusive (Konings 2015). For our interlocutors involved in the design of labelled bonds and Impact Funds, 'the fetish of liquidity' (Keynes quoted in Ortiz 2020) is first and foremost an obsession. With some insistence, the Investors Presentation explains how liquidity is 'ensured via (a) outright purchase or sale of bonds, (b) repurchase agreements and security lending, (c) switch transactions between twins'. Green bund, just like their twins, are 'Euro cash surrogate' (BMF 2020; see also Gabor and Vestergaard 2016). Furthermore, in a 'de-risking' strategy of sort (Gabor 2021), the German Treasury guarantees that the performance of the green twin is at least equal to the conventional one. Among the other features the green twin shares with the conventional one, is also its ability to back the same derivatives contracts.

'LIQUIDITY', 'CASH SURROGATE', 'COLLATERAL', 'DERIVATIVES', 'RISK-NEUTRAL' – this is all discussed 'in a single breath' together with the rest of the document, which further covers: the role of Germany in achieving climate targets; its connection with what we have been calling here the green ISA (NGFS, etc.); some detailed examples of green expenditure (railways, bicycle lanes, biodiversity, energy development in emerging countries, mobile digital printing, organic farming, etc.). The overall impression, then, is that green and conventional bonds are indeed twins, perhaps homozygous twins, as they share much of their financial DNA. Quite surprisingly, though, investors are indeed paying more for green securities.

Citations

Within this framework, corporate issuers pricing green bonds will index the pricing of institutional issuers. In this sense, pricing events are inter-linked semiotic events which ‘come to share substance even as they are marked by difference’ and constitute a chain of citations. Their performativity works through the tension between two semiotic components. On the one hand, as ‘indexes’ in the Peircian sense, they point to a reference through the time-space contiguity, while maintaining an irreducible gap with it. On the other, establishing relationships of similarity with each other, pricing events are also ‘icons’. Thus, pricing events are related to green labels by a token-type relationship, they are instances (tokens) of a certain label identity (type) sustained through standards and certifications (Nakassis 2012).

As aggregation and sedimentation of chains of citations, green yield curves seem to embody the ‘immaterial qualities’ of labels: ‘imaginaries, meanings, and forms of personhood that adhere to the brand and that are invokable by its tokens’ (Nakassis 2012). Provoking a certain macroeconomic reality (Christophers 2017), ‘formed and formative’ (Butler 1997a), they are the ‘fixed point’ around which subjectivities are produced.

A green bond boot camp

As we have presented in this article, pricing events of green bonds are acts of interpellation performed through green labels. The German Treasury, the European Investment Bank, CBI or ICMA, are strong organizational voices through which Green Finance speaks. Through this propaganda, like Althusserian *personae*, green financiers are recruited and indoctrinated to the truth of climate change. In response to this growth, discussions around green bond pricing and the framing of green bonds as an asset now change the personhood of practitioners in the sector. This parallels Moor and Lury’s finding that the marketing of prices impacts identity (Moor and Lury 2011, 2018).

In May 2018, a climate finance NGO held a ‘Green Bond Boot Camp’ training program in New York City. This was the first time that the nonprofit with a remit of both analysing and promoted the growth of the green bond market – bonds whose proceeds are earmarked for green projects – since 2009, attempted to create and run a training program. The boot camp took place on the top floor of an NYC investment bank’s offices. The floor overlooked a view of Central Park past a newly constructed ‘toothpick skyscraper’, a glaring sign of the effects of financial value on Manhattan. The then head of the NGO’s green bond certification program ran the training. Staff had arrived in New York City from Brazil, Australia and the UK. They were a mix of policy analysts and communications and event organisers.

The inaugural Green Bond Boot Camp class was a mix of financial professionals, sustainability practitioners, all with varying degrees of experience working in or around the green bond market. The participants in the training session worked on sustainability or in the green bond market at a number of scales. One was a manager in the World Wildlife Fund's sustainable finance program while another was a community solar developer. The two-day training program revolved around going through a PowerPoint presentation, which included multiple guest lecturers presenting on their work in the green bond market, such as a lead underwriter at JP Morgan and the treasurer for New York City's Metropolitan Transit Authority. The boot camp focused on having practitioners and people already active in putting green bonds together to share their experiences. Through presenting on their experiences working on and driving the green bond market, these practitioners, who had been instrumental in beginning the green bond market, both identified themselves as green bond experts and recruited new green bond experts.

The presentation began with a general green bonds and market overview before transitioning to discussions on market dynamics, information and pricing. Throughout these presentations and discussions, practitioners identified as green bond experts shared their stories working on the particular issues discussed in the PowerPoint presentations. On the last day of the boot camp, there was an interactive exercise that would both wake up participants after long sessions of PowerPoints and also highlight the negotiations that go into issuing a green bond. In this game, participants took on different roles of market actors, and the goal was to have a successful green bond issuance. Trainees were divided up into four teams: green bond issuers, underwriters, verifiers, and investors. The first page of the exercise begins with a prompt that focused on time pressure:

> The email below is waiting for the Issuer Team on a Monday morning… 'The green light has just been given by the CFO !! The work you have been doing on learning about green bonds is about to pay off… The objective is to work towards issuance of a green labelled (and Certified) bond with financial close just on six weeks from now… 42 calendar days. Can we do it ??'.

Through doing this exercise, participants highlighted the feeling of time pressure in putting the bond together and also the issues with balancing contrasting expectations between issuer, underwriter, and investors. Participants mentioned that the training program supported them in 'meeting people from all across the investment universe'.

Another participant described the exercise as 'a really great experience, you get to role play, try different roles that you might not you understand a lot more the different perspective of other people in the green bond space…' He described the exercise as being effective at communicating 'the speed, the processes and the challenges of these roles.' This final exercise of the Green Bond Boot Camp both confirmed for participants what their role was or could be in the green bond market as well as allow them to identify with the motivations and roles of other organisations and people.

Since 2018, green bond training programs, such as the boot camp described, have proliferated from the International Capital Markets Association's *Introduction to Green, Social and Sustainability (GSS) Bonds – Online self-study* to the Chartered Financial Analyst ESG certification which includes a briefing on green bonds (ICMA 2021). Similarly, the World Wildlife Fund created a sustainable finance masterclass in 2021. The World Sustainable Finance Association (WSFA) runs a Certified Sustainable Financial Analyst training course as well (Sustainable Finance Institute 2021). The environmental and climate knowledge transferred by one-week training courses and executive education in sustainability that many sustainable finance practitioners rely on is insufficient, according to many practitioners, to communicate the scientific knowledge that the sustainable finance community purports to translate into the language and workings of the financial industry. This concern is underscored by Kim Schumacher in a thought leadership piece in *Responsible Investor* on the risk of 'competence greenwashing' (Schumacher 2020).

Training programs such as this boot camp represent an expression of the green financial machine which produces and releases green labels, and which in turn exerts a potential control over contemporary life, including financial professionals working in this space. With the financial products they make and promote, they can grow and expand on the basis of future projection, speculation, and critique. The career trajectory they undertake in green finance offers them the possibility to be both controllers and influencers of a new green finance apparatus which embraces a new moral turn in finance (see Dal Maso et al. 2022). In this sense, the calling and naming of practitioners as sustainable finance experts through training programs harkens back to our earlier discussion of Althusser's interpellation. At different stages in their careers, they are exposed to an apparatus which interpellates them into a privileged and powerful cognitive workforce.

The financial subjectivities trainings in sustainable finance generate contain mixed and contradictory feelings that do not simply hold to a fixed ontology of the neoliberal investor (competitive *homo economicus*). On one hand, the training and the financial knowledge they acquire through this practice is directed to an 'imaginary of smartness'(Ortiz 2014, 2021; Ortiz and Muniesa 2018; see also Dal Maso 2020; Tripathy 2022a) that calls for conversion into money – either in the form of high salary or the margins from successful financial deals. On the other, their drive to change finance as usual into its brand green features, makes them open to a compromise that is willing to give up sole focus on a profit motive. Crucially, the means of finance and of ultimate profits, remains both ends and tools, as making an impact and doing good is only reachable and conceivable through financial means (Tripathy 2022b). This anxiety surrounding sustainable and climate finance expertise reflects a key tension both in the career of sustainable finance practitioners and in processes of assetization around financial instruments such as green bonds. Their work entails interpreting climate and environmental degradation scenarios and bringing this interpretation into financial markets in a format that will ideally influence investment flow away from worsening these negative impacts (Bracking 2015, 2019). This negotiation is ongoing, and practitioners must grapple with anxieties about the future and balancing their work and life in the present.

We suggest that effectively, green bond and green finance training more broadly puts on stage financial practitioners as 'theatrical' *personae*. Representing how to become 'good finance practitioners', this performance structures a space (defines a plot) where these subjects are supposed to be interpellated by a green ISA, thus guaranteeing a specific ideological reproduction of the financial elites. The charged semiotics space of the green bonds boot camp, however, also leaves these subjects with contradictory feelings as to the effectiveness of different green finance perspectives. This contradiction arises from the disavowal of other climate response possibilities that adherence and interpellation in green finance may forego.

Conclusions

Within the growing green financial complex, the proliferation of labels and signifiers to denote the green features of financial instruments seem fundamental for their own valorisation. Through an analysis of the mechanisms and the actors involved in the definition of green bonds pricing and by observing the educational purposes of the green bonds boot camp that one of us has witnessed, we employ the analytical Althusserian toolkit to contend that the fast-emerging constitution of 'greenness' is grounded in an ideological apparatus which strives to maintain its hegemony. The linking of the burgeoning field of green finance – and its developing ideological claims – to Althusserian materialism – and its ideology as immanent in practices and apparatuses – we suggest might open up a new way of conceptualisation of the notion of financial value in the transitional time of energy transition.

Specifically, we contend that the value of the greenium, which emerges out of green bonds practices of valuation, cannot merely be attributed to the performativity of models and formulas for risk engineering. Rather, it is the material effect of a subjectivation apparatus attuned to the existing reality of relations of production (see Althusser 2014). Ultimately, we submit, 'value' is performed through the tendency of capital to reproduce relations of exploitations in transitional time.

As we have shown, the aleatory constitution of the green hegemonic front rests on processes of articulation in which green financial labels are crystallising an ever longer chain of heterogenous positions. In the case of green finance, we show how the greenness which becomes encrypted in the greenium is a process of translation of language of capital valorisation (Mezzadra 2010; Dal Maso 2022). We question whether this new ideological apparatus of green finance – often uncapable as it is of listening to what any subaltern is (not) able to speak (Spivak quoted in Butler et al. 2000) – can really represent a revolutionary action to rescue us from climate catastrophe. Finally, given that processes of valuation-cum-subjectivation are materialised in states and market institutions, as well as in their produced rituals, and unfold with the specific long temporality of any ideological apparatus; we ask whether this apparatus can diachronically bring about the real change it preaches. As we learn from Althusser, this temporality is 'long' compared to the short one of the organised political action to reach radical change, thus begging the question of its adequacy to tackle the urgency of climate change.

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References

Agliardi, Elettra, and Rossella Agliardi. 2019. "Financing Environmentally-Sustainable Projects with Green Bonds." *Environment and Development Economics* 24(6): 608–623.

Aglietta, Michel, and Étienne Espagne. 2016. *Climate and Finance Systemic Risks, More than an Analogy? The Climate Fragility Hypothesis*. Paris: CEPII (Centre d'etudes prospectives et d'informations internationales).

Althusser, Louis. 2014. *On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses*. London: Verso.

Appadurai, Arjun. 2016. *Banking on Words: The Failure of Language in the Age of Derivative Finance*. Chicago, IL: University of Chicago Press.

Austin, John Langshaw. 1962. *How to Do Things with Words*. Oxford: Oxford University Press.

Balibar, Étienne. 2015. "Althusser's Dramaturgy and the Critique of Ideology." *Differences* 26(3): 1–22.

Bargu, Banu. 2015. "Althusser's Materialist Theater: Ideology and Its Aporias." *Differences* 26(3): 81–106.

Bargu, Banu. 2019. "Police Power: The Biopolitical State Apparatus and Differential Interpellations." *Rethinking Marxism* 31(3): 291–317.

Baud, Céline, and Eve Chiapello. 2017. "Understanding the Disciplinary Aspects of Neoliberal Regulations: The Case of Credit-Risk Regulation under the Basel Accords." *Critical Perspectives on Accounting* 46: 3–23.

Beckert, Jens. 2016. *Imagined Futures*. Cambridge, MA: Harvard University Press.

Bengtsson, Elias. 2008. "A History of Scandinavian Socially Responsible Investing." *Journal of Business Ethics* 82(4): 969–983.

BIS (Bank for International Settlements). 2020. *The Green Swan. Central Banking and Financial Stability in the Age of Climate Change*. Basel: BIS. https://www.bis.org/publ/othp31.pdf.

BMF (German Ministry of Finance). 2020. "Press Release Germany to Issue Green German Federal Securities from 2020." https://www.deutsche-finanzagentur.de/fileadmin/user_upload/institutionelle-investoren/pdf/Green_Bond_Investor_Presentation_2020.pdf, accessed 29 April 2021.

Bracking, Sarah. 2015. "Performativity in the Green Economy: How Far Does Climate Finance Create a Fictive Economy?" *Third World Quarterly* 36(12): 2337–257.

Bracking, Sarah. 2019. "Financialisation, Climate Finance, and the Calculative Challenges of Managing Environmental Change." *Antipode* 51(3): 709–729.

Brightman, Marc, and Jerome Lewis. 2017. "Introduction: The Anthropology of Sustainability: Beyond Development and Progress." In *The Anthropology of Sustainability*, edited by Marc Brightman and Jerome Lewis, 1–34. New York: Palgrave MacMillan.

Bruckner, Benedikt, Klaus Hubacek, Yuli Shan, Honglin Zhong, and Kuishuang Feng. 2022. "Impacts of Poverty Alleviation on National and Global Carbon Emissions." *Nature Sustainability* 5(4): 311–320.

Burgio, Alberto. 2020. "Gramsci, Historian of Modernity." In *Gramsci in the World*, edited by Fredric Jameson and Roberto M. Dainotto, 38–58. Durham, NC: Duke University Press.

Butler, Judith. 1993. B*odies That Matter: On the Discursive Limits of Sex*. New York: Routledge.

Butler, Judith.1997. *Excitable Speech: A Politics of the Performative*. New York: Routledge.

Butler, Judith. 2010. “Performative Agency.” J*ournal of Cultural Economy* 3(2): 147–161.

Butler, Judith. 2015. “Theatrical Machines.” *Differences* 26(3): 23–42.

Butler, Judith, Ernesto Laclau, and Slavoj Zizek. 2000. *Contingency, Hegemony, Universality: Contemporary Dialogues on the Left*. London: Verso.

Callison, Candis. 2015. *How Climate Change Comes to Matter: The Communal Life of Facts*. Durham, NC: Duke University Press.

Carney, Mark. 2015. “Breaking the Tragedy of the Horizon – Climate Change and Financial Stability.” Speech Given at Lloyd's of London, 29 September.

Carney, Mark. 2021. *Value(s): Building a Better World for All*. Toronto, ON: Penguin Random House.

CBI. 2015. *Bonds and Climate Change. The State of the Market 2015*. https://www.climatebonds.net/files/files/CBI-HSBC%20report%207July%20JG01.pdf, accessed 4 October 2023.

Chancel, Lucas, and Thomas Piketty. 2015. “Carbon and Inequality: From Kyoto to Paris Trends in the Global Inequality of Carbon Emissions (1998-2013) & prospects for an equitable adaptation. Fund World Inequality Lab”. *HAL* (halshs-0265526).

Christophers, Brett. 2017. “The Performativity of the Yield Curve.” *Journal of Cultural Economy* 10(1): 63–80.

Dal Maso, Giulia. 2020. *Risky Expertise in Chinese Financialisation: Returned Labour and the State-Finance Nexus*. Singapore: Palgrave MacMillan.

Dal Maso, Giulia.2022. Bridging “green” Asymmetries through Crises: How a Chinese Green Bond has Landed in Portugal. *Focaal* (93): 46–59.

Dal Maso, Giulia, Aneil Tripathy, and Marc Brightman. 2022. “A Moral Turn in Finance? Labeling, Purpose, and the Morality of Markets.” *Focaal* (93): 1–17.

De Ípola, Emilio. 2018. *Althusser, the Infinite Farewell*. Durham, NC: Duke University Press.

EIB (European Investment Bank). 2007. *The “Climate Awareness Bond” EIB promotes climate protection via pan-EU public offering*. European Investment Bank Press Release. https://www.unicreditgroup.eu/content/dam/unicreditgroup/documents/inc/press-and-media/FOR_DISTRIBUTION_MAY_22_2007_EPOSeng.pdf, accessed 30 April 2021.

EIB (European Investment Bank). n.d. “Green Bond Market Development and EIB”. https://www.eib.org/attachments/green-bond-market-development-and-eib.pdf, accessed 5 October 2023.

ENEL (National Electricity Board [Italy]). 2020. “Base Prospectus Dated 9 January 2020.” https://www.enel.com/content/dam/enel-com/documenti/investitori/investire-in-enel/programmi-principali/medium-term-notes/base-prospectus_9jan2020.pdf, accessed 30 April 2021.

Gabor, Daniela. 2021. “The Wall Street Consensus.” *Development and Change* 52 (3): 429–59.

Gabor, Daniela, and Jakob Vestergaard. 2016. "Towards a Theory of Shadow Money." *Institute for New Economic Thinking*, *INET Working Paper* 24: 41.

Goetzmann, William N. 2016. *Money Changes Everything: How Finance Made Civilization Possible*. Princeton, NJ: Princeton University Press.

Gramsci, Antonio. 1975. *Quaderni Dal Carcere. Edizione Critica Dell'Istituto Gramsci*. Edited by Valentino Gerratana. Turin: Einaudi.

Hardt, Michael, and Antonio Negri. 2019. "Empire, Twenty Years On." *New Left Review* 120: 67–92.

Harrison, Caroline, Candace Partridge, and Aneil Tripathy. 2020. "What's in a Greenium: An Analysis of Pricing Methodologies and Discourse in the Green Bond Market." *Journal of Environmental Investing* 10(1): 64–76.

Hofstadter, Douglas R. 1979. Gödel, Escher, Bach. London: Harvester Press.

Hollywood, Amy. 2002. "Performativity, Citationality, Ritualization." *History of Religions* 42(2): 93–115.

ICMA (International Capital Markets Association). 2021. "Introduction to Green, Social and Sustainability (GSS) Bonds." https://www.icmagroup.org/executive-education/courses/introduction-to-green-social-and-sustainability-gss-bonds/, accessed 30 April

Igoe, Jim. 2021. *The Nature of the Spectacle: On Images, Money, and Conserving Capitalism*. Tucson, AZ: University of Arizona Press.

Jameson, Fredric. 1998. *Brecht and Method*. London: Verso.

Jameson, Fredric. 2020. *Allegory and Ideology*. London: Verso.

Kockelman, Paul. 2013. *Agent, Person, Subject, Self: A Theory of Ontology, Interaction, and Infrastructure*. Oxford. Oxford University Press.

Konings, Martijn. 2015. *The Emotional Logic of Capitalism*. Stanford, CA: Stanford University Press.

Laclau, Ernesto. 2014. *The Rhetorical Foundations of Society*. London:Verso.

Laclau, Ernesto, and Chantal Mouffe. 2001. H*egemony and Socialist Strategy: Towards a Radical Democratic Politics*. London: Verso.

Leins, Stefan. 2020. "Narrative Authority: Rethinking Speculation and the Construction of Economic Expertise." *Ethnos* 87(3): 1–18.

Levidow, Les. 2020. "Turning Nature into an Asset: Corporate Strategies for Rent-Seeking." In *Assetization: Turning Things into Assets in Technoscientific Capitalism*, edited by Fabian Muniesa and Kean Birch, 225–257. Cambridge, MA: MIT Press.

Mann, Geoff. 2018. *Climate Leviathan: A Political Theory of Our Planetary Future*. London: Verso.

Mann, Geoff, and Joel Wainwright. 2019. "Political Scenarios for Climate Disaster." *Dissent* 66(3): 65–72.

Martines, Lauro. 1988. *Power and Imagination: City-States in Renaissance Italy*. Baltimore, MD: Johns Hopkins University Press.

Mezzadra, Sandro. 2010. "Living in Transition. Toward a Heterolingual Theory of the Multitude." In *The Politics of Culture: Around the Work of Naoki Sakai*, edited by Richard Calichman and John Namjun Kim, 121–137. New York: Routledge.

Montag, Warren. 2013. *Althusser and His Contemporaries*. Durham, NC: Duke University Press.

Moor, Liz, and Celia Lury. 2011. "Making and Measuring Value." *Journal of Cultural Economy* 4(4): 349–454.

Moor, Liz, and Celia Lury. 2018. "Price and the Person: Markets, Discrimination, and Personhood." *Journal of Cultural Economy* 11(6): 501–513.

Mouffe, Chantal. 2022. *Towards a Green Democratic Revolution: Left Populism and the Power of Affects*. London: Verso.

Muniesa, Fabian, Liliana Doganova, Horacio Ortiz, Álvaro Pina-Stranger, Florence Paterson, Alaric Bourgoin, Véra Ehrenstein, Pierre-André Juven, David Pontille, and Basak Saraç-Lesavre. 2017. *Capitalization: A Cultural Guide*. Paris: Presses des Mines.

Nakassis, Constantine V. 2012. "Brand, Citationality, Performativity." *American Anthropologist* 114(4): 624–638.

Ortiz, Horacio. 2014 "The Limits of Financial Imagination: Free Investors, Efficient Markets, and Crisis." *American Anthropologist* 116(1): 38–50.

Ortiz, Horacio. 2020. "Liquidity." In *The Routledge Handbook of Critical Finance Studies*, edited by Christian Borch, and Robert Wosnitzer, 29–45. London: Routledge.

Ortiz, Horacio. 2021. T*he Everyday Practice of Valuation and Investment: Political Imaginaries of Shareholder Value*. NY: Columbia University Press.

Ortiz, Horacio, and Fabian Muniesa. 2018. "Business Schools, the Anxiety of Finance, and the Order of the 'Middle Tier.'" J*ournal of Cultural Economy* 11(1): 1–19.

Ortner, Sherry. 2005. "Subjectivity and Cultural Critique." *Anthropological Theory* 5(1) 31–52.

Pearse, Rebecca. 2021. "Theorising the Political Economy of Energy Transformations: Agency, Structure, Space, Process." *New Political Economy* 26(6): 951–963.

Pezzolo, Luciano. 2007. "Government Debts and Credit Markets in Renaissance Italy." *University Ca'Foscari of Venice, Dept. of Economics Research Paper Series,* no. 05–07.

Reckwitz, Andreas. 2012. *Subjekt* (3rd edn.). Bielefeld: Transcript Verlag.

Richardson, Benjamin J. 2013. *Fiduciary Law and Responsible Investing: In Nature's Trust*. London: Routledge.

Sato, Yoshiyuki. 2022. *Power and Resistance: Foucault, Deleuze, Derrida, Althusser.* London: Verso.

Schumacher, Kim. 2020. "'Competence Greenwashing' Could Be the next Risk for the ESG Industry." *Responsible Investor*. https://www.responsible-investor.com/articles/competence-greenwashing-could-be-the-next-risk-for-the-esg-industry, accessed 5 December 2020.

Semieniuk, Gregor, and Victor M. Yakovenko. 2020. "Historical Evolution of Global Inequality in Carbon Emissions and Footprints versus

Redistributive Scenarios." *Journal of Cleaner Production* 264(2020) Article 121420: 1–11.
Sullivan, Sian. 2013. "Banking Nature? The Spectacular Financialisation of Environmental Conservation." *Antipode* 45(1): 198–217.
Sustainable Finance Institute. 2021. "The Sustainable Finance Institute (SFI)." *Sustainable Finance Institute*. https://sfini.org/csfa-standard, accessed 1 December 2021.
Swedish Government Official Reports. 2009. "Ethics, Environment and Pensions." https://www.regeringen.se/contentassets/8ee57c72d0184f7ea465166750c46876/ethics-environment-and-pensions-sou-2008107/, accessed 26 January 2022.
Swyngedouw, Erik. 2010. "Apocalypse Forever?" *Theory, Culture & Society* 27(2–3): 213–232.
Taleb, Nassim Nicholas. 2007. *The Black Swan: The Impact of the Highly Improbable*. New York: Random House.
Tomasi di Lampedusa, Giuseppe. [1957] 1969. Il Gattopardo. Milan: Feltrinelli.
Tripathy, Aneil. 2017. "Translating to Risk: The Legibility of Climate Change and Nature in the Green Bond Market." *Economic Anthropology* 4(2): 239–250.
Tripathy, Aneil. 2022a. "Careers and Climates: Becoming and Being a Climate Finance Practitioner." *Focaal* (93): 32–45.
Tripathy, Aneil. 2022b. "How Should We Deal with Climate Change?" In *People before Markets: An Alternative Casebook*, edited by Daniel Scott Souleles, Johan Gersel, and Morten Sørensen Thaning, 184–203. Cambridge: Cambridge University Press.
UNEP. 2016. *Towards a Performance Framework for a Sustainable Financial System*. Inquiry Working Paper 16/14
WCED (World Commission on Environment and Government). 1987. *Our Common Future. Report of the World Commission on Environment and Development*. https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf.
Zaloom, Caitlin. 2009. "How to Read the Future: The Yield Curve, Affect, and Financial Prediction." *Public Culture* 21(2): 245–268.
Zerbib, Olivier David. 2016. "Is There a Green Bond Premium? The Yield Differential between Green and Conventional Bonds." *Published in the Journal of Banking and Finance* 98: 39–60.
Žižek, Slavoj. 1989. *The Sublime Object of Ideology*. London: Verso.
Žižek, Slavoj. 2019. *The Sublime Object of Ideology*. London: Verso.

Alessandro Maresca is Research Fellow at the University of Bologna. He has recently completed his PhD in anthropology at the University of Bologna in the project ImpactHau, researching sustainable finance.

Giulia Dal Maso is a Marie Skłodowska-Curie Fellow at the Department of Asian and North African Studies, Ca' Foscari University of Venice (Italy) and the Asia Research Institute (ARI), National University of Singapore. She has worked on processes of financialization in post-socialist contexts, in China and Eastern Europe. She has published in S*outh Atlantic Quarterly; Journal of Cultural Economy; Historical Materialism; Social and Cultural Geography; Finance and Society* and she is the author of *Risky Expertise in Chinese Financialisation: Financial Labor within the Chinese State-Finance Nexus)*.

Aneil Tripathy is an Impact Fellow at the Massachusetts Institute of Technology Climate and Sustainability Consortium. He holds a PhD in anthropology from Brandeis University. He was a Postdoctoral Researcher at the University of Bologna on the European Research Council funded Impact Hau project. He is a core member of the Energy and Climate Finance Network (ECFN) at the University of St Andrew's Centre for Energy Ethics and has been a visiting researcher at Bayes Business School, Lancaster University, and an associate of University College London's Centre for an Anthropology of Sustainability (CAOS). He has published in *Economic Anthropology, Journal of Environmental Investing* and *Focaal* and has a chapter on climate change responses in *People before Markets: An Alternative Casebook* published by Cambridge University Press.

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Theme issue contribution

Performing Nature's Valuation: The art of natural capital accounting

Sylvain Maechler and Valérie Boisvert

Abstract
Accounting for nature as capital is touted as a promising way of aligning environmental conservation with global capitalism by valuing nature like economic assets. Both its proponents and detractors speculate on what its promises might achieve if they were fully realized, i.e., if nature were actually accounted for, capitalized or commodified. There is, however, an enduring disjunction between vision and execution in this field: the promises simply do not materialize. Economizing nature proves to be extremely complex, raising not only technical hurdles but also intractable conceptual and ontological issues. We suggest taking a critical realist approach to natural capital accounting, acknowledging the inherent resistance of nature to being treated as capital. We consider the arenas dedicated to natural capital accounting as the sites of singular dramaturgical performances, whose effects extend beyond the integration of nature into economic decision making. Drawing on documents, interviews and observations at events dedicated to natural capital accounting, we highlight their theatrical character and reveal the effects they produce. This article aims to contribute to the investigation of environmental governance arenas by emphasizing their significance as venues for symbolic performance and achievement, extending beyond the traditional emphasis on regulatory and hoped-for environmental transformations.

Keywords: accounting; dramaturgy; environmental governance; performance; spectacle

Sylvain Maechler is Research Fellow at the University of Lausanne and Swiss National Science Foundation Postdoctoral Fellow for visiting scholar positions at Goethe University of Frankfurt and the University of Ottawa.
Valérie Boisvert is Professor of Ecological Economics at the Institute of Geography and Sustainability of the University of Lausanne.

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Introduction

> Value is what leads us to action; it leads to do something, because it means something to us. (Mark Gough, Director of the Natural Capital Coalition, Korea Value Balancing Alliance Conference, October 28, 2020).

The promise of reconciling environmental and business concerns by unpacking the values of nature as capital, promoted here with enthusiasm as an inspiring collective undertaking, has recently gathered momentum. For the past ten years, it has been embodied in "natural capital accounting," a malleable combination of accounting, statistical, economic and ecological techniques for counting and valuing nature, with the promise of realizing environmental policies. Developed by multiple coalitions and shifting assemblages of actors at the boundaries of the conservation and business worlds, this initiative is being institutionalized. Indeed, the 2019 Green Deal of the European Commission calls for the development of "standardized natural capital accounting practices within the EU and internationally" (European Commission 2019: 17).

Nature accounting is however not a new program. Projects to integrate the environment into national accounting have been flourishing since the late 1980s (e.g., Ahmad et al. 1989). They were meant as contributions to the assessment of sustainability, shedding light on the status and progress of countries in this regard and informing public policy. The standard justification for these projects revolves around the concept of externalities and their valuation. Since the values of nature are only partially reflected in the market, the contributions of nature to economic activity, though critical, are overlooked and considerably underrated. Conversely, some damages caused to nature are not accounted for as costs, and therefore cannot be included in decision-making processes. Measuring, valuing and accounting for nature as natural capital, providing ecosystem services that are essential to economic activity, would enable its accurate recognition (Maechler and Graz 2020; Stevenson et al. 2021). This representation of the internalization of externalities has been the mainstay of environmental policies for decades (e.g., Pearce et al. 1989; Stern 2006; Dasgupta 2021), and has been more recently taken up by private actors (TEEB 2010; Natural Capital Coalition 2016). Expressing values in monetary terms allows them to be included in economic calculation and to be taken over, reputedly efficiently, by the market. This would allow more informed trade-offs between present actions and their future benefits (Maechler and Graz 2022).

This accounting enterprise has met with much criticism: it is commonly referred to as neo-liberalization or (admittedly incomplete) capitalization or assetization of nature (Sullivan 2017; Levidow 2020). Both support and criticism relate to what the promises of natural capital accounting could achieve if they were fully realized: if nature were actually capitalized and commodified, if the standards were largely accepted and applied, in the intended forms and on a meaningful scale and if they actually guided an internalization of corporate environmental externalities. Yet, research has pointed to an enduring disjunction between vision and execution in natural capital accounting, and more generally in projects related to the economic valuation of nature (Boisvert et al. 2013; Dempsey 2016; Stevenson et al. 2021). Expectations of a commodification or an assetization of nature, although strongly supported by part of the conservation world, are not really materializing. As has been observed in many areas of conservation, nature resists its commodification (Boisvert 2016; Dempsey and Suarez 2016; Bigger and Robertson 2017).

Just like previous endeavors of a similar nature, current natural capital accounting projects for businesses face a multitude of challenges. These have long been identified: the practical definition of natural capital; the production of categories, typologies or nomenclatures to capture its constituent assets and the services it provides; the choice and calibration of methods for the physical measurement of these assets and services, and only then their expression in monetary terms (Fredriksen 2017). These hurdles are far from trivial. They have all prompted technical debates over several decades among economists, statisticians and accountants on ontological foundations as well as methodological dimensions. While conventions may be established to enable the deployment of accounting systems, the possible contribution of the latter to environmental objectives is highly uncertain. Yet, despite all these obstacles and disjunctions, natural capital accounting remains central in conservation discourse (Maechler and Boisvert 2023).

The accountants and consultants driving natural capital accounting, from the business and conservation worlds, are acutely aware of the intricate nature of the task and the associated criticisms they may face. Their communication reflects a delicate balance between enthusiastic endorsement of nature and its values, alongside cautious commitments. The objectives of natural capital accounting are defined by vague and hardly binding formulas. The general tenor is to "make nature's values visible," to "measure what matters," to "make nature count" and to "mainstream the values of natural capital into decision-making." Natural capital accounts should "help decision-makers recognize the wide range of benefits provided by ecosystems and biodiversity […] and where appropriate capture these values in decision-making."[1] The language is reassuringly imprecise and does not strictly commit private sector actors to reduce their environmental impacts. Environmental issues are a matter of "invisibility" of values instead of externalities, of "mainstreaming" instead of internalization. Faced with the

[1] http://teebweb.org/, accessed June 21, 2023. "Making nature's values visible" is the slogan of the TEEB initiative.

simplification, theoretical disarmament and depoliticization of the language, it is difficult to see natural capital accounting as a purely economic or technical project. This would impose a meaning that the key stakeholders themselves do not ascribe to it.

Hence, we advocate for a critical realist perspective when it comes to natural capital accounting and argue that it is crucial to approach it as a singular domain, without presuming that it is merely another arena for commodifying nature. Our first observations of the debates in this field soon convinced us that considering them in the latter light would only confirm our initial assumptions, locking us into a hermeneutic circle and rendering our study object illegible. The parties involved in natural capital accounting keep claiming that the latter might help to overcome the ecological crisis, despite its enduring inability to deliver on its promises. We contend that it would be overly simplistic to explain this away by an unshakeable faith in the powers of the market, or a lack of information about the practical challenges of accounting for nature. To unravel this apparent paradox, we believe it is crucial to go beyond teleological views of natural capital accounting as a simple commodification device and to broaden the analysis beyond the exclusive focus on the texts produced on the subject and their content. We advocate considering the events where these discourses are crafted and delivered as distinctive performances. We posit that natural capital accounting is more about fostering a shared vision of nature as capital than it is about implementing that vision. It gives rise to an "economy of appearances" (Tsing 2000) in the sense that it implies the production of a spectacle of profitability, success and gain, that aims at dramatizing potential benefits and silencing doubts and critics.

In this regard, our proposal is in line with the idea of the spectacularization of conservation highlighted in the scholarly discussions related to neoliberal natures (Brockington 2008, 2009; Igoe 2010, 2017; MacDonald 2010; MacDonald and Corson 2012). This strand of scholarship linking discursive and material productions of nature has shown how nature is mediated and produced through a set of practices, techniques and imaginaries – how framing nature as "capital" affects its representation and perception. To a certain extent, our proposal resonates with Blühdorn's (2007) concept of "simulative politics," drawing on Baudrillard's concept of simulacrum. This pertains to policies that build on a performance of earnestness, of authenticity, and draw on a form of political communication that "articulates demands which are not supposed to be taken seriously and implemented, but which are nevertheless constantly rearticulated" (Blühdorn 2007: 267–268). However, unlike Blühdorn, we do not ascribe a priori to (all) the actors involved in natural capital accounting the intention of actively perpetuating a system that serves their own interests and neutralizing any potential radical reform through ostensible activism. The diversity of constituencies and motivations in the nature valuation debate is such that it simply cannot support this hypothesis. At first glance, it does indeed seem to be an "incantatory system of governance," where "symbols and narratives appear to be just as important as the production of rules, institutions and instruments" (Aykut et al. 2021: 521; Aykut et al. 2022). However, we suggest that endeavors to establish natural capital accounting may reveal distinctive connections and issues within the conservation and business worlds. We therefore offer to approach meetings and digital spaces where the accounting of natural capital is advanced as sites of dramaturgical performance producing meaning of their own and yielding effects beyond those advertised.

In line with this special issue, we set out to reveal how natural capital accounting is elaborated and the promises it embodies are maintained based on the analysis of texts, images, discourses, visions and gestures; but also energy, atmosphere, intangible signs, collective effervescence and ways of being and conveying. Building on research on "business as show business," and managerial presentations as performances (Mangham and Overington 1987; Clark and Salaman 1996; Biehl-Missal 2011; Lezaun and Muniesa 2017), we draw on dramaturgy both as a metaphor to illustrate and structure our empirical findings and, primarily, to think outside the dominant reading of the commodification of nature and, hopefully, to escape its aporias.

This article is based on three types of sources. First, it draws on a review of the relevant literature, ranging across a spectrum of academic articles and gray literature (protocols, featured case studies, methodological reports, standards, declarations), an analysis of outreach documents, including videos and websites. Second, it is fed by 12 semi-structured interviews with environmental officers, sustainability managers, economists and accountants involved in natural capital accounting and nature valuation projects (i.e., people working for businesses, consulting companies, coalitions, conservation organizations). Third, we draw on ethnographic observations conducted between November 2017 and November 2022 within the connected networks and groups of actors presented in the next section. These observations covered 16 events that lasted from one hour to several days, with the highlights being the European Business and Nature Summits that took place in Madrid, Spain, from November 5 to 8, 2019 and in Brussels, Belgium, from November 17 to 19, 2022, as well as the online We Value Nature 10-days Challenge from March 11 to 24, 2021, and a meeting organized by the International Organization for Standardization in Beirut, Lebanon, from March 12 to 15, 2018 on natural capital valuation standards.

After presenting our analytical framework, we examine the dramaturgy of natural capital accounting in four acts. The first is the casting, i.e., the constitution of a community of actors with specific roles. Second, this community undertakes script writing through rehearsed exercises in standardization and consultations concretizing the roles assigned and preparing the plot. The third act is the actual performance, i.e., a fiery celebration of the success of natural capital accounting, which at least symbolically brings the project into existence and thus lends it some reality. Fourth, a series of role plays and trainings involve the participants as co-performers.

Natural capital accounting as a performing art?

Several scholars have convincingly employed theatrical metaphors to account for managerial practices, business training techniques and the staging of certain events that punctuate corporate culture. Mangham (1990: 107) draws a parallel between the dramaturgies of theater and business, referring in both cases to the "triadic collusion between author, actor and audience." Clark and Salaman (1996, 1998b) suggest that charismatic leaders could be seen as "gurus" in a literal sense. Their analysis stresses the importance of "the presentation of ambitious claims to transform managerial practice, organizational structures and cultures and, crucially, organizational performance, through the recommendation of a fundamental almost magical cure or transformation that rejects the past, and reinvents the organization" (Clark and Salaman 1998b: 138). Natural capital accounting, predominantly shaped by and tailored for corporate actors, aims to enhance their environmental awareness and involvement. As a result, it strongly integrates the principles and practices of the business world. It therefore seems worth extending the observations made on business theatricality to environmental accounting. Incidentally, the same point has also been made about other environmental negotiations (Death 2011; Fischer and Gottweis 2012; Fletcher 2014). Unlike the conventional perception of environmental negotiations as transparent, which emphasizes only the content of messages and views the form as neutral, we propose to accord substantial importance to their theatricality, thickness and opacity. We feel that thoroughly understanding the significance of the discussions on natural capital accounting necessitates an examination of their style in the utmost literal sense.

Inspired by Biehl-Missal (2011) and her analysis of business annual general meetings, we consider performance studies can be insightful in capturing what she calls the "performance text," defined as the "perception occurring through atmospheric, bodily sensations which are influenced by the interplay of aesthetic elements, by the whole behavioral, temporal, and spatial situation," and that differs from the "linguistic text," which is the verbal message formally delivered (2011: 622). She thus emphasizes that the events she has studied constitute an "intricate theatrical moment of sound, text, movement, and colors, shared with and co-created by spectators" (2011: 622).

Following her path, we propose to consider not only how stories about natural capital valuation and accounting are told, but also how they are orchestrated and performed to impress, persuade and create a sense of community among actors. We begin by describing the self-appointed "natural capital community," examining its protagonists: staff from a variety of environmental organizations, consultants, charismatic figures who can act as role models, and embody economic credibility and political legitimacy. They have developed discursive routines, particular modalities and forms of speaking, while ways of being together, of behaving and of addressing each other have gradually been established. They have identified common places that make it possible to express familiar concerns in general terms, deal with divergent interests and produce common meanings (Cheyns 2014). We will show the importance in this context of "formulas" and "ideographs," defined as "an ordinary language term [...] a high order abstraction, representing collective commitment to a particular but equivocal and ill-defined normative goal" (McGee 1980: 15). The shared vision of what accounting could achieve is articulated through the engagement of the participants in the creation of a common script.

In addition to this linguistic text, a slogan-based plea for the conservation of nature through counting, a performance text is elaborated, rehearsed and incorporated by means of a genuine "meeting culture"(Van Vree 2001). The "natural capital community" devotes much of its resources to preparing, organizing and holding meetings, and then debriefing and preparing for the next meeting. In line with the observations of MacDonald and Corson (2012: 159), periods between two official sessions are punctuated by webinars, which convey the impression of a barely interrupted conversation. The active commitment of participants is constantly stimulated by facilitation arrangements. They are called upon to become co-performers through role-play games where "reality is produced and conveyed" (Lezaun and Muniesa 2017: 265). The script is then displayed at events of varying size and scope, encapsulated in catchphrases, and circulated beyond the arenas where it was created, enlightened by the recollection of the lively experience of the participants.

Unveiling the dramaturgy of natural capital accounting

The casting

The primary role in natural capital accounting is played by the Natural Capital Coalition, a broad alliance of public and private organizations set up in 2014 from the network that had been involved in drafting the TEEB for Business and Enterprise report – "The Economics of Ecosystems and Biodiversity" (MacDonald and Corson 2012). This coalition was founded by the World Business Council for Sustainable Development (WBCSD) and the International Union for Conservation of Nature (IUCN). They are supported by the European Commission, through the "EU Business @ Biodiversity Platform" (EU B@B) created in 2008 "to work with and help businesses integrate natural capital and biodiversity considerations into business practices."[2] They succeeded in bringing together around them international conservation organizations such as the United Nations Environment Programme (UNEP) and the World Wide Fund for Nature (WWF), a plethora of consulting firms of various sizes including the Big Four (PwC, Deloitte, KPMG, EY), and big companies – the actual target for such an initiative.

For internal as well as external communication purposes, participants in natural capital accounting discussions and meetings are commonly referred to as the "natural capital community," indicating an intention to build a constituency around a common project, to develop ties within the group, and to have its members represent and advocate its collective vision. Broad and flexible, this coalition discloses the attributes of what Clark and Salaman (1998b: 147) call an "imagined community" that they depict as a group whose "members and activities are integrated through [constantly re-manufactured] shared beliefs, mutuality, consensus; where conflict is minimal, the organization is [fictionally] unified and harmonious and members accept the logic of difference and rank and accept their positions and their roles and rewards." While cultivating togetherness, "the natural capital community" has sufficiently blurred boundaries and socializing mechanism to welcome newcomers. As happily reported by a consultant, "it is open to everyone, we don't need to pay to follow the event, to participate. It works quite well because everyone feels comfortable."[3] In practice, "the community" consists of a collection of people with different positions, backgrounds and roles. Some are employed by member organizations of the Natural Capital Coalition and are primarily responsible for its facilitation; others are accounting experts acting as consultants; while still others derive their legitimacy from their proximity to regulatory bodies, their experience in the private sector or their long-standing leadership in the field.

Unsurprisingly, the public faces, spokespersons or "facilitators" of "the community" are employed by the environmental organizations and business-driven coalitions supporting natural capital accounting.

[2] EU Business & Biodiversity Platform: https://ec.europa.eu/environment/biodiversity/business/about-us/index_en.htm, accessed June 21, 2023.

[3] Informal talk: European Business & Nature Summit 2019 (hereafter "EBNS"), Madrid (Spain).

Beyond their respective affiliations, they have similar backgrounds: an initial technical degree from a western (in most cases British) university – with a focus on environmental management, environmental science, ecology or environmental economics, possibly supplemented by additional trainings (such as a Master of Advanced Studies) in financial management from a prestigious institution (e.g., Oxford University, London School of Economics) to be able to "think like their audience" (i.e., big companies) in order to "transform their consciousness" (Clark and Salaman 1996). They act as masters of ceremony and orchestrate the performance: they ensure that the conditions are met to keep the promises embodied in natural capital accounting alive. They define the talking points and frame the entire discussion, both in terms of content and form, setting the tone and translating complex realities and processes into simple formulas and catchy slogans intended to be taken up. They strive to engage the audience in debates. They make sure that meetings are constructive, can always be seen as advances, and do not leave time or space for doubt or criticism to arise, at least not openly. Depending on their level of experience (young people and women are more often entrusted with the facilitation of events, especially when they occur online), they prepare, convene and facilitate internal and outreach events.

The second circle of actors is made up of a large number of consultants, either independent, employed by small specialized consultancies interested in the possible market niche opened by growing expectations of environmental accountability and transparency, or by conservation NGOs. As they admit in private, they all know each other personally, especially since they frequently move from one organization to another in the course of their careers and participate in the same events throughout the year. Several have launched their consulting company after having been employed by one organization involved in natural capital accounting, such as IUCN, WBCSD and its dedicated Redefining Value Programme, or the Natural Capital Coalition. Like all consultants, "they have something [they consider] of value to offer" (Clark and Salaman 1998a: 24). They are often invited as experts in events organized under the patronage of the above-mentioned organizations and cooperate with them on specific tasks. They unreservedly support the project and discuss it as if it were a common and well-established practice. They describe the definition of standards and procedures as indispensable for dealing with the challenges of the ecological crisis and display all the more seriousness and commitment as their business outline and their future market are at stake. Their credibility and expertise are symbolically involved in their participation in the natural capital community. They all bring their own accounting methodologies to the table, and invariably describe them as distinct from, but complementary to, those of their colleagues or competitors. Yet, they generally have few illusions about the chances of disseminating their methodologies, as they readily admit in private. Some of them may lament that the process is not delivering on its promises, as will be shown in more detail in the next section. However, debates over natural capital accounting are helping to level the playing field for environmental consultancies, particularly insofar as they maintain a convenient status quo. Though competitors in the marketplace, they have a vested interest in participating together in the discussions shaping the future of their business sector, not so much for immediate gain, but because they could miss out on opportunities if they did not.

A quite different sort of consultant works for the Big Four accounting and audit firms that have become central to environmental auditing and reporting since the end of the 1990s (Power 1997; Malsch 2013). "They are everywhere (…) they have their hand in the honeypot all the time. They have the money, the expertise and the power,"[4] as reported by a person involved in the setting of standards. Like their peers, they may be involved in "technical" work, including drafting and standards. However, their contribution is sometimes limited to symbolically endorsing documents by adding their company's name to the list of authors. Their mere presence lends authority and substance to the process. They bring vibrancy and since they participate on a pro bono basis, which is always strongly emphasized, they perform the role of guardians or benevolent patrons watching over the discussions. Their few words drop during meetings are expected and respected, received as omens, which they play up to mark that they are above the fray – like a PwC consultant during a conference: "I have a vision. I want all companies considering the consequences on society and the environment of every single business decision, underpinned by impact measurement and monetary data"[5]. They multiply signs and gestures that allow them to appear powerful (Biehl-Missal 2010); and to display their political and economic connections (Tsingou 2015), yet without delivering substantial messages.

While the Big Four representatives derive their legitimacy from the identity of their employers, other actors in the theater of natural capital accounting are considered as reference and authority figures in a personal capacity due to their background. These are the people whose careers typify the revolving door phenomenon, who have accumulated significant symbolic capital in the accounting milieu through their successive or parallel anchoring in the private sector and in the public regulation apparatus, who circulate between the arenas and master their codes and who are considered as insiders. The CEO of the Value Balancing Alliance (VBA) mandated in 2020 by the

[4] Interview: October 19, 2020, online.

[5] Field notes: Korea Value Balancing Alliance conference, October 2020, online.

European Commission to develop standards for natural capital accounting is a prime example. After studying business management and ethics, he started his career at the International Integrated Reporting Council (IIRC), an organization specialized in sustainability reporting. He was later in charge of the sustainability strategy of the chemical company BASF for almost 16 years. In this context, he has been publishing an annual "Integrated Profit and Loss account" for BASF including an assessment of natural capital since 2013 with the support of KPMG.[6] He is also a member of the EU Sustainable Finance Platform and of the Harvard Business School Impact Weighted Accounts Initiative. His political, economic and epistemic credentials make him an expected and respected speaker in "the natural capital community." He takes every opportunity to hammer home his message about the importance of making nature's values fungible in capitalism: "Business' language is money, we need to feel the environmental impact, so environmental impact needs to be translated into money;"[7] "Money is the language that people share and especially decisionmakers."[8] His interlocutors take up the message: "We value anyway, this is how the world operate … we spend our life valuing; but now we need to make it explicit;[9] "Valuing nature is not a debate anymore … this is a universal imperative."[10] His speeches and those of his peers with similar backgrounds are applauded for their clarity, simplicity and appeal. Like an ancient chorus, however, they just repeat, amplify and multiply the natural capital accounting project, without bringing any new argument and without elaborating a narrative, like a counterpoint that underlines the main theme. They have little to contribute beyond the authority derived from their experience and position and therefore do not appear as charismatic leaders or "visionaries" (Harvey 2001).

The latter role is played by a former chief economist at Deutsche Bank, and more importantly, the former study leader of TEEB which gave rise to "the natural capital community." A charismatic leader, he then became president of WWF International and has also launched his own consultancy in natural capital accounting. He was recently awarded the Tyler Prize – the so-called "Nobel prize for environmental

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[6] See the results of BASF natural capital accounting exercises here: https://www.basf.com/global/en/who-we-are/sustainability/we-drive-sustainable-solutions/quantifying-sustainability/value-to-society/impact-categories.html, accessed June 21, 2023.

[7] Field notes: EBNS 2019, Madrid (Spain).

[8] Field notes: We Value Nature 10-Day Challenge, session 'Advancements in our understanding of value', March 2021, online.

[9] Field notes: We Value Nature 10-Day Challenge, March 2021, online.

[10] Field notes: We Value Nature 10-Day Challenge, March 2021, online.

achievement" – for contributing to "bringing the economic consequences of environmental degradation and loss to the attention of corporate and political decision-makers."[11] He is rarely present, but he is the true initiator of the project, and his name is known and respected by all. He is the voice and face of "the natural capital accounting community," which he represents and promotes by speaking at popular events such as "TED Talk" (for Technology, Entertainment and Design), which have been shown to be a powerful way of communicating innovative business ideas to a wide audience (Bell et al. 2019). His performances are reassuringly predictable in terms of both content and audience reaction. They are perfectly staged and executed. He demonstrates the qualities expected from a leader: charisma, vision, energy, rhetorical skills (Clark and Salaman 1996; Harvey 2001), and he masterfully alternates metaphors and incantations about the invisible values of nature.[12]

Finally, big companies that are officially the prime targets of natural capital accounting projects are sending representatives. For them the experience borders on an epiphany, possibly initiating their conversion, as illustrated by this conversation overheard at an event:

> X: I come from the field of insurance; I am totally new to this world.
> Y: Me too; I am in finance.
> X: Ah, that's even worse than insurance.
> Z: You must have a lot to make up for.[13]

Being part of "the community" allows companies "to escape the role of the villain" (Moussu 2019: 61) and feel a sense of belonging to a club of thoughtful leaders, i.e., "an elite community whose members are motivated by the recognition of their peers and a common goal consistent with the values they consider honorable" (Tsingou 2015: 230–231). While the names of large multinational companies (e.g., Coca-Cola, Holcim, BASF or Kering) are proudly and enthusiastically displayed as a token of broad support for the project, these companies are usually represented by independent consultants. They also sometimes show their support through prerecorded video messages from executives or even the CEO. When company representatives participate, it is to showcase their "natural capital journey." Small businesses such as start-ups producing craft beer or solar panels[14] also participate alongside the large corporations whose impact on the

[11] https://www.unep.org/news-and-stories/press-release/pavan-sukhdev-wins-2020-tyler-prize-environmental-achievement, accessed June 21, 2023.

[12] See the TED Talk here: https://www.ted.com/talks/pavan_sukhdev_put_a_value_on_nature?language=en, accessed June 21, 2023.

[13] Field notes: EBNS 2019, Madrid (Spain).

[14] Field notes: EBNS 2022, Brussels (Belgium).

environment is indisputable. Their presence symbolically attests that natural capital accounting is a shared concern and an almost universal tool in the face of the ecological crisis. All companies are put on an equal footing. Irrespective of their size or the extent of their environmental impact, they are all expected to undertake the same "journey." Their differentiated responsibilities are thus totally erased by a unifying language that obscures the notion of corporate responsibility altogether. CEOs, whether from big or small companies, are required to share their own experience and expertise based on a predefined scenario and stage directions that prevail in the "community." This is where we turn next.

Writing the script and creating visions

The natural capital accounting script is outlined in a document entitled the Natural Capital Protocol, published in 2016 as the first deliverable of the Natural Capital Coalition. It describes the natural capital accounting journey in four steps: "why, what, how and so what" (Natural Capital Coalition 2016). Strictly speaking, it is not a technical standard, such as those of the International Organization for Standardization (ISO). Rather, it is more what businesses refer to as an "MoU" (memorandum of understanding), described by a member of "the community" as "a very fuzzy framework on which everyone can agree."[15] It does not commit to any particular action as it mainly enjoins people to commit to a consideration of natural capital. Its objective is explicitly of "establishing a common platform for the consideration of natural capital in all sectors" and embodying a "collaborative spirit" (IDEEA Group 2017: 8). This reflects "a form of pseudo-knowledge" (Clark and Greatbatch 2004: 399), which places more emphasis on communicating a vision than on the practical implementation of technical knowledge. The document is full of drawings supposedly representing nature as capital and the services it provides to business. Just as best-selling management book authors publish a new book every few years "to fuel the demand for their services on the corporate lecture circuit" (Clark and Greatbatch 2004: 415), many other documents have followed the Natural Capital Protocol, some focusing on specific sectors: apparel, food and beverage, forest products, as well as two "supplements" for biodiversity and finance.

These documents are mostly drafted by consultants who may bring their own agenda to the table. However, to be seen as a consensual basis of understanding, they officially involve all members of "the community;" they are usually subject to an open consultation process, but at such an advanced stage of drafting that they are virtually final.

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[15] Interview: UNEP-FI employee, May 22, 2019, Geneva (Switzerland).

The final draft is presented during a webinar, then it is posted online and everyone can propose amendments. The consultation is followed by a discussion phase which usually drifts quickly on to the expected effects of the protocol, the vision it embodies; it does not explicitly address either the comments or the way they have been incorporated. Each time a new protocol is published, a policy brief follows to emphasize that further progress has been made toward the ultimate goal of achieving conservation through mainstreaming of nature's values in accounting.

Parallel to this process, alternative scripts for natural capital accounting emerged, which threatened to overshadow it, if not compete with it, or even impose alternative performance texts. Indeed, the International Organization for Standardization (ISO) has taken up the issue and has set a standard for monetary valuation of nature in 2018 (ISO 14008) (Maechler and Graz 2020). Some members of the natural capital community did attend the initial discussions with the agenda to have this standard modelled on their language and script. As reported by ISO experts, they "constantly made proposals to change the text, to bring in the definitions they use in the Natural Capital Protocol […] it was taking away attention by the market on their things"[16] and therefore they tried "to block everything that they do not initiate by themselves."[17] As they felt their claims would not be sufficiently addressed, they stopped attending meetings. This ISO standard is now published but barely mentioned by members of "the community." Their strategy for capturing and occupying regulatory space on natural capital accounting is to simply ignore or divert other initiatives. They were able to convince the powerful British Standards Institution (BSI) representing the United Kingdom in ISO (Yates and Murphy 2009) to set a new standard in line with their own approach and language (BS 8632 Natural Capital Accounting for Organizations, based on the Natural Capital Protocol language).

Many efforts are being made in seemingly distant policy arenas to disseminate key messages on natural capital accounting and standards to a broader audience, so that they eventually become mainstream (Mangham 1995: 495). This implies a proliferation and staging of seemingly competing accounting initiatives and approaches yet stemming from more or less the same network. It conveys the impression of a booming business to provide "the accounting standards of the future" – the motto of the recently created organization Value Balancing Alliance setting standards on behalf of the EU.[18] It maintains a particular agenda and sense of momentum, brings people together and makes natural capital accounting a

[16] Interview: ISO expert 1, December 14, 2018, online.

[17] Interview: ISO expert 2, January 29, 2019, Baden (Switzerland).

[18] Field notes: Korea VBA conference, October 2020, online.

dynamic field. More mundanely, it is a way for consultants to get funding. European funding fuels the ongoing various production of methods for valuing and accounting for natural capital and has even allowed a bubble to develop in this regard. Nearly every year a new project is developed, while former ones and their successes and failures are forgotten. This could be interpreted, following Fletcher (2013), as "fetishistic disavowal," which he defines as a way of dealing with the past by ignoring it, which would lead to reformulating the same proposals over and over again. When they are not simply forgotten, the multiplication of methodological projects has become a pretext to call for yet other types of projects, those that aim at aligning the former. A new project of this kind financed for three years by the EU and entitled "Aligning accounting approaches for nature" was launched in early 2021. Although the coalitions engaged in natural capital accounting claim to call for methodological convergence and the ordering of what they call the "natural capital soup,"[19] they take advantage of this situation.

This approach does not fully satisfy those who are looking for real transformation of the accounting systems, such as participants from the conservation world who have held high positions in their respective organizations and followed these developments – or the absence of development – over a long time. Often trained in environmental or resource economics or environmental sciences, they are well equipped to understand the technicalities of natural capital accounting. Although they support the project in public, they are sometimes skeptical of the way communication takes precedence over technical and practical action to promote standardization.

> Ideally the Natural Capital Protocol would have been a standard. Instead, it is just a guideline. Companies can use it as they want. But this is obviously not good enough. People within this coalition are just "conveners", they are not technical people, they don't understand the technicality of natural capital. (Interview: UNEP-FI employee, May 22, 2019, Geneva).

> Their goal is simply to make it look like they are making progress on the subject but in reality they are doing nothing [...they] do not really seek to create a standard but only to attract the attention. (Interview: IUCN employee, May 24, 2019, Online).

Such criticisms of the lack of concrete progress do not weaken the natural capital script. On the contrary, they are an integral part of it, creating a dramatic tension that rekindles interest and general engagement in the spectacle of natural capital accounting and revives the associated promises in line with the "politics of simulation"

[19] Field notes: EBNS 2019, Madrid.

(Blühdorn 2007). Far from defining either clear technical rules or an agenda for action, this script defines themes and registers of expression and opens the way to performance.

Performing the script

The script is brought to life through various meetings. Large events follow a ritualized protocol (Biehl-Missal 2011): an opening and a final plenary session, and sometimes an intermediate plenary session. Yet, no discussion cycle is ever really opened or closed, there are just rituals ("civilized norms") that punctuate an almost continuous conversation, pursued between meetings by virtual events.

The annual two-day European Business and Nature Summit (EBNS) is probably the key moment of articulation and dissemination of the promise of conserving nature by valuing it and making it visible through accounting. Just as in a business general assembly, annual progress is proudly "delivered as an elaborate and spectacular theatrical production" (Biehl-Missal 2011: 620). Gathering around 200 people, it has been taking place since 2014 during the dedicated "natural capital week" in autumn to support the "mainstreaming of natural capital thinking." Each year, it is organized in a different European city (the last events were held in Brussels, Paris, The Hague, Frankfurt, Madrid and Brussels again, and the 2023 event is planned for Milan[20]) in a prestigious conference center. The 2019 edition was hosted at the CaixaForum museum, a building designed by the Swiss architects Herzog and de Meuron reinforcing participants' sense of belonging to a privileged club (Tsingou 2015). After two years of online meetings (due to the Covid-19 pandemic), the 2022 event was held in a more conventional venue, a conference center called "The Hague" in Brussels. In both cases, however, there was no need to neutralize an impersonal atmosphere through interior staging techniques as is generally the case for business annual assemblies (Biehl-Missal 2011: 631). The stage was already set for a spectacle that was just waiting to be performed. The main room was actually a theater. During these meetings, a social room, usually lit by green lights, is dedicated to networking. Smaller rooms accommodate parallel sessions often organized into roundtables to facilitate communication among participants and reinforce the sense of community. Parallel sessions are chaired by participating organizations, who bring their own style and combine their brand communication and corporate identity with the natural capital accounting language. The name and logo of the organization is displayed on panels on both sides of the room, which are therefore changed from one session to the next. The presenters, often

[20] See here: https://green-business.ec.europa.eu/news/save-date-2023-european-business-nature-summit-2023-05-04_en, accessed June 21, 2023.

consultants, pitch their business approach to natural capital accounting and showcase their achievements. Then there are interactions with the audience. These are moments of self-promotion whose success as a performance depends on the presence and talent of the presenter but also on the weight of the organization and its relations. Some sessions are relatively deserted, especially since one of the major functions of these large events is the constitution and consolidation of professional networks. Some participants chose not to attend the organized sessions in order to continue their informal discussions in the social room. Although the script revolves around the notion of natural capital, the usual codes of business meetings prevail.[21] The business and conservation organization participants are not acting; they "perform themselves," through "non-illusionary real-life presentations" (Biehl-Missal 2011).

Each year, a new motto, often a plain and seemingly commonsense message, is coined or borrowed from a new organization to welcome its creation. As often happens in managerial discourse, these formulas reflect wishful thinking, "what should be the case, not what is the case" (Boltanski and Chiapello 2005: 58). In 2019, it was "the environment underpins everything, business and society," from the slogan of Business for Nature, a new coalition whose CEO was convening the yearly meeting. In 2020, the catchphrase was "we're going to hear companies on how they put nature at the center of their business model."[22] In 2022, all messages revolved around the new simple and empty appeal to be "nature positive." The CEO of the Natural Capital Coalition told the audience in confidence, as if revealing a well-kept secret, that since the 2019 meeting in Madrid, he had felt the community needed to regain momentum. So he had called a closed-door meeting, described as a "business incubator," with WWF, WBCSD, EU@BB, perhaps others unnamed, to come up with a new, inspiring message. These "secret negotiations" resulted in the notion of "nature positive" as the new mantra in nature conservation. The latter was emphatically taken up in the much-publicized G7 2030 Nature Compact in June 2021: "[O]ur world must not only become net zero, but also nature positive, for the benefit of both people and the planet."[23] This phrase also appears in the latest documents from the major environmental NGOs and in the Kunming-Montreal Global Biodiversity Framework, adopted in 2022 at the fifteenth Conference

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[21] Closing the 2022 EBNS, the EU Director General for Natural Capital thanked the participants for "this successful "business meeting," before catching himself and adding "business and nature meeting."

[22] Nadine McCormick, WBCSD, Convener of the 2020 EBNS.

[23] G7 2030 Nature Compact, Policy paper, published July 12, 2021. https://www.gov.uk/government/publications/g7-2030-nature-compact/g7-2030-nature-compact, accessed June 21, 2023.

of the Parties to the Convention on Biological Diversity. By 2050, nature – both species and ecosystems – is not only expected to stop declining, but also to be restored and regenerated. Given the magnitude of the challenge, the significance of creating a slogan is probably derisory. Yet performing such narratives is obviously intended to impress upon the audience the quiet influence of the visionary champions of the natural capital community, whispering in the ears of the powerful.

These messages are then repeated like antiphons during the sessions, as if saying were doing and as if statements eventually turned into actions if repeated enough (Mangham 1995: 495). These discourses are in addition sustained by risk-oriented imaginaries "that create a strong imperative for urgent action" (Moussu 2019: 60), in an attempt to "transform the consciousness of the audience" (Clark and Salaman 1996) using sophistry.

> Business models that are not sustainable will not survive. Business is thus part of the solution, not the problem. To do that, we need to measure the impact of business on nature thanks to natural capital accounting. We need to put in place accounting systems that reflect these interactions between business and nature. (Daniel Calleja, Director General for Environment, European Commission, EBNS 2019, Madrid).

Striving to combine "the rhetoric, persuasive skills, and the sense of 'drama' of charismatic leaders" (Biehl-Missal 2011: 620), speakers at plenary sessions repeatedly exhort the audience to action, emphasizing their transformative power, alternating "we" and "you" to emphasize that the participants belong to a community. "We need to move from a competitive to a collaborative world. If we do not collaborate, we will all lose;"[24] "It will be necessary to convince the 99% of companies that are not in the same direction as you are;"[25] "Now, it is time to challenge ourselves."[26] They deploy conscious linguistic strategies, as illustrated by the call to switch from "could" to "must" through "should" to suggest the need for stronger commitment. However, they carefully avoid applying these injunctions to specific proposals:

> These documents [the Natural Capital Protocol and its supplements] have been based around a language of "could," 'we could do this, we could do that," we are now at the next phase. We are moving into "should." But in the future, we must be using "must." (Mark Gough, Director of the Natural Capital Coalition, Korea VBA conference 2020).

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24 Field notes: EBNS 2019, Madrid.

25 Field notes: EBNS 2019, Madrid.

26 Field notes: EBNS 2019, Madrid.

Managers who realized the value of nature as capital are pictured as heroes of our contemporary ecological times (Clark and Salaman 1998b); they have the courage to see the situation as it really is (Lezaun and Muniesa 2017: 267). Critics are disregarded. Photos of the audience, speakers and various moments of interaction are posted on social networks with key formulas of the event as a caption during and after the natural capital accounting meetings, to share the enthusiasm and fervor displayed. All participants are asked to "tweet" or "re-tweet" key moments of the performance through hashtags specifically created for the occasion: #EBNS2022 or #BusinessNatureSummit. "Produce more quotes that we can post on social media," the 2022 event convener urged speakers.[27] These tweets are expected to attract new participants to the next conference. Regardless of their actual ability to mobilize, they contribute to the performance of success, adding images to words, to give tangibility and reality to the natural capital accounting project.

Engaging the audience as "spect-actors"

Performances are usually addressed to an audience who play a critical role in their realization (Mangham 1990; Biehl-Missal 2011). The spectacle of natural capital accounting is unique in that there are hardly any spectators who are not also actors. The conferences are accessible by invitation from the organizers, which is relatively easy to obtain and gives attendees the status of full participant once and for all, entitling them to be informed and invited to future events. However, there is virtually no outside audience. During its meetings, the natural capital community stages a performance for its own benefit. Participants are alternately spectators of talks given by inspirational personalities or presentations of success stories by their peers, speakers when invited to share their own professional experiences, or facilitators when leading role-playing sessions. There are very few passive observers. Audience members are all called upon to both spectate and engage with the performance.

[27] Field notes: EBNS 2019, Madrid.

Performing desirable futures: Rob Hopkins's magic box of possibilities

The 2022 meeting opened with a keynote performance by Rob Hopkins, renowned environmental entrepreneur and sought-after speaker who travels the world to give talks at conferences including TEDx events. According to his website, "in 2012, he was voted one of the Independent's top 100 environmentalists and was on Nesta and the Observer's list of Britain's 50 New Radicals."[28] Introduced by the meeting's organizer as someone to "imagine the journey," he did indeed take the audience on a "journey into the future," asking them to imagine that the cardboard box placed at his feet was a "time machine," unlocking "imagination as a transformative force for change." He then asked the audience to close their eyes for a few minutes and transport themselves by thought into a desirable future, striving to perceive it through all their senses – sight, but also hearing and touch – and to conjure up the trajectory to get there. Most of the audience played along. Each person was then asked to turn to their neighbor and describe their experience. This second exercise appeared a little less comfortable for the audience. Only a few participants spoke out. One spectator simply said "I have seen a future of open-ended possibilities." This was enough for Rob Hopkins to move on to a new exercise illustrating these open-ended possibilities. He showed pictures – e.g., a London bridge occupied by Extinction Rebellion where trees had replaced cars – told stories – e.g., a company giving "nature" a seat on its board – and asked for audience reactions. The participants welcomed and approved these initiatives and agreed that this was the way things should be. Although he concluded his talk by promoting his podcasts and books, and left the conference immediately after, his message – the key role of imagination as a positive force for change – had been internalized by the audience and was echoed in the sessions that followed. Some apologized in their presentations for not being "as inspiring as Rob," others called for their messages to be received in the same spirit as Rob's.

Rob Hopkins, Inspirational keynote, "The power of imagination to drive a nature positive world"
Source: European Business & Nature Summit 2022 (Brussels)

Active participation in the theatrical experience is encouraged by a series of techniques that transform the audience into "spect-actors," to use the term coined by Augusto Boal, Brazilian director, and

[28] https://www.robhopkins.net/about/, accessed June 21, 2023.

practitioner of forum theater. Also known as Theatre of the Oppressed, the latter is a participatory form of theater that aims to stimulate dialogue, critical thinking and social change by engaging both actors and spectators in interactive performances. Its codes and techniques are diverted and depoliticized to turn it into a Theater of the Privileged or Enlightened, to build team spirit, foster a sense of community, produce catchy slogans and supposedly to bring about environmental change.

On the main stage of the 2019 and 2022 EBNS, interaction was organized through online polls open to the audience. Evasive questions, not inviting specific commitments, are mostly a pretext for the speaker to jump on the participants' experiences to bring them back to the script (e.g., "if implemented, which policy recommendations would be most likely to convince your CEO to do more on nature," potential answer ranging from "transforming the financial system," "agree on ambitious targets for biodiversity," "publicly support the adoption of an emergency declaration for nature and people," "integrate and harmonise coherently decisions"). In 2019, speakers were also invited to throw an inflatable planet earth balloon to members of the audience to prompt them to speak up and share their personal relationships and experience with natural capital

It is however in smaller rooms that the audience is most fully involved in the performance, being called upon to take part in various role games guided by consultants. For instance, a "biodiversity collage" described as "a collaborative, playful and science-based workshop to better understand biodiversity and the causes and consequences of its loss" was organized at the 2022 conference by a small consultancy. Participants, in groups of five, were invited to reproduce ecosystems using cards representing elements of biodiversity, which was intended to inspire them "to better take biodiversity into account in [their] daily life and company actions."[29]

The collective experience is indeed crucial in the fictional enactment of natural capital accounting projects. "You only need to have a supporting network around you,"[30] "Try not to do this journey alone."[31] The journey metaphor builds on an "epic narrative" developed in three stages according to Clark and Salaman (1998b: 147): "initially the hero (the executive) is complacently unaware of the pressing dangers [i.e., the threats of the ecological crisis on its business model…]; secondly, having awakened, the hero in a condition of awareness seeks redemption [i.e., through participation in "the community"]; and finally, in the third stage, the questor achieves

[29] Description of the biodiversity collage, EBNS 2022, Brussels.

[30] Field notes: EBNS 2019, Madrid.

[31] Field notes: EBNS 2019, Madrid.

transformation through ordeal and commitment" [i.e., by committing to an active participation and undertaking the "journey"].

This journey metaphor is commonly used in sustainability reporting "to symbolize organizational adaptation, learning and advancement" (Rinaldi et al. 2018: 1297). Portraying sustainability transitions as such would "simplify sustainability into something even a layperson or someone new to sustainability could likely understand" (Milne et al. 2006: 821). Namely, it would convey the notion that the transition is underway as soon as changes are initiated, regardless of whether the intended goals are met.

"What counts is not the measure; it is how we got the measure;" "We are good, but we want to be even better," highlighted some presenters.[32] Depicting natural capital accounting in this way highlights its processual nature: companies can progress along this path only in stages, they have to complete an initiatory journey, to undertake a thorough conversion and to witness their experience. "You need to first feel the importance of natural capital for your business model, and only then you can start your natural capital journey."[33] "It does not have to be perfect. It is okay not to be perfect. Speak about it and do it!"[34] "Transform yourself, go out of your comfort zone!"[35] This "invitation to journey" allows for the collection of case studies on natural capital accounting that are published online and discussed during the meetings, not from a substantive point of view, but in their procedural and lived dimensions, with a particular focus on the insights that companies have gained from this experience.

These experiences are discussed in "practical sessions" during conferences, seen as opportunities to "force people to think differently and be more creative (boost innovation, not just resilience)."[36] They are organized as focus groups that prioritize experience sharing and open communication about the so-called practical barriers to the mainstreaming of natural capital accounting. Participants are challenged to reflect on natural capital through role-playing games strongly inspired by the famous "Harvard Business School Case Method," aptly described by Lezaun and Muniesa (2017: 271) as "a never-ending experiment." These exercises enact "strategic scripts" that seek to "initiate certain behaviors" (Clark and Salaman 1998a: 28) and provide an "illusion of reality to satisfy student's quest for relevance" (Augier and March 2013: 213). They are designed to help

[32] Field notes: EBNS 2022, Brussels

[33] Field notes: A line repeated over and over during the 2019 EBNS in Madrid.

[34] Field notes: EBNS 2019, Madrid,

[35] Field notes: EBNS 2022, Brussels.

[36] We Value Nature, Business training on natural capital, https://wevaluenature.eu/training-resources/module-1, accessed June 21, 2023.

them better understand the importance of the environment in risk management. They always rely on the same kind of stories, like a coffee supplier who has to decide where to locate his operations, and in this case will have to take natural capital into account to do so.[37] Participants are required to perform roles that bear no relation to their real-life professional positions. Workshops are also organized around board games adapted for the occasion, such as Parcheesi, transformed into Parcheesi of sustainability. Players take on the role of corporate sustainability managers who must prioritize objectives and stakeholders based on natural capital assessments. The right choices get them ahead, while the wrong ones, which increase the risk to financial assets, can lead them to bankruptcy.

The blurring of boundaries between actors and spectators is paralleled by a blurring of the qualities and capacities in which attendees participate. They are at times called upon as representatives of their company or industry, or as technical experts, by virtue of their functions and qualifications, and at other times as individuals, invited to express emotions, display fervor and play games, disregarding their status. This makes it difficult to determine who actually constitutes the natural capital community: Individuals in their personal capacity? Representatives of identifiable interests? Similarly, it raises doubts about the nature of the messages being conveyed. and their actual targets. This mix of genres produces sibylline messages, disseminated in various documents and on websites that probably only make sense to those who have experienced the events organized by the Natural Capital Coalition, and can recall the intentions, emotions and energy displayed on those occasions.

Conclusion

Natural capital accounting is often described in the academic literature, particularly by its critics, as an endeavor to turn nature into capital, with the goal of making it tangible and enacting the initially fictitious and abstract category of natural capital. It is widely seen as a further step in the implementation of environmental accounting that has been underway for several decades to support the integration of environmental concerns and sustainability into public policy and more recently private strategies.

However, a closer look at its elaboration process leads to nuance in this perception. As we have shown, studying the arenas of natural capital accounting as the theatre of a post-dramatic performance, in the sense of Biehl-Missal (2010, 2011), unveils how the lived and felt experience takes precedence over the written text, in this case the

[37] For an example, see: https://www.youtube.com/watch?v=Uj- WZk0g4lI&feature=emb_logo, accessed June 21, 2023.

declared object of the discussion, i.e., accounting standards. Our ambition was to explore the heuristic and analytical power of reading environmental policy arenas as sites of dramaturgical performance, and to demonstrate its relevance to the research agenda on global or transnational environmental governance (Paterson and Newell 2010). We have shown that this approach can indeed lead to new conclusions.

We have shown that the "natural capital accounting community" is in a state of permanent mobilization. The bubbling of activity and incessant agitation maintain the illusion of permanent progress in order to maintain the status quo. This is reminiscent of the Red Queen effect, an evolutionary hypothesis – named after Lewis Carroll's character in *Through the Looking Glass*,[38] which proposes that organisms must constantly evolve, and proliferate simply to survive while pitted against evolving opposing organisms in a changing environment.

This performance of immobility and recommencement is the result of the managerial turn increasingly evident in the handling of the ecological crisis, that Hibou (2012) describes as a "neoliberal bureaucratization" – where practices from businesses and markets are transferred to new domains of social life. In this instance, techniques rooted in employee motivation, team spirit cultivation and corporate branding have been imported into the environmental governance sector, a world traditionally closer to the formalism and etiquette of international diplomacy. The arena we have studied is a reflection of the network that drives it: purportedly pluralist, diverse and open, yet totally governed in practice by managerial conventions. Drawing on literature that examines the business world as theater has allowed highlighting of formal proximities and similarities between corporate managerial habits and this particular locus of environmental governance. As we have pointed out, the performance of the "spect-actors" in natural capital accounting seems primarily intended for their own benefit. Its declared aim is to develop environmental standards and support their widespread dissemination and implementation, but without alienating business actors, rushing them or raising concerns about their responsibilities. Creating a community around this project was a crucial step in this respect. This has become an objective in its own right, rather than a prerequisite.

Observation from within the arenas of natural capital accounting has not enabled us to fully gauge what it may produce elsewhere. It does not allow us to judge what participants get out of it in terms of personal fulfilment or professional experience, nor to determine their degree of adherence to the performance when they are no longer insistently summoned to show enthusiasm. It is therefore difficult to

[38] In Through the Looking Glass, the Red Queen says to Alice: "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!".

ascertain the existence of a genuine "community" linked to natural capital accounting. Whether its messages reach beyond participants and are likely to touch the decision-making core of companies, is even more uncertain. The fact is, outside audiences do not flock to these events, and except for the institutions of the EU, their activities seem to have had little impact on political bodies.

The efforts invested in natural capital accounting have nonetheless tangible and immediate outcomes. They have imposed themes, or more accurately phraseology, on environmental policy discourse. They have legitimized the presence of business actors in environmental governance, by portraying them as solution providers rather than troublemakers. Without presenting specific proposals, the "natural capital community" floods environmental communication with its slogans, as we have shown elsewhere (Maechler and Boisvert 2023). It is extremely active in social media and relays all reports and information on the state of the environment, however diverse, as so many repetitions of its own message, which results in stifling and neutralizing dissenting voices. Its media strategy tends to preclude the emergence of critics and alternative perspectives. Finally, the succession of events devoted to natural capital accounting has boosted the development of a brokerage and consultancy sector. These meetings have brought a subject into existence, facilitated the gathering of experts, fostered the adoption of a common language and formed what could be termed a club. They have also provided these experts with the opportunity to establish contacts with their potential "customers," in particular to access EU funding to develop guidelines and protocols, and to outline the future private natural capital accounting industry, should it eventually emerge. It is therefore not so much accounting itself that is expanding as the associated advisory activities, which can only ensure their survival by continuing to maintain a speculative bubble around the future of natural capital accounting. The show must go on.

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References

Ahmad, Yusuf J., Salah El Serafy, and Ernst Lutz. 1989. "Environmental Accounting for Sustainable Development." A UNEP World Bank Symposium. Washington, DC: World Bank.

Augier, Mie, and James G. March. 2013. *The Roots, Rituals, and Rhetorics of Change: North American Business Schools after the Second World War*. Stanford, CA: Stanford Business Books.

Aykut, Stefan C., Edouard Morena, and Jean Foyer. 2021. '"Incantatory" Governance: Global Climate Politics' Performative Turn and Its Wider Significance for Global Politics." *International Politics* 58(4): 519–540.

Aykut, Stefan C., Felix Schenuit, Jan Klenke, and Emilie d'Amico. 2022. "It's a Performance, Not an Orchestra! Rethinking Soft Coordination in Global Climate Governance." *Global Environmental Politics* 22(4): 173–196. doi:10.1162/glep_a_00675.

Bell, Emma, Alexia Panayiotou, and Janet Sayers. 2019. "Reading the TED Talk Genre: Contradictions and Pedagogical Pleasures in Spreading Ideas about Management." *Academy of Management Learning & Education* 18(4). Academy of Management: 547–563.

Biehl-Missal, Brigitte. 2010. "Hero Takes a Fall: A Lesson from Theatre for Leadership." *Leadership* 6(3): 279–294.

Biehl-Missal, Brigitte. 2011. "Business Is Show Business: Management Presentations as Performance." *Journal of Management Studies* 48(3): 619–645.

Bigger, Patrick, and Morgan Robertson. 2017. "Value Is Simple. Valuation Is Complex." *Capitalism Nature Socialism* 28(1): 68–77.

Blühdorn, Ingolfur. 2007. "Sustaining the Unsustainable: Symbolic Politics and the Politics of Simulation." *Environmental Politics* 16(2): 251–275.

Boisvert, Valérie. 2016. "Des limites de la mise en marché de l'environnement." *Ecologie politique* 52(1). Editions Le Bord de l'eau: 63–79.

Boisvert, Valérie, Philippe Méral, and Géraldine Froger. 2013. "Market-Based Instruments for Ecosystem Services: Institutional Innovation or Renovation?' *Society & Natural Resources* 26(10): 1122–1136.

Boltanski, Luc, and Ève Chiapello. 2005. *The New Spirit of Capitalism*. London: Verso.

Brockington, Dan. 2008. "Powerful Environmentalisms: Conservation, Celebrity and Capitalism." *Media, Culture & Society* 30(4): 551–568.

Brockington, Dan. 2009. *Celebrity and the Environment: Fame, Wealth and Power in Conservation*. London: Zed Books.

Cheyns, Emmanuelle. 2014. "Making 'Minority Voices' Heard in Transnational Roundtables: The Role of Local NGOs in Reintroducing

Justice and Attachments." *Agriculture and Human Values* 31(3): 439–453.

Clark, Timothy, and David Greatbatch. 2004. "Management Fashion as Image-Spectacle: The Production of Best-Selling Management Books." *Management Communication Quarterly* 17(3): 396–424.

Clark, Timothy, and Graeme Salaman. 1996. "The Management Guru as Organizational Witchdoctor." *Organization* 3(1): 85–107. doi:10.1177/135050849631005.

Clark, Timothy, and Graeme Salaman. 1998a. "Creating the 'Right' Impression: Towards a Dramaturgy of Management Consultancy." *The Service Industries Journal* 18(1): 18–38.

Clark, Timothy, and Graeme Salaman. 1998b. "Telling Tales: Management Gurus' Narratives and the Construction of Managerial Identity." *Journal of Management Studies* 35(2): 137–161. doi:10.1111/1467-6486.00088.

Dasgupta, Partha. 2021. The Economics of Biodiversity: The Dasgupta Review. London: HM Treasury.

Death, Carl. 2011. "Summit Theatre: Exemplary Governmentality and Environmental Diplomacy in Johannesburg and Copenhagen." *Environmental Politics* 20(1): 1–19.

Dempsey, Jessica. 2016. *Enterprising Nature: Economics, Markets, and Finance in Global Biodiversity Politics*. Chichester: Wiley.

Dempsey, Jessica, and Daniel Chiu Suarez. 2016. "Arrested Development? The Promises and Paradoxes of "Selling Nature to Save It"'. *Annals of the American Association of Geographers* 106(3): 653–671.

European Commission. 2019. A European Green Deal. Brussels: European Commission.

Fischer, Frank, and Herbert Gottweis (eds.). 2012. *The Argumentative Turn Revisited: Public Policy as Communicative Practice*. Durham, NC: Duke University Press.

Fletcher, Robert. 2013. "How I Learned to Stop Worrying and Love the Market: Virtualism, Disavowal, and Public Secrecy in Neoliberal Environmental Conservation." *Environment and Planning D: Society and Space* 31(5): 796–812.

Fletcher, Robert. 2014. "Orchestrating Consent: Post-Politics and Intensification of NatureTMInc. at the 2012 World Conservation Congress." *Conservation and Society* 12(3): 329.

Fredriksen, Aurora. 2017. "Valuing Species: The Continuities between Non-Market and Market Valuations in Biodiversity Conservation." *Valuation Studies* 5(1): 39–59.

Harvey, Arlene. 2001. "A Dramaturgical Analysis of Charismatic Leader Discourse." *Journal of Organizational Change Management* 14(3): 253–265.

Hibou, Béatrice. 2012. *La bureaucratisation du monde à l'ère néolibérale*. Paris: La Découverte.

IDEEA (Institute for Development of Environmental-Economic Accounting) Group. 2017. N*atural Capital Protocol – A System of Environmental*

Economic Accounting Toolkit. Victoria, Australia: Institute for Development of Environmental-Economic Accounting. https://ideeagroup.com/natural-capital-protocol-system-of-environmental-economic-accounting-toolkit/.

Igoe, Jim. 2010. "The Spectacle of Nature in the Global Economy of Appearances: Anthropological Engagements with the Spectacular Mediations of Transnational Conservation." *Critique of Anthropology* 30(4): 375–397.

Igoe, Jim. 2017. *The Nature of Spectacle on Images, Money, and Conserving Capitalism*. Tucson, AZ: The University of Arizona Press.

Levidow, Les. 2020. "Turning Nature into an Asset: Corporate Strategies for Rent-Seeking." In *Assetization: Turning Things into Assets in Technoscientific Capitalism*, edited by Kean Birch and Fabian Muniesa, 225–258. Boston, CA: The MIT Press.

Lezaun, Javier, and Fabian Muniesa. 2017. "Twilight in the Leadership Playground: Subrealism and the Training of the Business Self." *Journal of Cultural Economy* 10(3): 265–279.

MacDonald, Kenneth. 2010. "Business, Biodiversity and New 'Fields' of Conservation: The World Conservation Congress and the Renegotiation of Organisational Order." *Conservation and Society* 8(4): 256. MacDonald, Kenneth, and Catherine Corson. 2012. "'TEEB Begins Now': A Virtual Moment in the Production of Natural Capital". *Development and Change* 43(1): 159–184.

McGee, Michael Calvin. 1980. "The 'Ideograph': A Link between Rhetoric and Ideology." *Quarterly Journal of Speech* 66(1): 1–16.

Maechler, Sylvain, and Valérie Boisvert. 2023. "Valuing Nature to Save It? The Centrality of Valuation in the New Spirit of Conservation." *Global Environmental Politics*. 1-21.

Maechler, Sylvain, and Jean-Christophe Graz. 2020. "The Standardisation of Natural Capital Accounting Methodologies." In *Shaping the Future Through Standardization*, edited by Kai Jakobs, 27–53. Pennsylvania, PA: IGI Global.

Maechler, Sylvain and Jean-Christophe Graz. 2022. "Is the Sky or the Earth the Limit? Risk, Uncertainty and Nature". *Review of International Political Economy* 29(2): 624–645.

Malsch, Bertrand. 2013. "Politicizing the Expertise of the Accounting Industry in the Realm of Corporate Social Responsibility." *Accounting, Organizations and Society* 38(2): 149–168.

Mangham, I. L., and Michael A. Overington. 1987. *Organizations as Theatre: A Social Psychology of Dramatic Appearances*. Chichester: Wiley.

Mangham, Iain L. 1990. "Managing as a Performing Art." *British Journal of Management* 1(2): 105–15.

Mangham, Iain L. 1995. "Scripts, Talk and Double Talk." *Management Learning* 26(4): 493–511.

Milne, Markus J., Kate Kearins, and Sara Walton. 2006. "Creating Adventures in Wonderland: The Journey Metaphor and Environmental Sustainability." *Organization* 13(6): 801–839.

Moussu, Nils. 2019. "Business in Just Transition: The Never-Ending Story of Corporate Sustainability." In *Just Transitions: Social Justice in the Shift Towards a Low-Carbon World*, edited by Edouard Morena, Dunja Krause, and Dimitris Stevis, 56–75. London: Pluto Press.

Muniesa, Fabian. 2017. "On the Political Vernaculars of Value Creation." *Science as Culture* 26(4): 445–454. doi:10.1080/09505431.2017.1354847.

Natural Capital Coalition. 2016. *Natural Capital Protocol.* Geneva, Switzerland: Natural Capital Coalition.

Paterson, Matthew, and Peter Newell. 2010. *Climate Capitalism: Global Warming and the Transformation of the Global Economy.* London: Cambridge University Press.

Pearce, David W., Anil Markandya, and Edward B. Barbier. 1989. *Blueprint for a Green Economy*. London: Earthscan.

Power, Michael. 1997. "Expertise and the Construction of Relevance: Accountants and Environmental Audit." *Accounting, Organizations and Society* 22(2): 123–146.

Repetto, Robert, William Magrath, Michael Wells, Christine Beer, and Fabrizio Rossini. 1989. "Wasting Assets. Natural Resources in the National Income Accounts." Washington, DC: World Resources Institute. https://www.wri.org/publication/wasting-assets.

Rinaldi, Leonardo, Jeffrey Unerman, and Charl de Villiers. 2018. "Evaluating the Integrated Reporting Journey: Insights, Gaps and Agendas for Future Research." *Accounting, Auditing & Accountability Journal* 31(5): 1294–1318.

Stern, Nicholas. 2006. *Stern Review: The Economics of Climate Change.* London: Stationery Office.

Stevenson, Hayley, Graeme Auld, Jen Iris Allan, Lorraine Elliott, and James Meadowcroft. 2021. "The Practical Fit of Concepts: Ecosystem Services and the Value of Nature." *Global Environmental Politics* 21(2): 3–22.

Sullivan, Sian. 2017. "Making Nature Investable: From Legibility to Leverageability in Fabricating 'Nature' as 'Natural Capital'". *Science & Technology Studies* 20(November): 1–30.

TEEB (The Economics of Ecosystems and Biodiversity). 2010. *The Economics of Ecosystems and Biodiversity in Business and Enterprise.* Edited by Joshua Bishop. Geneva: TEEB.

Tsing, Anna. 2000. "Inside the Economy of Appearances." *Public Culture* 12(1): 115–144.

Tsingou, Eleni. 2015. "Club Governance and the Making of Global Financial Rules." *Review of International Political Economy* 22(2): 225–256.

Van Vree, Wilbert. 2001. *Meetings, Manners and Civilization: The Development of Modern Meeting Behaviour*. Translated by Kathleen Bell. London: Continuum Intl Pub Group.

Yates, Joanne, and Craig N. Murphy. 2009. *The International Organization for Standardization*. London: Routledge.

Sylvain Maechler holds a PhD in Political Science from the University of Lausanne, where he is still Research Fellow. He currently holds a Swiss National Science Foundation Postdoctoral Fellowship for visiting scholar positions at Goethe University of Frankfurt and the University of Ottawa. His research lies at the intersection of global environmental governance and international political economy and focuses on how contemporary capitalism faces the global ecological crisis, particularly through the economic and financial valuation of nature and other measuring, accounting, and market-based instruments. His research has been published in leading journals, including *New Political Economy*, *Review of International Political Economy*, and *Global Environmental Politics*.

Valérie Boisvert is a full Professor of ecological economics at the Institute of Geography and Sustainability of the University of Lausanne (Switzerland). Her work focuses on the political economy of biodiversity. The development of biodiversity-related markets is one of her main research topics. She is interested in the construction of institutional arrangements, the economic qualification of their objects and the transactions to which they give rise, in a perspective of ecological economics, mainly inspired by institutionalism and economic sociology.

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Theme issue contribution

Valuation through Narrative Intelligibility

Patrycja Kaszynska

Abstract
Narrative intelligibility is central to making sense of valuation. Narrative intelligibility is a framing device that combines empirical observation and situated interaction with teleological, purpose-oriented, normative inquiry. Thus understood, narrative intelligibility provides a useful analytical frame to explain how the phenomenon of valuation is practised. At the same time – and on the level of research – it bridges synthetically different traditions of thought, including actor–network theory's descriptive accounts of valuation practices and humanities-grounded, normative theories of value. As such, narrative intelligibility offers a way of avoiding the alleged weakness of overstating the agency of devices and material actors in actor–network informed approaches, without however seeking to relocate analysis into the 'ineffable' realm of purely theoretical constructs, the way some humanities scholars are said to have done. The argument shows that the humanities-derived understanding of values, approached in terms of standards of justification and norms of criticism, can be combined with the vernacular concepts of valuation from actor–network theory in a way that promises a unified research agenda going forward.

Keywords: valuation; Valuation Studies; narrative; normativity; humanities; actor–network theory

Patrycja Kaszynska is Senior Research Fellow at University of the Arts London.

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Introduction

If one of the ambitions of the *Valuation Studies* journal is to consolidate a field of inquiry under the same name – the question arises: what fragmented, pre-existing areas have enough proximity and relevance to enter the gravitational pull? Perhaps an obvious answer is: those concerned with value and with valuing. And yet, a little paradoxically, existing accounts of value and those concerned with valuing do not, at present, overlap in a productive way.

The starting – contestable – point of this article is that the approach to valuation represented, or perhaps over-represented, in the present journal has not intersected in a sustained and systematic manner with the humanities' 'way' of thinking about value. As explained in the next section, to talk about distinctive 'schools' is an oversimplification and possibly a reification. And yet, if one accepts that there is a notable distinction between descriptive and normative approaches – those concerned with describing how valuation practices unfold on the one hand, and those asking why they develop the way they do and how they should be conducted on the other – one can legitimately insist that there is a spectrum with two quite distinctive ends. Humanities literature, in particular, of a philosophical orientation, has traditionally aimed at articulating theories of value, and has often – but certainly not always (cf. Dewey 1939) – been conducted in a priori terms and based on speculative claims concerning which normative concepts should be applied. The descriptive 'school' can be characterised by empirical engagement with situated contexts and 'devices' used in these contexts. The latter, actor–network theory (ANT)-inspired tradition, downplays (Munk and Abrahamsson 2012) or eliminates outright (Roberts 2014; Heinich 2020) the normative concerns that form the core of the humanities approaches, its focus is on mapping 'the systems, devices, instruments and infrastructures that underpin various kinds of valuation (rating, pricing, ranking, accounting, funding, and assessing)' (Helgesson et al. 2017: 3).

This article argues that the ANT-informed valuation studies and the humanities-grounded theories of value need one another: without any standards of justification or critique, ANT accounts are unable to characterise the kind of agency that is operative in valuation and thus, to genuinely act on the recognition that 'to describe the real is always an ethically charged act' (Law 2007: 17). On the other hand, humanities-grounded accounts of value need to appreciate the material and the empirical dimensions highlighted by ANT – this in order to curtail their propensity for abstraction and reification.

The key contribution of this article is to present the notion of narrative intelligibility as a meeting point for the two 'schools' (ends of the spectrum) without compromising their central tenets. That is to say, narrative intelligibility allows making the most of the socio-material analysis of the ANT-informed approaches, while at the same time capitalising on the humanities to present valuation as an object susceptible to critique and thus something that can be analysed in normative terms. As explained in detail in what follows, narrative intelligibility is defined here in terms of teleological continuity and situated interaction and draws on the account of narrative developed by MacIntyre (2007), Haraway (2016) as well as, crucially, the Deweyan understanding of situational means-ends adjustment (Dewey 1939).

The upshot of this article is a better framework for understanding valuation which does not rest on metaphysical speculation about value and values, nor does it reduce valuation to a multitude of patterns. This marks an approach to valuation that is both practical and normative (Horkheimer 1972; see also Lynch and Fuhrman 1991; Radder 1992, 2008). This is because the normativity in question is derived from the 'know-how' of everyday practice which is situationally embedded (Bohman 2004; see also Kaszynska 2021). In suggesting that the frame of narrative intelligibility should be added to the 'toolbox' of valuation studies, this article makes an important contribution to consolidating the field that cuts across the socio-material and humanistic analysis. The frame of narrative intelligibility is a means of bridging the ends of the spectrum which have remained too distant up until now.

Between theories of value and valuation networks

There is a long tradition of thinking about value in the humanities across axiology, ethics, theology and moral theory, aesthetics and theory of art, intellectual history and political philosophy and – of special interest in this article – the theory of value as related to action and pragmatics. Some canonical names in this lineage include: Aristotle([340BC] Crisp 2014); Thomas Aquinas ([1265–1274] 2012); Bentham ([1780] 1996); Kant ([1785] 2005); Marx ([1867–1883] 2010); Nietzsche ([1887] Nietzsche and Hollingdale 1989); Dewey (1939); Arendt [1958] 2013); Habermas (2015); Foucault (1980); Rorty (1989); Chang (1997); and Nussbaum (2009); more recently, Srinivasan (2015); McMullin (2018). The list is necessarily selective and partial (for one thing, it privileges philosophy over other humanities disciplines such as literature and history) but serves well the purpose of illustrating the historical expansiveness of thinking about value in the humanities.

In comparison, valuation studies as a field of inquiry consolidated around the journal of the same name established in 2013 – is in its infancy. Of course, if valuation is understood as 'any social ... practice ... where ... the ... value ... or values of something are established, assessed, negotiated, provoked, maintained, constructed and/or contested' (Doganova et al. 2014: 87) – an interest in understanding these practices predates 2013. The sociology of valuation can easily be traced to the pioneering work of Viviana A. Zelizer (1979) but has perhaps deeper roots in institutional economics (Veblen [1899] 1973) and Weberian sociology (Weber [1922] 2019). Interest in the social embedding and determination of value has since found articulation across the pragmatic valuation sociology (Espeland and Stevens 2008; Stark 2011; Lamont 2012), fed into the developments of economic sociology (Beckert and Aspers 2011; Muniesa 2011; McFall and Ossandón 2014) and the economics of convention (Thévenot 2001; Diaz-Bone 2011), got a stronghold in science and technology studies (Callon and Muniesa 2005; Haywood et al. 2014), and informed some strands of management and business (Ramirez 1999; Chandler and Vargo 2011).

There are of course individual scholars working in the sociology of valuation who have been engaged with the journal and whose work has presented a sustained involvement with literature, history and literary criticism (e.g. Czarniawska 1997, 2004; Fourcade 2009, 2011). Indeed, it is worth noting that Latour himself presents an interesting case when it comes to recognising the cogency of a perspective spanning a plurality of different discourses in making sense of valuation. While, on the one hand, his commitment to deflating abstract constructs makes him suspicious of 'values' as construed by the modern western epistemology, ethics and metaphysics (Latour 2013), his central argument for why *We Have Never Been Modern* rests on observing the entanglement of different value registers in practical situations (Latour 2012) and the need for resolving those as quasi-ethical matters of concern (Latour 2004). It should also be acknowledged that the editors of *Valuation Studies* did openly recognise that there are different disciplinary 'positions' which raise different questions and give different answers about how the constructions of values and valuation are or should be studied (Doganova et al. 2014). In this sense, the seeds of cross-disciplinarity spanning the spectrum from ANT-informed descriptive accounts and humanities-grounded normative theories – have been planted. And yet, this cross-fertilisation has not been pervasive enough to benefit both 'schools': ANT approaches to valuation (which have been well represented in *Valuation Studies*) and humanities-grounded theories (which have not). Needless to say – as indeed observed by Helgesson and Muniesa (2013) in the inaugural editorial address to *Valuation Studies* – there is much to be gained from more collaborative approaches. This raises the question: where and how do these approaches meet?

Oversimplifying, the humanities 'school' studies value and values starting with theoretical presuppositions and concepts; the valuation studies 'school' starts with material and semiotic networks and seeks to stay 'local', 'situated' and 'empirically descriptive' (Law 2004; Guggenheim 2020). The sociology of valuation can be perhaps located somewhere in-between in that it shows a range of different points of emphasis, e.g. from Weber's theoretical reconstructions to Stark's empirically-underpinned conceptualisations (for the purposes of this article, the sociology of valuation will not be considered as a separate category but rather as redistributed on the spectrum). Also, it worth noting that there are internal differences within the 'schools' themselves, including differences between the 'founding fathers' of ANT: Latour and Law (see Munk and Abrahamsson 2012). Setting the question of internal unity aside, what is apparent is that the humanities and the ANT-inspired 'schools' do not meet in a productive way.

This, as this article argues, results in partial accounts of valuation and puts constraints on what the 'schools' can individually accomplish. The humanities 'school' lacks empirical credibility; the ANT valuation studies 'school' is deprived of much ability to compare across different contexts and to critique individual accounts, indeed to issue value judgements in the traditional sense of the word (cf. Doganova et al. 2014). In other words, the 'Normative– Descriptive' (Radder 1998: 325) schism or, at very least, a spectrum arises – the theoretical accounts with standards of justification are set apart from the descriptive reports with empirical engagement.

Does ANT need normativity?

First, a word of explanation about what is meant by 'normativity', since the word is used differently in ANT and in the humanities, including critical theory. To be normative in the sense of Annemarie Mol (Mol 1999) or John Law (Law 2004) is to make deliberate choices: to foreclose some alternatives. To be normative in the Critical Theory sense is to pay attention to how actors manifest the normative attitudes implicit in their practical knowledge (Geuss 1981; Horkheimer 1993; Habermas 2015) and in the everyday 'know-how' of human conduct (Bohman 2004). What is sometimes not fully understood is that normativity in the critical theory sense is not about proscribing or fixing courses of action, nor even about setting rules. Rather, it is based on capitalising on the fact that action coordination presupposes that some standards of criticism and justification are applied and can be collectively ascertained (Kaszynska 2021).

ANT designates a method rather than a theory but it signals a predilection for a certain mode of inquiry. As John Law put it back in 1992, 'actor–network theory almost always approaches its tasks empirically' (Law 1992: 6). This often translates into the suspicion of 'occult entities' and the preference for the ontological 'desert landscapes', to borrow expressions from the philosopher Willard Van

Orman Quine (1948). In other words, the default position of the ANT sympathisers is a commitment to flatter or flat 'ontologies' in the sense suggested by Quine and notably, in the opposite sense to that intended by Bhaskar (1978) who first coined the term.

The emphasis in this tradition is very much on the mechanism – the nuts and bolts – of valuation, such as: 'market technologies' (Muniesa 2007), 'political technology' (Muniesa and Doganova 2020) and other kinds of 'the systems, devices, instruments and infrastructures that underpin various kinds of valuation' (Helgesson et al. 2017: 3: see also Orlikowski and Scott 2014). What this amounts to in practice is studies preoccupied with detailed description of the formation of socio-material-semantic networks, attentive to contexts and devices as a way of mapping out the trajectories along which valuation unfolds. Even though there is a growing interest in generalising from specific circumstances and in understanding the conditions of critique for the systems in question (see for instance Muniesa 2017, 2019; Muniesa and Doganova 2020; also Latour 2004, 2012), the main emphasis remains on mapping the actants and the circumstances in which they act. With reference to the *Valuation Studies* journal specifically, this can be exemplified by the influential study of the role of algorithmic valuation devices and verification mechanisms in the tourism and travel sector by Baka (2015). Forseth et al.'s account of 'Reactivity and Resistance to Evaluation Devices' (2019) in the banking sector is another example.

These ANT-informed approaches are now well established in valuation studies – and indeed *Valuation Studies* – but with this success comes a growing recognition of potential limitations. One such an indication is the reaction against, or perhaps a growing self-awareness of, the excessive concentration on the 'mechanics' of valuation (Zuiderent-Jerak and van Egmond 2015). As Hauge points out, 'while the many studies of valuation practices have drawn attention to the pervasive effects of valuation devices, only a few studies have taken into account the fact that many spaces, including organizations, are already flooded with practices and ideas that constitute what is valuable' (Hauge 2016: 117).

Some commentators sympathetic to ANT were explicit about the no absence of normative considerations and standards of critique (Radder 1992; Marres 2009). An overt concern about 'flat-land of relativism' was noted in the editorial address in *Valuation Studies* back in 2014 (Doganova et al. 2014). The root can be traced back to the early 1990s. The 'Epistemological Chicken' controversy involved some of the prominent figures such as Latour and Callon (Fuller 1991; Lynch and Fuhrman 1991; Redder 1992) and centred on the claim made by Collins and Yearley (2010) that the ANT method leads to an infinite regress because it is unable to fix any parameters of the debate as standards of comparison and criticism. If there is nothing beyond the shifting networks of relationships and all actors and actants have the same status – questions such as: what motivates agency in valuation and what gives it direction? what binds the discrete moments of action into a valuation situation? and above all, which courses of action are to be preferred over others? – are difficult to settle. It should be noted that Latour's talk of 'ontopolitics' (Latour 2012) and Mol's 'ontological politics' (Mol 1999) reveal that these issues are cogent even within the ANT discourse. At some risk of overstating the case, the need to ponder politics in ANT is an admission that the ethical choices have not gone away. As Law puts it: 'There is nowhere to hide beyond the performativity of the webs':

> But since our own stories weave further webs, it is never the case that they simply describe. They too enact realities and versions of the better and the worse, the right and the wrong, the appealing and the unappealing. There is no innocence. The good is being done as well as the epistemological and the ontological. (Law 2007: 16).

Think of the existence of racism and racial oppression in the USA. There are multiple accounts – many told by the oppressors, and few told by the oppressed. The current situation is precarious because of the polarisation fuelled by culture wars. As Charles Mills (2014) argues in *The Racial Contract*, the one constant is that racial contract is continually being reformatted. Once upon a time it was manifested as physical enslavement; later, more intangible forms of segregation and inequality were proposed; now, it is primarily based on immaterial forms of discrimination by institutional and cultural norms which maintain the same racialised hierarchy. In Mills's (2014) opinion, not much has changed but the reality needs to change. How to achieve this?

One way of handling this is to encourage some open-ended plurality of 'webspinning' without arbitration (cf. Stark 2011). But is this enough? Surely, justice cannot be achieved just by pitting the opposing factions against one another the way ANT might recommend. But how can this prevent the 'might is right' scenario? If, in the context of racial oppression, one finds oneself confronted with the question: What am I to do here and now? – it is far from obvious that the 'laissez-faire' attitude of ANT has a satisfactory answer. The point is that there is 'no innocence': there is the right and the wrong way of acting when it comes to racial oppression.

Admittedly, as noted above, there have been some attempts in ANT to offer 'embedded' accounts of normativity and to answer the 'where to' question from within the contexts, networks and situations themselves: be they *Situated Intervention and the Ethics of Specificity* (Zuiderent-Jerak 2015), or *Care in Practice* (Mol et al. 2015), or Latour's 'ontopolitics' (Latour 2012). These attempts however do not offer satisfactory answers on a scale capable of changing collective behaviours. As the next section discusses, it is by relocating the discussion from the realm of causes and patterns (the how) to the realm of purposes (the why), that the humanities opens up the possibility of normative analysis to ANT. This however does not need to mean betraying the instincts of ANT to stay situated and grounded. Narrative intelligibility is introduced as a meeting point for empirical social inquiry and normative philosophical argumentation. The notion of narrative intelligibility is presented as a frame which makes it possible to cross-fertilise the ANT-informed studies of valuing and the humanities tradition of thinking about value.

Narrative and narrative intelligibility

Starting in the 1980s, there has been a growing interest in narratives across a wide range of disciplines. A number of publications set out to examine the use of narrative structures in different domains: history, literature, psychology and social science (Polkinghorne 1988) and literature, philosophy and science (Nash 2005 [1994]; see also Brosch and Sander 2015) to name but some. The interest in narratives as a subject matter has gone hand-in-hand with the development of narrative-based methodologies: narrative inquiry and narrative analysis (Mishler 1990; Plummer 2001; Riessman 2008). What has become known as the 'narrative turn' is usefully summarised by Hinchman and Hinchman (1997) as a rejection, among other things, of the atomistic understanding of social phenomena and the dis-embedding of individual acts from the 'web of communication' out of which they arise (Hinchman and Hinchman 1997: xiv). Narratives in this context are presented as a means of retrieving the plurality of stories that cultures and subcultures tell without submerging them into some uniform meta-narrative, while at the same time not giving up on the ambition of finding a common communicative ground. Not surprisingly, a number of interesting scholars have been developing different forms of engagement with narratives in relation to valuation studies (e.g. Czarniawska 1997, 2004; Smith 1988; Fourcade 2009, 2011). More recently, Beckert and Bronk (2018) revived the idea of narrative as a coordinating device that can be used to deal with the conditions of radical uncertainty when a stabilising of expectations is needed. Alasdair MacIntyre was one of the first to take an interest in the role of narrative in valuation.

In broader terms, the key argument of *After Virtue* can be reconstructed as saying that without a minimal narrative structure, lives and actions of individuals will lack intelligibility. Actions and events need to be formulated as episodes in a narrative to have meaning. In other words, moral discourse has been cut adrift from the narrative understanding of purposes, and with this, it was rendered incoherent. This is a problem because: 'I can only answer the question, "What am I to do?" if I can answer the prior question, "Of what story or stories do I find myself a part?"'(MacIntyre 2007 [1981]: 216) – as MacIntyre put it.

Some have taken MacIntyre to be making a metaphysical claim that individuals are narrative constructs; others understood him as saying that narratives are useful as reflective prisms for people to look at their life (Kupfer 2014; cf. Taylor 2016). Resolving this is not necessary for the purposes of this article. What matters is that MacIntyre defines narrative as a form that has a beginning, a middle and an ending, and crucially, an internal coherence that is instrumentally useful in making sense of valuation situations. Importantly, what is required for narrative coherence is more than just being a sequence. The chain of events has to unfold in a certain purpose- oriented way with parts interpreted in the light of the whole sequence and with the whole defined by its teleological orientation. To rephrase, what is at issue is not just a mechanical pattern where one thing causes the next (cf. Aristotle's *Poetics* in Janko 1987) but that events unfold according to a unifying purpose.

Some may at this point be alarmed by the prospect of resurrecting 'occult entities' such as the notion of 'divine causes', 'absolute spirits' and other ontological 'pathologies' that ANT has set to abolish. This alarm would be premature. This can be demonstrated by a quick look at how narrative – as a form that has a beginning, a middle and an ending, and crucially, some internal coherence – can be found in Donna Haraway's work. Haraway's account of the power of 'fabulating' in the influential *Staying with the Trouble* (2016) presents an account not dissimilar to MacIntyre's. There Haraway sets out a programme which uses telling stories as a practice for generating imaginative patterns, something on which she elaborates with the example of *string figures* which can be transformed over and over again. Each moment of transformation is underpinned by its unique teleological drive. Each stringing moment has some – arguably purposive, even if implicit – unity, even though there is no overarching, universal purpose. To be clear, Haraway is concerned with the material semiotics (Haraway 2013). Even though she agrees that 'for a material semiotics teleology may not reside in human intentions' (Law 2007: 10) she retains the idea of teleology as the means-ends adjustment for every discrete moment of the string transformation. To be fair, in a similar vein, MacIntyre recognises that narratives do not occur in a vacuum, rather they are historically and geographically situated. In this context, MacIntyre speaks evocatively that 'we enter upon a stage which we did not design and we find ourselves part of an action that was not of our making. Each of us being the main character in his own drama plays subordinate parts in the dramas of others, and each drama constrains the others' (2007 [1981]: 49). Even though the ontology of socio-material and technological networks does not figure in MacIntyre's vocabulary, he admits that narratives are situated and contextually circumscribed.

Taking MacIntyre's and Haraway's work together, it can be suggested that narrative intelligibility is where socio-material networks and teleology meet (cf. Bevir and Galisanka 2016). That is to say, to make a narrative intelligible both are needed: an understanding of a sequence as internally coherent and so directed towards a goal and also an understanding of how it is situated in a specific context. Accordingly, the notion of narrative intelligibility is defined in this article in terms of both: goal-oriented, teleological continuity and contextually circumscribed interaction. But, what kind of entity is narrative intelligibility?

Narrative intelligibility could be thought a framing construct, to borrow a term from communication and media studies (cf. Clarke 2003). The framing at issue should not be understood as a phenomenon known as agenda-setting (Kuypers 2010) nor is it an attempt to forge uniformity through appealing to some set of universal values (Lakoff 2014). Rather, the frame is here understood in the sense presupposed by Kenneth Burke's concept of terministic screens. Terministic screens are filters for photographs which accentuate different features of photographs. So, applying different screens to the same photograph may make different features apparent and prompt different interpretations. In the same way, Burke (1966) argued that individuals can represent issues based on the choice of some aspects fixing their attention – whether consciously or unconsciously – which they emphasise in language. Narrative intelligibility is a way of filtering valuation situations through the prism of the chosen goals as they become adjusted to the available means. This underscores that what is at issue with narrative intelligibility is not some universalistic grand narrative. Far from it as the next section demonstrates turning to a quintessentially Deweyan understanding of valuation.

Situational interaction and teleological continuity in Dewey

Dewey approaches valuation as a type of inquiry. Inquiry for Dewey is a social process that follows the following six steps: 1. Identify the problem 2. Plan possible solutions 3. Evaluate and test the various solutions 4. Decide on a mutually acceptable solution 5. Implement the solution 6. Evaluate the solution. Following this general pattern, valuation takes the form of a practical judgement, that is – as spelled out in Dewey's *The Logic of Judgments of Practise* (1915) – the judgement characterised in terms of being geared towards future actions, based on an assessment of desired outcomes and using means-ends reasoning, and being grounded in some form of empirical inquiry. This, in a nutshell, is tantamount to meeting the conditions of situational interaction and teleological continuity.

Thus, it could be suggested that narrative intelligibility is the grounding of Dewey's valuation theory. According to Dewey, valuation is best thought of in terms of acts of interpretation and justification configured by specific socio-material contexts (Dewey 1939). Even though anchored in individual experiences, as these are shaped by moral norms and ethical values, value can be seen as constructed and reconstructed by groups and communities who themselves are shaped by their historical and geographical, social and cultural, institutional and technological contexts (cf. Foucault 1980; Latour 2005). This is consonant with ANT and, not surprisingly, Dewey has been embraced by key figures in valuation studies (e.g. Muniesa 2011). It is worth pointing out in this context that Dewey and his fellow George Herbert Mead were instrumental in the development of the Chicago School of Sociology. There they played a pivotal role in driving the work to understand the nature of relationships in regional geography (Singelmann 1972) later to be associated with the thinking about 'social worlds' (Strauss 1978) which, through science and technology studies, fed into ANT thinking (Clarke and Star 2008) and situational analysis (Clarke 2003).

Dewey's thinking is thus informed by the considerations concerning 'social worlds' and 'site ontologies' that preoccupied the Chicago school. However, for Dewey the idea of situated 'shared discursive spaces that are profoundly relational' (Clarke and Star 2008: 120) is never separated from teleological analysis and never purely discursive. Simply put, according to Dewey, people value things because they are useful to them. And yet, not all desired outcomes and future actions are equal. On the one hand, Dewey admits that there are a number of normative standards that can in principle apply to any given situation. At the same time, the process of inquiry, as outlined in the six steps above, rests on the idea of justification. To value is to weigh the means and ends in specific situations and crucially, to demonstrate that the proposed course of action is justifiable in collective terms. This is the basis of normativity in Dewey.

Thus, while faithful to some tenets of what this article dubbed the ANT-informed valuation, Dewey is also a member of the humanities tradition with his insistence on normativity. The problematic situations that trigger valuation are unmistakably a part of the socio-material networks. Yet, the teleology constitutive of valuation unfolds according to the means-ends reasoning and in line with normative constraints. His account brings together MacIntryre and Haraway. Situational interaction and teleological continuity underpinning narrative intelligibility are the ground and a way of bridging the descriptive and normative approaches to valuation in Dewey. In such a way, narrative intelligibility provides a solution to what Dewey dubs 'the deepest problem of modern life': 'the problem of restoring integration and cooperation between man's [sic] beliefs about the world in which he lives and his beliefs about values and purposes that should direct his conduct' (1929: 204).

Concluding reflections on overcoming 'the great divide'

This article argues that the ANT-informed descriptive approach to valuation and the humanities-grounded normative theories of value will not succeed in separation from one another. Moreover, they have much to gain from coming together, individually and collectively. For the humanities-grounded perspective, unless this tradition finds a way of keeping itself empirically embedded, the use of reasoning alone is likely to result in rarefied and reifying accounts of value. As for the ANT perspective, it too will fail in separation. By its own admission, ANT sees itself as 'a toolkit for telling interesting stories about, and interfering in, those [world] relations' (Law 2007: 2). But can ANT really tell stories rather than compose the proverbial shopping lists? Are the networks created just random collections or is there any orientation to them? Moreover, are some ways of composing these networks better than others – are some courses of affairs straightforwardly bad? The argument presented here is that, if ANT remains stranded with *lists* and not *stories*, it will fail in its attempts to account for valuation as a phenomenon in the world where some ways of acting are better than others, where norms of criticism and standards of justifications apply.

This article argues that narrative intelligibility is a useful framing device that brings together the tradition concerned with value in the humanities and the ANT approach preoccupied with valuing. Narrative intelligibility binds the notions of teleological progression, orientation and purpose (MacIntyre 2007 [1987]) with those of the situated, material interconnectedness (Haraway 2013, 2016). Conceived in these terms, it allows valuation to be seen as normatively grounded and goal oriented, as well as empirically situated and contextually circumscribed (Dewey 1939).

Narrative intelligibility provides thus a good frame to make sense of the phenomenon of valuation but also to set an agenda for research into valuation. Adding narrative intelligibility to the 'toolbox' of valuation studies opens up the possibility of integrating the normative and descriptive approaches and with this, the option of interrogating the assumptions and hegemonies present in the understandings around 'good' and 'bad' valuing (cf. Horkheimer 1972) without relying on some fixed metaphysical abstractions. This option is, arguably, needed in valuation studies and in *Valuation Studies* (Helgesson and Muniesa 2013; Helgesson 2021).

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References

Aquinas, Thomas. 2012. *Summa Theologica (Part 1)*. Milton Keynes: Authentic Media.

Arendt, Hannah. 2013. *The Human Condition*. Chicago, IL. University of Chicago Press.

Baka, Vasiliki. 2015. "Understanding Valuing Devices in Tourism through 'Place-Making'." *Valuation Studies* 3(2): 149–180.

Beckert, Jens, and Patrik Aspers (eds). 2011. *The Worth of Goods: Valuation and Pricing in the Economy*. Oxford: Oxford University Press.

Beckert, Jens, and Richard Bronk (eds). 2018. *Uncertain Futures: Imaginaries, Narratives, and Calculation in the Economy*. Oxford: Oxford University Press.

Bentham, Jeremy. 1996. *The Collected Works of Jeremy Bentham: An Introduction to the Principles of Morals and Legislation*. London: Clarendon Press.

Bevir, Mark, and Andrius Gališanka (eds). 2016. *Wittgenstein and Normative Inquiry*. Leiden: Brill.

Bhaskar, Roy. 1978. "On the Possibility of Social Scientific Knowledge and the Limits of Naturalism." *Journal for the Theory of Social Behaviour* 8(1): 1–28.

Bohman, James. 2004. "Realizing Deliberative Democracy as a Mode of Inquiry: Pragmatism, Social Facts, and Normative Theory." *The Journal of Speculative Philosophy* 18(1): 23–43.

Brosch, Tobias, and David Sander (eds). 2015. *Handbook of Value: Perspectives from Economics, Neuroscience, Philosophy, Psychology and Sociology*. Oxford: Oxford University Press.

Burke, Kenneth. 1966. *Language as Symbolic Action: Essays on Life, Literature, and Method*. Oakland, CA: University of California Press.

Callon, Michel, and Fabian Muniesa. 2005. "Peripheral Vision: Economic Markets as Calculative Collective Devices." *Organization Studies* 26(8): 1229–1250.

Chandler, Jennifer D., and Stephen L. Vargo. 2011. "Contextualization and Value-In-Context: How Context Frames Exchange." *Marketing Theory* 11(1): 35–49.

Chang, Ruth (ed.) 1997. *Incommensurability, Incomparability, and Practical Reason*. Cambridge, MA: Harvard University Press.

Clandinin, D. Jean, and Jerry Rosiek. 2007. "Mapping a Landscape of Narrative Inquiry." In *Handbook of Narrative Inquiry: Mapping a Methodology,* edited by D. Jean Clandinin, 35–75. London: Routledge.

Clarke, Adele E. 2003. "Situational Analyses: Grounded Theory Mapping After the Postmodern Turn." *Symbolic Interaction* 26(4): 553–576.

Clarke, Adele E., and Susan Leigh Star. 2008. "The Social Worlds Framework: A Theory/Methods Package." *The Handbook of Science and Technology Studies* 3(0): 113–137.

Collins, Harry M., and Steven Yearley. 2010. "10. Epistemological Chicken." In *Science as Practice and Culture*, edited by Andrew Pickering, 301–326. Chicago, IL: University of Chicago Press.

Crisp, Roger (ed.) 2014. *Aristotle: Nicomachean Ethics*. Cambridge, Cambridge University Press.

Czarniawska, Barbara (ed.) 1997. *A Narrative Approach to organization Studies*. Thousand Oaks: Sage.

Czarniawska, Barbara. 2004. *Narratives in Social Science Research*. Thousand Oaks: Sage.

Dewey, John. 1915. "The Logic of Judgments of Practise." *The Journal of Philosophy, Psychology and Scientific Methods* 12(19): 505–523.

Dewey, John. 1929. "The Quest for Certainty." In *The Later Works of John Dewey, 1925-1953,* edited by Jo Ann Boydston, Volume 4, 1–255. Carbondale, IL: SIU Press.

Dewey, John. 1986 [1938]. "Experience and Education." In *The Later Works of John Dewey, 1925-1953*. Volume 13, edited by Jo Ann Boydston, 1–63. Carbondale, IL: SIU Press.

Dewey, John. 1939. "Theory of valuation." In *The Later Works of John Dewey, 1925-1953, Volume 13,* edited by Jo Ann Boydston, 189–253. Carbondale, IL:SIU Press.

Diaz-Bone, Rainer. 2011. "The Methodological Standpoint of the 'économie des conventions'." *Historical Social Research/Historische Sozialforschung*: 36(4), 43–63.

Doganova, Liliana, Martin Giraudeau, Claes-Fredrik Helgesson, Hans Kjellberg, Francis Lee, Alexandre Mallard, Andrea Mennicken, Fabian Muniesa, Ebba Sjögren, and Teun Zuiderent-Jerak. 2014. "Valuation Studies and the Critique of Valuation." *Valuation Studies* 2(2): 87–96.

Espeland, Wendy Nelson, and Mitchell L. Stevens. 2008. "A Sociology of Quantification." *Archives Européennes de Sociologie/European Journal of Sociology/Europäisches Archiv für Soziologie,* 49 (3): 401–436.

Forseth, Ulla, Stewart Clegg, and Emil Andrè Røyrvik. 2019. "Reactivity and Resistance to Evaluation Devices." *Valuation Studies* 6(1): 31–61.

Foucault, Michel. 1980. *Power/Knowledge: Selected Interviews and Other Writings*, 1972-1977. New York: Pantheon Books.

Fourcade, Marion. 2009. *Economists and Societies*. Princeton, NJ: Princeton University Press.

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

Fuller, Steve. 1991. "Naturalized Epistemology Sublimated: Rapprochement Without the Ruts." *Studies in History and Philosophy of Science Part A* 22(2): 277–93.

Geuss, Raymond. 1981. *The Idea of a Critical Theory: Habermas and the Frankfurt School*. Cambridge: Cambridge University Press.

Guggenheim, Michael. 2020. "How to Use ANT in Inventive Ways so that its Critique Will Not Run out of Steam?" In *The Routledge Companion to Actor-Network Theory*, edited by Anders Block, Ignacio Farías, and Celia Roberts, 64–72. London: Routledge.

Habermas, Jürgen. 2015. *Knowledge and Human Interests*. New York: John Wiley & Sons.

Haraway, Donna. 2013. *Simians, Cyborgs, and Women: The Reinvention of Nature*. London: Routledge.

Haraway, Donna J. 2016. *Staying with the Trouble*. Durham, NC: Duke University Press.

Hauge, Amalie Martinus. 2016. "The Organizational Valuation of Valuation Devices: Putting Lean Whiteboard Management to Work in a Hospital Department." *Valuation Studies* 4(2): 125–151.

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

Heinich, Nathalie. 2020. "A Pragmatic Redefinition of Value(s): Toward a General Model of Valuation." *Theory, Culture & Society* 37(5): 75–94.

Helgesson, Claes-Fredrik. 2021. "Editorial Note: A Note on Transitions." *Valuation Studies* 8(1):1–6.

Helgesson, Claes-Fredrik, and Fabian Muniesa. 2013. "For What It's Worth: An Introduction to Valuation Studies." *Valuation Studies* 1(1): 1–10.

Helgesson, Claes-Fredrik, Monika Krause, and Fabian Muniesa. 2017. "Attempting to Bring Valuation and Politics Together: The Politics of Valuation Studies at a Series of Sessions in Copenhagen." *Valuation Studies* 5(1): 1–6.

Hinchman, Lewis P., and Sandra Hinchman (eds). 1997. *Memory, Identity, Community: The Idea of Narrative in the Human Sciences*. New York: Suny Press.

Horkheimer, Max. 1972. "Traditional and Critical Theory." In *Critical Theory: Selected Essays,* 188–224. London: Continuum.

Horkheimer, Max. 1993. "Reason against Itself: Some Remarks on Enlightenment." *Theory, Culture & Society* 10(2): 79–88.

Janko, Richard. 1987. *Aristotle: Poetics*. Indianapolis, IN: Hackett Publishing.

Kant, Immanuel. 2005 [1785]. *The Moral Law: Groundwork of the Metaphysic of Morals*. Hove, East Sussex: Psychology Press.

Kaszynska, Patrycja. 2021. "From Calculation to Deliberation: The Contemporaneity of Dewey." *Culture, Theory and Critique* 62(1-2): 1–13.

Kupfer, Joseph. 2014. *Meta-Narrative in the Movies: Tell Me a Story*. London: Palgrave Macmillan.

Kuypers, Jim A. 2010. "Framing Analysis from a Rhetorical Perspective." In *Doing News Framing Analysis*, edited by Paul D'Angelo, 302–327. London: Routledge.

Lakoff, George. 2014. *The All New Don't Think of an Elephant! Know Your Values and Frame the Debate*. London: Chelsea Green Publishing.

Lamont, Michèle. 2012. "Toward a Comparative Sociology of Valuation and Evaluation." *Annual Review of Sociology* 38: 201–221.

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

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

Latour, Bruno. 2012. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press.

Latour, Bruno. 2013. *An Inquiry into Modes of Existence*. Cambridge, MA: Harvard University Press.

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

Law John. 2004. *After Method: Mess in Social Science Research*. London: Routledge.

Law, John. 2007. "Actor Network Theory and Material Semiotics." Version of 25th April 2007. http://www.heterogeneities.net/publications/Law2007ANTandMaterialSemiotics.pdf: 1–21/.

Law, John, Evelyn Ruppert, and Mike Savage. 2011. "The Double Social Life of Methods." CRESC Working Paper Series: 1–18.

Lynch, William T., and Ellsworth R. Fuhrman. 1991. "Recovering and Expanding the Normative: Marx and the New Sociology of Scientific Knowledge." *Science, Technology, & Human Values* 16(2): 233–248.

McFall, Liz, and José Ossandón. 2014. "What's New in the 'New, New Economic Sociology' and Should Organisation Studies Care?" In *The Oxford Handbook of Sociology, Social Theory, and Organization Studies: Contemporary Currents*, edited by Paul Adler, Paul du Gay, Glenn Morgan, and Michael Reed, 510–533. Oxford: Oxford University Press.

MacIntyre, Alasdair. 2007 [1987]. *After Virtue: A Study in Moral Theory [1981]*. London: Duckworth.

McMullin, Irene. 2018. *Existential Flourishing: A Phenomenology of the Virtues*. Cambridge: Cambridge University Press.

Marres, Noortje. 2009. "Testing Powers of Engagement: Green Living Experiments, the Ontological Turn and the Undoability of Involvement." *European Journal of Social Theory* 12(1): 117–133.

Marx, Karl. 2010. *Capital: A Critique of Political Economy*. Seattle, Washington: Pacific Publishing Studios.

Mills, Charles W. 2014. *The Racial Contract*. Ythaca, NY: Cornell University Press.

Mishler, Elliot. 1990. "Validation in Inquiry-Guided Research: The Role of Exemplars in Narrative Studies." *Harvard Educational Review* 60(4): 415–443.

Mol, Annemarie. 1999. "Ontological Politics. A Word and Some Questions." *The Sociological Review* 47(1, suppl): 74–89.

Mol, Annemarie, Ingunn Moser, and Jeannette Pols (eds). 2015. *Care in Practice: On Tinkering in Clinics, Homes and Farms*. Vol. 8. Bielefeld: Transcript Verlag.

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

Muniesa, Fabian. 2011. "A Flank Movement in the Understanding of Valuation." *The Sociological Review* 59: 24–38.

Muniesa, Fabian. 2017. "On the Political Vernaculars of Value Creation." *Science as Culture* 26(4): 445–454.

Muniesa, Fabian. 2019. "Is ANT a Critique of Capital?" In *The Routledge Companion to Actor-Network Theory*, edited by Anders Block, Ignacio Farías, and Celia Roberts, 56–63. London: Routledge.

Muniesa, Fabian, and Liliana Doganova. 2020. "The Time That Money Requires: Use of the Future and Critique of the Present in Financial Valuation." *Finance and Society* 6(2): 95–113.

Munk, Anders Kristian, and Sebastian Abrahamsson. 2012. "Empiricist Interventions: Strategy and Tactics on the Ontopolitical Battlefield." *Science Studies* 25(1): 52–70.

Nash, Cristopher (ed.) 2005 [1994]. *Narrative in Culture: The Uses of Storytelling in the Sciences, Philosophy and Literature*. London: Routledge.

Nietzsche, Friedrich Wilhelm, and Reginald John Hollingdale. 1989 [1887]. *On the Genealogy of Morals*. London: Vintage.

Nussbaum, Martha C. 2009. *Hiding from Humanity: Disgust, Shame, and the Law.* Princeton, NJ: Princeton University Press.

Orlikowski, Wanda J., and Susan Scott. 2014. "What Happens When Evaluation Goes Online? Exploring Apparatuses of Valuation in the Travel Sector." *Organization Science* 25(3): 868–891.

Plummer, Ken. 2001. *Documents of Life 2: An Invitation to a Critical Humanism*. Thousand Oaks: Sage.

Polkinghorne, Donald E. 1988. *Narrative Knowing and the Human Sciences*. New York: Suny Press.

Quine, Willard Van Orman. 1948. "On What there is." *Review of Metaphysics* 2(5): 21–36.

Radder, Hans. 1992. "Normative Reflexions on Constructivist Approaches to Science and Technology." *Social Studies of Science* 22(1): 141–173.

Radder, Hans. 2008. "Critical Philosophy of Technology: The Basic Issues." *Social Epistemology* 22(1): 51–70.

Ramirez, Rafael. 1999. "Value Co-Production: Intellectual Origins and Implications for Practice and Research." *Strategic Management Journal* 20(1): 49–65.

Riessman, Catherine Kohler. 2008. *Narrative Methods for the Human Sciences*. Thousand Oaks, CA: Sage.

Roberts, Tom. 2014. "From Things to Events: Whitehead and the Materiality of Process." *Environment and Planning D: Society and Space* 32(6): 968–983.

Rorty, Richard. 1989. *Contingency, Irony, And Solidarity*. Cambridge: Cambridge University Press.

Singelmann, Peter. 1972. "Exchange as Symbolic Interaction: Convergences between Two Theoretical Perspectives." *American Sociological Review* 37 (August): 414–424.

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

Srinivasan, Amia. 2015. "Normativity without Cartesian Privilege." *Philosophical Issues* 25: 273–299.

Stark, David. 2011. *The Sense of Dissonance: Accounts of Worth in Economic Life*. Princeton, NJ: Princeton University Press.

Strauss, Anselm. 1978. "A Social Worlds Perspective." *Studies in Symbolic Interaction* 1: 119–128.

Taylor, Charles. 2016. *The Language Animal*. Cambridge, MA: Harvard University Press.

Thévenot, Laurent. 2001. "Organized Complexity: Conventions of Coordination and the Composition of Economic Arrangements." *European Journal of Social Theory* 4(4): 405–425.

Veblen, Thorstein, and John Kenneth Galbraith. 1973 [1899]. *The Theory of the Leisure Class*. Boston, MA: Houghton Mifflin.

Weber, Max. 2019 [1922]. *Economy and Society*. Cambridge, MA: Harvard University Press.

Zelizer, Viviana A. Rotman. 1979. *Morals and Markets. The Development of Life Insurance in the United States*. New York: Columbia University Press.

Zuiderent-Jerak, Teun. 2015. *Situated Intervention: Sociological Experiments in Health Care*. Cambridge, MA: MIT Press.

Zuiderent-Jerak, Teun, and Stans van Egmond. 2015. "Ineffable Cultures or Material Devices: What Valuation Studies Can Learn from the Disappearance of Ensured Solidarity in a Health Care Market." *Valuation Studies* 3(1): 45–73.

Patrycja Kaszynska is Senior Research Fellow at University of the Arts London (UAL) and Research Associate at Culture, King's College London. She is also Research Affiliate at Northeastern University London, where she was Head of the Art History Faculty before joining UAL. She has a track record of shaping the UK's national discussion on how the value of arts, culture and heritage is articulated and measured in the context of decision making: first as Project Researcher for the Arts and Humanities Research Council (AHRC) Cultural Value Project, then Project Manager for the Cultural Value Scoping Project and most recently, Principal Investigator for the AHRC and Department of Digital Culture Media & Sport (DCMS)-funded Scoping Culture and Heritage Capital Project. Patrycja's interests are at the cross section of critical theory, pragmatic philosophy, cultural studies and design with a key focus on the theory of value and valuation studies.

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Theme issue contribution

Design and the Polysemy of Value: On a problem within the language of valuation studies

Johannes Coughlan

Abstract
Value and valuation are notoriously difficult terms, because they mean very different things in different contexts for different scholars. This problem can be described in linguistic terms as "polysemy". In this article, I propose to reformulate the problem of value through the lens of polysemy as a problem within language. I offer an alternative to approaches that either narrow down value to one particular definition or disregard it altogether, turning value into a container concept for a variety of concerns. I seek thereby to avoid the twin risks of fragmentation or smothering. Following the lead of ordinary language philosophy, I distinguish between three different "grammars of value". Scholars address value differently depending on their grammar. This shows best in the ways they present value as an intuitively intelligible phenomenon, and in the ways in which they challenge such intuitive understandings of value in their studies. To illustrate these grammatical distinctions, I refer to ethnographic studies of design practices, including excerpts from my own research in a German architecture office.

Keywords: semiotics; methodology; actor–network theory; pragmatism; performativity; ordinary language philosophy

Johannes Coughlan is PhD Fellow and Research Assistant at the Humboldt–Universität zu Berlin.

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Introduction

If we want to follow the editors' call and reformulate what valuation studies is about (Board of Editors 2020), we must start at its basic methodological concepts. "Value", as well as "to valuate" and "valuation" are notoriously difficult terms. Dating back to the first editorial note of this journal (Helgesson and Muniesa 2013) and its oft-cited pragmatist sources (Dewey 1939), scholars have often acknowledged this difficulty and pointed to the terms' polysemy. Value and valuation can mean very different things in different contexts, and sometimes even in the same context. The problem of the "polysemy of value" comes in the shape of (i) the difference between value (the thing/noun) and valuation (the activity/verb), (ii) different verbs with a shared root in value (evaluate, valuate, valorise), (iii) semantic differences across languages (French: évaluer and valoriser; German: bewerten, aufwerten, abwerten, entwerten, verwerten; Polish: *wyceniać* and *wartościować* (cf. Helgesson and Muniesa 2013: 5)), (iv) terms without the same root but semantic proximity (assess, appraise, judge, enrich, economise, and their translations in other languages, such as enrichissement as "enrichment" or Bereicherung).

It would be easy to disregard these nuances as a mere inconvenience. Language, it might be thought, is simply an obstacle that, ultimately, does not stand in the way of knowing what we *really mean*. On this view, all variations point to some shared core meaning. But to relegate polysemy to the status of a surface effect begs the question why scholars draw such careful distinctions between different terms. Are, for example, "decisions" still a form of "valuation"? What are the circumstances under which this is (not) the case? If we neglect such questions, we treat value as a container concept and lose sight of important differences among disparate phenomena. Gilbert Ryle referred to this habit, which he found pervasive among philosophers, as a "smothering effect" (Ryle 2015). From the opposite view, a range of different terms could be said to refer to entirely distinct phenomena. Each case study would need to find a precise definition of what is meant by valuation, without that having any impact on the concept of use in other case studies. We are left with a choice between ignoring the variety in meanings of value or defining the term anew each time, potentially fragmenting the field beyond recognition.

The aim of this article is to take the polysemy of value seriously and outline an alternative to smothering and fragmentation. I suggest polysemy is not an inconvenience, but an impactful problem within language. Rather than adding another definition of valuation, I ask what allows us to recognise a social phenomenon as a valuation – both in a given field and a scholarly description of it. There must exist some recognisable ways in which the persistent and ubiquitous problem of the polysemy of value is disarmed, so scholars of valuation can proceed with straightforward notions of value (or valuation, appraisals, etc.). Eco has described this search for what makes something "intuitively" recognisable as the most important task of semiotic analysis:

> [T]here is something "intuitively" common to the red light of a traffic signal and the verbal order /stop/. One does not need to have a semiotic mind to understand this. The semiotic problem is not so much to recognize that both physical vehicles convey more or less the same command; it begins when one wonders about the cultural or cognitive mechanisms that allow any trained addressee to react to both sign-vehicles in the same way. (…) Now, the basic problem of a semiotic inquiry on different kinds of signs is exactly this one: why does one understand something intuitively? (…) one (if not the most important) of the semiotic endeavors is to explain why something looks intuitive, in order to discover under the felicity of the so-called intuition a complex cognitive process. (Eco 1986: 9).

I take up such a semiotic analysis of valuation in this article, taking my own research area – the ethnography of design practices – as an example. Ethnographies of design are an especially insightful field for this exercise, because valuation as a concept does not sit comfortably within valuation studies. In contrast, the study of markets or other economic phenomena, for example, make us quickly understand where to find valuation. Like the red traffic light in Eco's example, portfolios, auctions or stock tickers are designed to make valuation intuitively relevant for those involved and, indirectly, those outsiders learning about these fields. In design practices, valuation does not play as prominent a role and studies on design often only refer to it in passing. To locate the role of valuation practices for design can, therefore, be difficult. At the same time, there are plenty of debates in design and architectural theory focusing on how to understand the value of design (e.g. Boztepe 2007; Samuel 2018; Bryant et al. 2019; Fisher 2000; Goldberger 2009; Paine et al. 2021). Design is an interesting test case precisely because value has remained even more of a conceptual problem here.

Scholars have developed different understandings in their research of what valuation means. In order to make it intuitively recognisable, as well as plausible and relevant, they use what I call "grammars of valuation". This term follows Wittgensteinian usage and refers to the way terms are part of "language games" in which words and practices create meaning together. "Essence is expressed by grammar" and "(g)rammar tells what kind of object anything is", in Wittgenstein's words (Wittgenstein 1953: §371, §373; cf. Forster 2004). I prefer the Wittgensteinian term "grammar" to more semiotic and structuralist concepts, like cognitive process, *langue*, or structure, because it leaves the relationship between the observer and the observed more open. It implies no confidence in a clear cut between those who use a grammar and those who observe it, because even to simply observe a language game one must have some basic grasp of what it means to play it. As such all observers of a language game are, by necessity, already "grammatically involved" in it. Less abstractly speaking, this means that these grammatical investigations do not focus on a specific, clearly delineated field (e.g. design practices). The focus is rather on how scholars get themselves grammatically involved in those fields, i.e. how they make it intuitively intelligible that what they write about is value/valuation. At the same time, investigating their grammars assumes (charitably) that their observations result from language games in the field. These grammars do not belong exclusively to the field, nor to their observers. They are shared and often contradictory ways of dealing with the linguistic and conceptual problem of "not knowing my way around" the polysemy of value (cf. Wittgenstein 1953, para. 123).

These grammatical investigations aim to challenge a pragmatist orientation towards the performativity of value. Put bluntly, the three different grammars I will distinguish here all present value as real thanks to social practices. As a result, they often foreground one dimension of the polysemy of value, i.e. the difference between the noun and the verb form (Brosch and Sander 2016; Bigger and Robertson 2017). Valuation is presented as something that is done, in practices, performed or enacted (Law and Urry 2004; cf. Gond et al. 2016). What a look at the different grammars of valuation will show is that theories of performativity and social practices (Reckwitz 2002; Schatzki et al. 2005) accomplish much less conceptual clarity than is widely assumed through the conversion of a noun (value) to a verb (to valuate). After distinguishing three grammars of value, the last part of this article will hint at some tentative ways in which scholars could be more attentive to the polysemy of value and take it seriously as a problem within language.

The interactionist grammar of value

Valuations appear in social life in a large range of mundane situations, variously taking the shape of appraisals, evaluations or assessments. No technical terminology, scholarly skill or semiotic mind is required to intuitively recognise valuations in such ordinary expressions. It is easy to find people engaging in practices of valuation of this type. Such situations are ubiquitous and ethnographers are likely to encounter them sooner or later. The following example, taken from my own research in an architecture firm and spanning no more than a few seconds, shows an ordinary expression of this type (see Figure 1):

M: I like it this way (.) I like it.
P: hm.
M: ich find' es gut gerade (.) mir gefällt's.
P: hm.

Figure 1: Evaluation at the magnet wall
Source: Copyright Author

In this short exchange, the "I like it" (German: *mir gefällt's*) allows us to see with an intuitive glance that valuation is in play. Everybody can reasonably be assumed to have seen or gone through comparable situations, i.e. pointing at objects, uttering phrases like "I like it". It is an entirely ordinary expression that forms part of a very short interaction sequence. Even without any ethnographic context, the interaction can be understood as evaluative. Narrowly linguistic observers might be content to collect a range of similar sequences and make inferences about how evaluative interactions are performed. How long are the pauses between evaluation and confirmation ("hm")? How is the evaluative expression coordinated with other modalities of interaction, e.g. gesture, head movement? Other observers, who approach this kind of data with a more ethnographic mindset, are more likely to ask how the interaction is embedded in larger interactive sequences. At what point of the project phase does this interaction occur? What are the roles of the people involved? What are their aims and expectations going into this interaction? How have they changed coming out of it? What kind of occurrence is it? What is this a case of (cf. Goffman 1986)? In this example, the interaction takes place in the middle of a two-month project phase of a group of about five architects working on a competition entry in a large German office. Michael is the project manager, currently reviewing some visual rendering prepared by Phyllis (out of view on the right). They have a meeting in front of a magnet wall in Phyllis's shared office. During my visit, I could regularly participate in similar meetings. Some were more or less formal, different offices were used and the stage of the project advanced, so participants had to adapt accordingly. Often, they were used to inform and update other project members, or architects higher up in the organisation's hierarchy. Similar materials were used, too. For example, magnet walls were ubiquitous at the office and played an important role mediating these interactions. In other words, there was a whole organisational and socio-material context to these interactions that make them valuations in more than a narrowly linguistic sense.

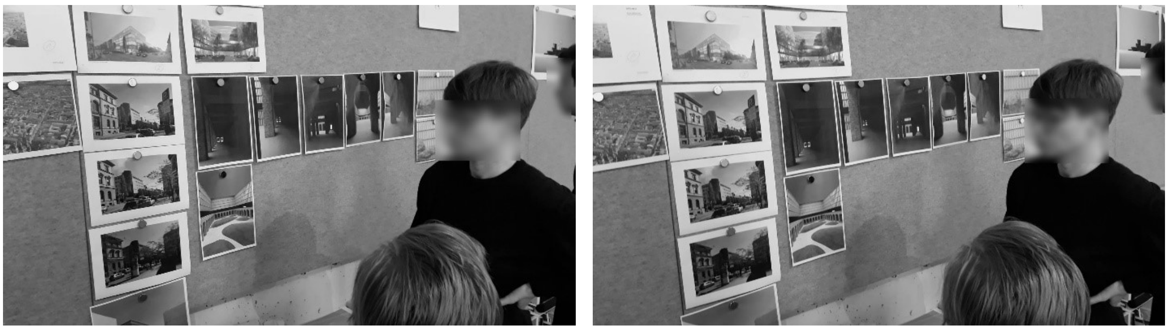
Having this background knowledge of the pervasiveness and embeddedness of "I like it" situations allows us to guess that what we have captured might be a locally relevant practice of valuation. What I call the "interactionist grammar of value" proceeds from empirical examples such as this one. It asks how a social practice actually works "in practice" (Luck 2012) by looking at the sequential context of the actual expression as a single case or a collection of similar cases (Hutchby and Wooffitt 1998: 120 ff.). Rather than trying to generalise about linguistic features, an ethnographic orientation uses interactions like these to then "look around" and ask how they are embedded, for example, in their organisational context. The interaction, however, remains key for understanding where valuation takes place and where one might learn something about it.

One thing linguistic and ethnographic studies share is an emphasis on how a given practice is part of a larger collection of other ordinary activities. These might include talking (Oak 2011; Adams and Siddiqui 2016), drawing (Mondada 2012), using tools (Büscher et al. 2003; Luff et al. 2009; Lymer et al. 2009), gesticulation (Murphy 2003; Streeck 2008), pointing (Murphy et al. 2012) or seeing (Goodwin 1994; Büscher 2006; Styhre 2011; Luck 2014). Research into interactional grammar questions how something like valuation is constituted through these other activities. In other words, which ordinary activities render a valuation intuitively recognisable and available to those involved? Lymer (2013), for example, in his discussion of the realisation of intention in design reviews, focuses on "assessments" in the context of a series of other ordinary activities (seeing, instructing, question-answer-pairs, etc.). Researchers engaged in interactionist grammar showcase the interactive complexities of a given social practice by situating it alongside a complex set of activities. Valuation, from this point of view, is not a simple action within a "repertoire" of actions. It does not refer to a simple "thing" that actors could "do", as Austin's (1962) *How to Do Things with Words* might suggest. Instead it must be artfully and interactively accomplished (Garfinkel 1967; Enfield and Sidnell 2017).

In this way, the performativity of valuation becomes a truly thorny issue. First, valuation in interactions form part of potentially very large lists of activities to which they relate in complex ways. The resulting lists of social practices look very different from the one that, for example, Muniesa (2014) has put forth in his important book on performativity in the economy. It makes a difference whether we view valuation or assessment alongside pointing, tool-use, talk, gestures, seeing, or if we locate valuation alongside more abstract, technical terms like economising, abstraction and capitalising (Muniesa 2014: 38–41). These lists of terms are a good way of understanding the grammar around a term, because they indicate what kind of thing they are.

A second point to notice is the way the interactionist grammar of value is used to create knowledge by irritating our intuitive understanding of valuation. Muniesa (2014), among others, has emphasised that even descriptions can be viewed as performative in Austin's sense of performative speech acts, i.e. as something that "enacts the social" (Law and Urry 2004). Valuations, on this account, can be expected to be performative if even descriptions which do not have such linguistic forms are – in practice – performative. The interactionist grammar, however, questions whether even something like an assessment that looks like a performative speech act in form, really is what it purports to be.

To make this point clearer, consider the following example (Figure 2) from the same interaction.



M: you. (.) Phyllis we- we- we we] give- we're sending this out. (0.8) to (.) Thilo [the design director]. (0.3) I ask him, when he (.) can talk. (1.0) and otherwise we're sending this out. °this° as a suggestion. I like it=
P: =>right. well.< so, basically, I believe what would be important is that one here- that Thilo says (.) which of these th[ree:

M: *du. (.) phyllis wi- wi- wir wir] geben- wir schicken das raus. (0.8) an den (.) an den thilo. (0.3) ich frag ihn, wann er (.) erreichbar ist. (1.0) und sonst schicken wir das raus. °das° als vorschlag. ich find es gut.=*
P: *=>genau. also< naja also im prinzip ich glaube, was wich:tig wäre, dass man hier- dass Thilo dann gesagt wird, (.) welches von den d[rei:*

Figure 2: Evaluation to solicit a response
Source: Copyright Author

In this example, we encounter the ordinary expression "I like it" again (German: ich find es gut). The insertion of more interactional context, however, allows for better understanding its role in this situation. The expression appears at the end of Michael's turn, which had started with an interruption of Phyllis (indicated by the square brackets). During the course of his turn M has attempted to close the sequence, seeking some confirmation token from Phyllis at several points. So-called "completion points" of "turn-constructional units" (TCU) (Sacks et al. 1978) can be seen in the numerous occasions that Michael fills his speech with micro-pauses, giving Phyllis the opportunity to chime in. Phyllis is not forthcoming, however, and remains entirely speech- and motion-less. She only picks up again at the point where Michael formulates the evaluative expression. She does not appear to refer directly to the evaluation, but opens up the topic that Michael has sought to close, albeit from a different angle: the matter is transferred to the design director. Within the course of this interaction, Michael's evaluative expression appears to have primarily turn-constructional and specifically sequence-closing functions. Michael's interjection was designed to close down more evaluative talk among those present: which of these images was to be chosen should be a matter for the design director to decide. The evaluative expression itself is primarily another attempt by Michael to elicit a response from Phyllis. Its effects have far more to do with issues of participation within interaction than with the valuation. The point is not that the valuation (and its performative effect) failed. The point is that reading this interaction as a valuation might miscategorise the interactional achievement. We would dislocate where exactly valuation happens in social interaction.

The reverse is also true – and this is where Muniesa's point on descriptions still stands: in any given context, some actions which have not got the linguistic form of a valuation might have performative effects that make it work as such. Conversation analysts suggest, for example, that negative assessments are systematically "dispreferred" in social interaction (Pomerantz 1984). In order to effect an evaluation, interactants tend to avoid outright speech acts of evaluation and instead prefer using alternative practices, such as hedging, reformulating a problem or telling a story. Other participants tend to understand such shifts within conversational practices and their evaluative implications in non-problematic ways. A valuation such as "I like it" might only occur and become visible for the researcher once those other subtler forms of interaction have failed.

Such subtle practices routinely remain "seen but unnoticed" (Garfinkel 1964: 226), which complicates our intuitive grasp of valuation. While finding "I like it"-situations in ethnographic data allows us to enter the interactionist grammar of value, the situation might turn out not to be primarily evaluative after all. On the other hand, those other ordinary activities like pointing, seeing, gesturing, etc. might on closer inspection turn out to be of central importance for valuation, even if they are not accompanied by an ordinary expression of valuation and their own linguistic form does not allow us to intuitively recognise them as valuation. The language game played through the interactionist grammar challenges our understanding of valuation in this way, sometimes referring to it as an ordinary expression, sometimes as the effect of other ordinary practices. The extent to which those "things with words" are intuitive varies accordingly, but must ultimately be connected back to what is achieved within a given interaction.

The institutionalist grammar of value

Many scholars of valuation would challenge the status of the data presented above. They might grant that it showed a valuation in terms of its linguistic form, but then argue that valuation studies are not really about such ordinary expressions. These scholars are likely arguing from within what I call an "institutionalist grammar of value". For them, the mundane and transitory moments of ordinary expressions are not the site where valuation *really* happens. They will instead focus on formats and processes in which social practices of valuation gain institutional legitimacy. While the institutionalist grammar will still need some linguistic marker to recognise a valuation, the actual instance of the fleeting occurrence of an expression is insignificant compared to its organisational and institutional context. The literature on valuation in general, and ethnographies of design specifically have yielded a range of studies using this institutionalist grammar. They highlight "conventions" (Bessy and Chauvin 2013; Strandvad 2014), "measures" (Brighenti 2018), "standards" (Bidet and Vatin 2013; Bidet 2020), "orders of worth" (Boltanski and Thévenot 2006; Stark 2009), "forms of enrichment" (Boltanski and Esquerre 2020) or "valuation constellations" (Waibel et al. 2021) – all ways in which formatted social practices stabilise valuations. Actors in any given situation may draw on them as resources for justification, appraisal or objectification.

Studies of design that speak the institutionalist grammar tend to have a focus on specific sites with routinised formats of valuation. For example, Strandvad (2014) finds implicit assumptions and categorisation practices in entry interviews of a design school. Krämer (2014), in his ethnography of an advertising agency, describes evaluation as one among a series of patterned activities, such as aestheticisation, selection, subjectification. Each on their own are recognisable, recurring ways of dealing with specific problems that have become institutionalised for a specific profession or site. While much of the ethnographic work under the title of "studio studies" (Farías and Wilkie 2015) tends not to be institutionalist strictly speaking, the impetus to identify and discuss one setting – the studio – suggests that it might be regarded as a *de facto* institution for a particular set of concerns. Equally, some studies within the interactionist grammar gain increased legitimacy or relevance by setting their interactions in the context of institutionalised formats, e.g. design reviews or "crit sessions" (Lymer et al. 2009; Oak 2011). What makes researchers speak the institutionalist grammar, however, is their focus on *finding* institutional formats. These are not just the backdrop or starting point for research, they are the point of it. Institutional formats are supposed to enhance and challenge our everyday intuitive understanding of valuation.

From an institutionalist perspective, calling the interaction in Figure 1 a case of "valuation" seems overly formalistic. It misses background information to understand what impact it might have on valuation at this field site. "I like it" is too indexical. It is not clear what either the "it" or the "I" means in the context of the organisation. Crucially, it is also not clear what to "like" something in this architectural firm means. Readers might want to know that the architect at the centre of the image is the project leader, overseeing day-to-day activities. The architect on the right is a specialist in visual renderings at the firm – a career path with both benefits and limitations that separates her from those working in a single project. Final decision-making power lies with the design director, who is absent. S/he is not involved in day-to-day activities but only comes for visitations once or twice a week. The conversation takes place in the context of these multiple audiences each playing different roles that can be drawn on as a resource. Even some short exchanges can hint at this organisational context, as Figure 3 shows.


M: (…) there are, of course, buildings that are somehow green like that, (.) right? we wanted to insert a plant there, (.) which (0.7) at the moment we are trying to proceed very strictly geometrically (.) inserting it there and very (0.7) explicitly to the [front-

C: I would] with with with the plants n:ot (.) rely on them=neither (1.0) so this (.) you could do this but (.) this this is going to be the first thing the client crosses out=it is dependent (.) on the archi[tecture.
W: they are] just explicitly asking for that.
C: >yes, yes, but< when architecture depends on a plant, then there is a problem. (.) I would definitely keep the plants in mind, that is definitely (1.0) I find it pretty as well. […] Something like this I also find that great. […] But the architecture=the idea cannot depend on it. So the plant – one has: to .hhh somehow like this ((C gestures above the model)).
I: supporting [but yes.
C: but plan does] not simply solve (0.7) the concept.
M: hm (0.5) yes.
C: or is not concept.

M: (…) es gibt natürlich so gebäude, die irgendwie so grün sind, (.) ne? wir haben da wollten da so 'ne pflanze einsetzen, (.) die (0.7) wir versuchen jetzt im moment so sehr streng geometrisch (.) irgendwie einzusetzen und so ganz (0.7) explizit nur na[ch vorne-
C: ich würde mich] bei bei bei pflanzen n:icht (.) verlassen=auch nicht (1.0) also dis (.) kann man machen aber (.) dis dis wird das erste was bauherren wegstreichen=(dis 'is) abhängig (.) von der archi[tektur.
W: die fragen] halt explizit danach.
C: >ja, ja schon, aber< wenn architektur abhängig ist von 'ner pflanze, dann is 'n problem. (.) Ich würde auf jeden fall Pflanzen mitdenken, das is' auf jeden fal]l (1.0) find ich auch hübsch. […] Auch sowas find ich- auch toll. […] aber die architektur=die idee darf davon nicht abhängig sein. Also die pflanze- da muss: man nochmal (Geste) .hhh: irgendwie so (Geste).
I: unterstützend [sein aber ja.
C: aber pflanze löst] nich' (0.7) einfach das konzept.
M: hm (0.5.) ja.
C: oder ist nicht konzept.

Figure 3: Participants discuss the value of plants in architecture
Source: Copyright Author

Diverse interactive practices like gestural referencing, drawings, question-and-answer exchanges or storytelling all become part of institutionalised valuations within this grammar. What makes the data a case of valuation is not the evaluative character of their interactions as such. The complex ways these ordinary practices are joined together is not what is most interesting, but institutionalised formats (roles, procedures, networks, etc.) which go beyond ordinary, fleeting expressions.

The fact that institutionalised valuations look like an intuitive case of valuation is no coincidence. Whether a crit session at university, a design review within an architectural office or a jury discussing design proposals, all these formats are created to undo the ambiguities over valuation we face in everyday life. Indirect communication, politeness rules, gossip stories have their place in the moral tapestry of everyday interaction and the informal side of organisations, but institutional procedures are put in place to render these "explicit" (Muniesa 2014: 24–26). Institutions are set up to make values and valuations visible to everybody who wants to see, because that is the way they can become consequential. To use Sharrock's expression (1995: 4), valuations in institutional contexts "are easy to find because they are put there to be found".

As a result, when the institutionalist grammar directs attention to broader contexts of conventions, orders of worth, forms of enrichment, etc., ethnographic research offers first-hand knowledge of which contexts are relevant in any given case. It may also inform us on how they are used in any given "trial of strength" (Boltanski 2011), potentially finding implicit rules or informal practices which are themselves partially institutionalised. In the architecture firm I observed, for example, that project groups could be seen to make sense of the explicit evaluations of the design director after he left. They recontextualise his input and try to figure out how to take it on without giving up their own vision. They might be working towards fulfilling demands until the next visitation but much of the import of his evaluation still has to be determined by the group and put into action in their own "re-evaluation". Besides challenging our understanding of valuation through historical and structural analysis (values and valuations change according to time and place), the institutionalist grammar may also aim to challenge an intuitive understanding of explicit formats of valuation by discovering their implicit rules and practices.

The associationist grammar of value

A third grammar with which to make sense of the polysemy of value can be found in the "sociology of translation" (Callon 1984; Law 2004; Latour 2005). This grammar incorporates the ambiguity of value as it rediscovers it in the field in the shape of what Stark (2009) calls a "sense of dissonance". Stark's work is mostly grammatically institutionalist, interested in the "orders of worth" (Boltanski and Thévenot 2006) that actors draw on to lend weight to their decisions. Others, however, have emphasised dissonance under labels such as "epistemic dissonance" (Farías 2015), "indeterminacy" (Hutter and Farías 2017) or "constitutive ambiguity" (Hennion 2015: 52).

Dissonance comes with the necessity for translation as the way agency is distributed through relations of human and non-human actors or "actants". Value, in this tradition, is the result of the position of an actant within a set of relations, while remaining irreducible to any form of social institutionalisation. What makes translation significant is less a search for its "felicity conditions" (Austin 1962). Translation becomes significant for understanding the problem of value in the way it connects to "treason" (Serres 1982), "untranslatability" (Cassin et al. 2014) and "friction" (Tsing 2005). Hutter (2015) even draws the two concepts together and speaks of "dissonant translation".

One important figure within the "associationist grammar of value" is Antoine Hennion, who has contributed to the development of valuation studies at crucial points (Hennion 2015, 2017). While rarely discussing design practices heads-on (but see Dubuisson and Hennion (1996)), his work has contributed to recurring themes surrounding design, such as taste (Hennion 2001, 2004), amateurism (Gomart and Hennion 1999; Teil and Hennion 2004) and cultural intermediaries (Hennion 1989, 2003). The notion of "attachments" stands at the centre of his research: "The word is a breaker of dualism", he claims (Hennion 2017: 74). Through attachment, as well as the relations that mediate it, Hennion repudiates the centrality of action even in its more distributed and interactionist forms (Gomart and Hennion 1999). What is "performed" is, then, not as much an action within an interaction, or within an institutional format. What is performatively created – throughout mediations between actants – are "attachments". The kind of social phenomenon Hennion imagines here is illustrated in his description of the surprise experienced at a wine tasting:

> First, there is prise (meaning "grasp" or "hold" in French), in the dual, active and passive sense of the word (...): the hold of the object, refined in the act of grasping, but also, on the amateur's side, the act of holding and allowing oneself to be held, each calling for, and not conflicting with, the other. Then, there is sur (in French, the prefix "over"): because the object adds something – that's all its charm! – as much on the side of tastes, savors and effects than on the side of bodies, sensations, what is felt. The object of attachment holds and it sur-prises, that is, it over-holds us more than we can ever expect. (Hennion 2015: 50).

A second author who has taken up the notion of "attachment" and authored a series of studies on architectural design is Albena Yaneva (e.g. 2005, 2008, 2009a, 2009b, 2013, 2017). For one of these, she follows the same type of attachment – i.e. surprise – in the context of conservation efforts of the *Alte Aula* in Vienna (Yaneva 2008). Surprise, she argues, is crucial in answering questions like: "Can old buildings faithfully transmit social meaning and historical value? How do they let themselves be known and transformed?" Surprise occurs in the moments when "the building itself" acts as a "performative agent" that is "recalcitrant" and "undisciplined" in face of the architects and conservators attempts to tame it. Surprise "provokes" (Muniesa 2014) and refers beyond itself: "the interaction of a building with architects, clients, and conservators becomes an event that trans-acts the particular situation of 'surprise'" (Yaneva 2008: 22).

In another work, Yaneva focuses on scoping techniques at Rem Kollhaas's Office of Metropolitan Architecture (Yaneva 2005). She shows how designers continuously switch between smaller and larger models using special equipment. While she does describe these as "trials" (similar to Boltanski and Thévenot [2006]), their purpose is not specifically to stabilise meaning. This makes them different from "inscription devices" that turn matter into conventionalised sign representations in a process Iedema (2001) calls "resemiotization". While Yaneva preserves the sense that there are shifts between different semiotic medias, she does not claim that this yields legitimacy in the way those speaking the institutionalist grammar would like to see:

> [T]e small- and large-scale models (…) constitute a circuit: when the small model is no longer needed (…), it is scaled up and transformed into a large one; when the large model accomplishes its function, it is necessary to return to the small one. (…) [T]he building is rendered diffuse, nearly atmospheric, and mundane; it is lost in transit. (Yaneva 2005: 885–886).

What both of these authors try to achieve through the "associationist grammar of value" is to show the significance – and "value" – of objects in social life. Hennion openly says as much: "properly taking objects into account: to me, this is the hidden stake lying behind the 'value issue'" (Hennion 2017: 72). Yaneva has in various ways tried to showcase the role of objects, not only in how they "surprise", but also how they "make the social hold" (Yaneva 2009b), in politics (Yaneva 2017) or the "crafting" of history (Yaneva 2020).

The language used in these efforts is often itself ambiguous. Yaneva, for example, insists objects did not "literally talked to us" (Yaneva 2008: 24). What is at stake in the word "literally" here? What is at stake with the quotation marks when she says "Materials, scoping instruments and new knowledge 'talk back' to the architects" (Yaneva 2005: 871)? Hennion similarly struggles to find a linguistic solution to this gap between the ordinary use of a verb and the way it is intended within the "associationist grammar":

> Semiotics makes it possible to describe the emergence of an effect by referring not to agents but to 'that which lets/makes happen' (ce qui fait faire, Greimas and Courtès 1986). For semioticians, this 'that which' is the predicate of the sentence; for us, it is the mediating object, the dispositive. (Gomart and Hennion 1999: 226).

> (T)he amateur "has himself love" things (…). This awkwardly attempted to find an expression of such a grammar of taste: so, in the thread of faire faire, we used therefore se faire aimer, or se mettre à aimer ("to have oneself love something", and reciprocally "to assist things to express themselves"). In fact, we had to resort to many other laboured turns of phrase, like "to put oneself in a condition to be actively affected by", or "to let oneself go into the grip of the object while continuing to value (in the lovely double sense of the word) it". How could we signify such a paradox: the fine articulation of attentiveness and fastidious control (in things, even when these go unrestrained) with abandon and zeal (which is itself immediately re-restrained by evaluation, narratives of experience and appropriation into stories)? (Hennion 2017: 117).

These "laboured turns of phrase" are the result a refusal to be led by either ordinary expressions within interactions, or the explicit formats of institutions. The "associationist grammar" pursues an alternative route that makes value "intuitively" accessible. This alternative focuses on the "experientiality" of moments, sites or figures (Caracciolo 2014; cf. Hennion 2019). One expression of this trend is its recurrent effort to appeal to the experimental (cf. Bogusz 2018), as well as to continue the traditional laboratory studies at the design studio (Yaneva 2005, 2009a, 2013; Houdart 2008; Houdart and Minato 2009; Farías and Wilkie 2015; Potthast 2017). Both places, i.e. the lab and the studio, share an intense entanglement of human and non-human entities in an enclosed setting, as well as a focus on crafted and skilful sensory experience. They offer a vantage point from which to describe how a heterogenous setting creates the kind of "attachments" that make certain ideas, things or practices valuable.

How does the excerpt from my own field data fare within "associationist grammar"? First, we could draw attention to how the magnet wall is set up within the larger material–semiotic context of the office. The question, then, is not whether the "I like it" is an evaluation or not. The question is also not, whether that expression takes place within an evaluative format and draws on resources to make it a powerful speech act. Instead, the crucial issue is how it takes part in forming attachments between a range of human and non-human actors. We can expect that "it" can only be an entrance point into these relations. What we would need are more materials and instances of attachments to make sense of "it". The magnet walls are part of a larger "ecology of practice" (Latour 2007; Yaneva 2017) made up of a plethora of objects, such as pencils, blueprints, visual renderings, large printers, a small library of design and architecture books and magazines, an archive downstairs, models at various stages of precision, meeting room furniture, desktop computers, design software and many more (see Figure 4). Architects move through their studio switching between their private desktop space to shared areas, where in turn they regularly move from one medium to another by turning their attention from models to the magnet wall to computers and back. Architects create a material environment surrounding them to constantly probe and reconfigure. It is only in the context of the relational entanglements of the site itself that an expression such as "I like it" can index something of value.

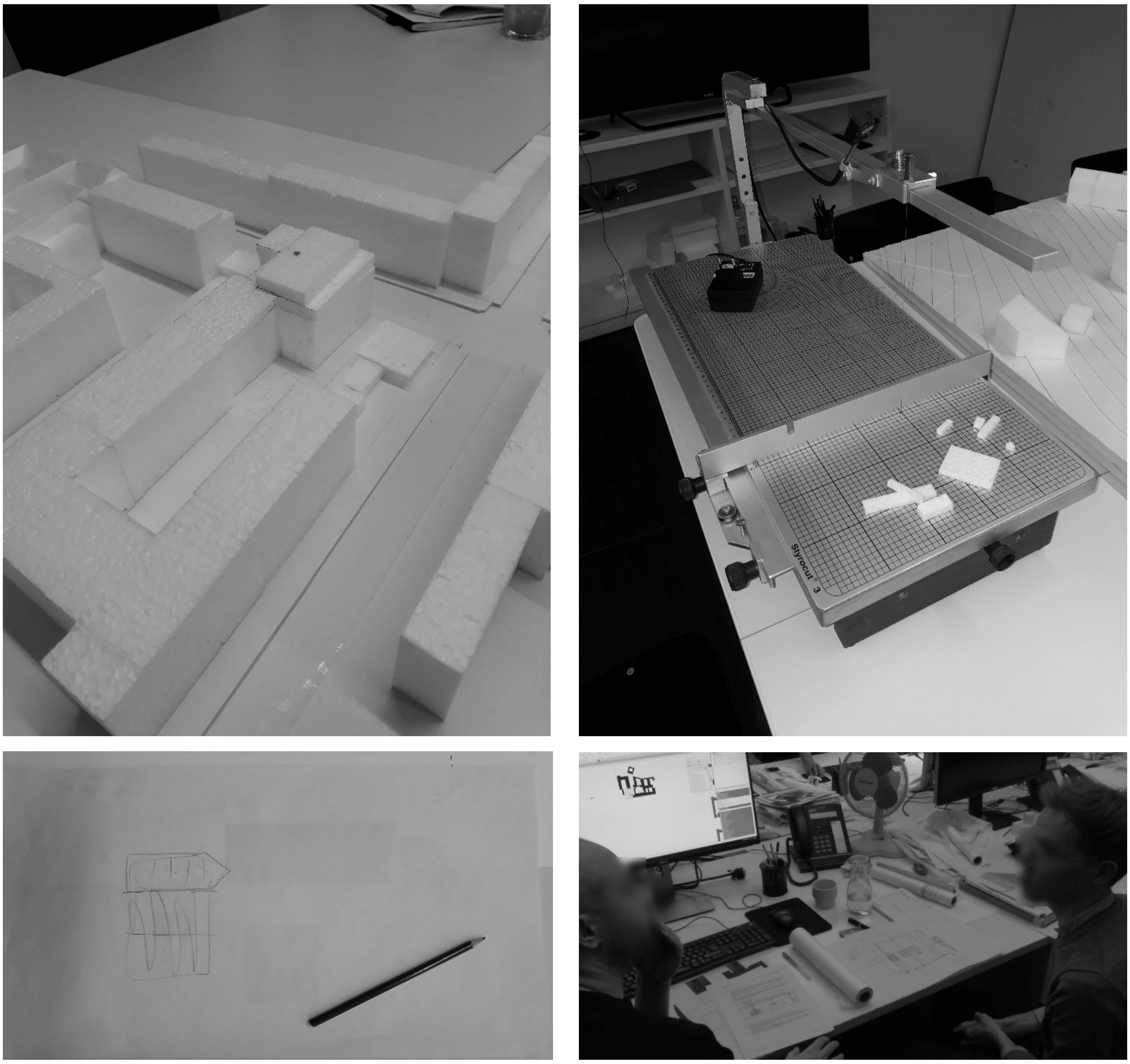


Figure 4: The abundance of objects at the architecture studio
Source: Copyright Author

This movement also entails a shift between different actions, like sketching, pointing, cutting, tracing, glancing, observing, discussing, storytelling. Adding "evaluating" as a plain and ordinary activity would not give "the value issue" much significance. For it to be a constitutive feature of design work, the associationist grammar retains the ambiguity inherent in the term. In this way, polysemy stops being a linguistic inconvenience and instead becomes an asset, because it is a feature of the field itself, as Hennion makes clear in a short passage that is reminiscent of the field data used in this article:

> Valuation is (…) a moment when a contact or an experience of things makes both the characters of the thing appreciated and a sensitiveness to those differentiated characters appear: “it's good/I like it,” in the case of taste, a case in which those two aspects are the closest. The “tasting/testing” oscillation is not a simple play on words to express our debates, it is central. (Hennion 2015: 53).

Hennion moves the polysemy of value into the field, where it reappears as an oscillation between “tasting” and “testing”, the studio and the lab, the “to let happen” and “to make happen” (*faire faire*). Rather than clearly stipulating that objects “have agency” or “are valuable”, the associationist grammar uses linguistic ambiguities, metaphors and conflations to narrate how moments, sites or figures come to matter, or have value. The flipside of this approach is that it must recreate what it is like to experience these moments of attachment (e.g. surprise), or sites that produce them (e.g. the studio), or social figures occupied with creating attachments. The figure of the amateur is an example in Hennion’s work:

> The amateur is the *lover*, not the layperson (…) they are experimenters, *éprouveurs*, or even, why not, “valuers” (…)? (…) No one feels more than do amateurs the open, indeterminate (and hence disputable, *contestable*) character of their object of passion. (…) Amateurism is the worship of what makes a difference. (…) That is why I treat amateurs as teachers of pragmatism. (Hennion 2017: 75).

While Hennion’s discussion of amateurs looks odd from the standpoint of social theory, he describes something that is very intuitive from within design practices. Designers themselves, for example often foreground the role of objects in the studio (e.g. Styhre 2011) and design researchers have embraced the focus on objects for understanding creative practice (ATELIER (Project) 2011). While Hennion presents his “laboured phrases” as technical inventions, Yaneva openly admits that her speaking of objects as “talking back” or “surprising” are not her own, but drawn from the field. Guggenheim (2020) has consequently questioned if these types of descriptions are not in fact too “intuitive”, i.e. too close to the field’s own language. In preserving the polysemy of value as a problem for the field site, the “associationist grammar” runs the risk of giving up its critical capacity towards design practices. Its experiential narrative of sites, moments and figures of attachment potentially continues the field's valuation efforts, elevating them to "teachers of pragmatism".

The three grammars of value beyond smothering and fragmentation

The three grammars identified here cover most of the ways scholars deal with the polysemy of value. Table 1 summarises the main points raised above, two of which are worth revisiting again. First, in abstract formulations of valuation, it has been commonplace to reformulate problems of "value" into its verb form (e.g. Brosch and Sander 2016; Bigger and Robertson 2017). This dominance of the term "valuation" does not, however, bear out in scholarly practice. Researchers focus on practices, activities and verbs differently depending on the grammar of value from within which they work. Among these, the phenomena of interest for the interactionist grammar stay closest to the verb form, giving it a prominent place as intuitively intelligible, ordinary activities: "Evaluations", "judgements" or "assessment" as nominalisations of verbs reflect actual instances of ordinary expressions. In the institutionalist grammar, on the other hand, valuation appears within explicit formats through which it is transformed into nouns, such as "conventions", "standards", "rankings", "rules", "forms of enrichment" or simply "values". Finally, for the associationist grammar, the polysemy of value is resolved neither through its verb form, nor through its noun form. That is because neither verb, nor noun, but metaphorical or *double entendre* uses of phrase linguistically express a heterogeneity of elements.

Grammar of value	Interactionist grammar	Institutionalist grammar	Associationist grammar
Where to find valuation?	Ordinary expressions	Evaluative formats	Moments, sites and/or figures
What makes valuation intuitively recognisable?	Linguistic form	Institutional explicitness	Experientiality
What form does the polysemy of value take (examples)?	Diversity of practices (evaluations, assessments, storytelling)	Plurality of values (orders of worth, conventions, standards)	Heterogeneity of elements (resemiotisation, actor-networks, topologies)

Adjacent field (and its alternative concept to valuation)	Sociolinguistics (assessments)	Organisation studies (decisions)	Science and technology studies/ cultural anthropology (translation)
How can studies challenge the intuitive understanding of valuation?	Not all valuations (in form) are valuations (in effect). Some non-valuations (in form) are valuations (in effect).	Values – as operating through institutions – undergo historical change and can be subject to further implicit rules (of valuation).	Valuation is not about actions at all. They are instances that show how things come to "matter".

Table 1: Grammars of value in comparison
Source: Author's work

The preference for the verb form ("to valuate") is still prevalent in conceptual and methodological discussions, i.e. before any grammar is employed to render a field intelligible through description. This is primarily a nod to a set of theoretical and ontological assumptions, namely pragmatism, performativity theory and social practice theory. It also reflects warnings against nominalisations (e.g. Billig 2013) and the widespread tendency to preface non-verbs with a generic verb form ("doing gender" (West and Fenstermaker 1995), "doing being ordinary" (Sacks 1992), "doing attentiveness" (Silverman 1998), "doing being plurilingual" (Mondada 2004)). This theoretical preference for the verb form, however, comes with its own blind spots. It makes us miss the different grammatical practices for observing social phenomena.

A second point to highlight from Table 1 is which aspects of valuation each grammar tends to problematise. Just as they all make valuation intuitively accessible in specific ways, they also all challenge our understanding of value in distinct ways. These are the two sides of the same coin on which instructive analysis depends, especially in ethnographic descriptions. Each grammar yields a distinct type of a "hidden" or "silent" (Hirschauer 2001) dimension of valuation. The interactionist grammar with its focus on the sequential and contextual occurrence of ordinary expressions leads us to ask what can be counted as an evaluation, assessment, etc. What kind of actions are performed in valuation? What kind of activities together perform valuation? In the institutionalist grammar, values and valuation are explicit formats, but these underlie both historical transformation and implicit rules. How do values and practices of valuation emerge historically? What implicit norms, rules and practices sustain valuation in a given institution? Last, the associationist grammar's rejection of valuation actions and value nouns means the "value issue" remains always partially inaccessible in heterogenous networks, and in the ambiguity that lies between "testing" and "tasting". How can we recreate a sense of what is involved in being with those sites, moments and figures?

Taken together these grammatical investigations outline which directions valuations studies should pursue, and which it might want to avoid. The same vocabulary of value, (e)valuations, etc. is used across the different grammars, while the polysemy of these terms constantly invites category mistakes where one grammar of value is applied across all social phenomena. But each grammar is only intuitively "at home" within a circumscribed area of social phenomena which it allows to describe, interrogate and potentially challenge. Once these grammars are overstretched, they lose their descriptive and critical potential. In the worst case, they come to "smother" the practices they are employed to describe (Ryle 2015). Alternatively, we might acknowledge the different grammars and the polysemy of value, but accept exactly one grammar and one meaning of "valuation" for any given study and subscribe to the language game that comes with it. We will then still end up with a growing number of case studies and field observations that in their multiplicity only yield a fragmented concept of valuation studies. While smothering blocks off any road to a reformulation of valuation studies, fragmentation does not even attempt it.

The challenge of valuation studies moving forward must be reformulated accordingly: How to study value, valuations, etc. while fully recognising the polysemy of these terms? If this recognition of polysemy is confined to matters of definition, dealt with in the first pages or paragraphs of a study, smothering or fragmentation will necessarily follow. Instead, scholars of valuation studies should embrace the polysemy and explore how participants in their field struggle with it, too. This would mean drawing together the interactive, institutional and associationist issues at the heart of value as "language and the actions into which it is woven" (Wittgenstein 1953, para. 7).

Some references for moving forward

There have been studies that, forced by the ubiquity of problems associated with the polysemy of value, have come to deal with it in productive ways. They manage to come to some recognition of the polysemy of value as a problem within both the activities of the field and their own descriptive language. These studies should serve as first reference points for a reformulation of valuation studies.

Navarro-Aguiar (2017) has put forth a first good example in his account of product designers at the Volvo Group, in which he makes a connection between valuation and strategy-practices. While much of his case study is framed as associationist, the focus on strategy ultimately leads in a different direction. Navarro-Aguiar tells the story of how product designers set up a meeting with upper management in which they hoped to persuade them to give design a more significant position within the organisation. This was supposed to be an "obligatory passage point" (Callon 1984), a "theatre of proof" (Latour 1988) or an opportunity for "tasting/testing" the value of design (Hennion 2015). A brief was specifically prepared and circulated for that purpose, which they hoped would enrol new stakeholders. For several reasons, some of which are circumstantial, this attempt failed and provoked more resistance from other departments. As a result, product designers had to shift gears and engage in a series of smaller adjustments and services targeted at middle management.

Two approaches were crucial in this alternative strategy. First, designers developed a scoring device to make design features comprehensible to engineers. This resonates with the literature on quantification and measurement in valuation studies (Espeland and Lom 2015) and resembles a practical orientation of participants towards the institutionalist grammar of value, moving from one institutional frame (formal meetings) to another (numerical "valuation devices"). Second, they engaged in a range of "soft contacts" with potential allies, delivering on specific projects and inviting their allies to their design studio. In that way, "rhetorical persuasion was achieved through participation, not through words or numbers" (Navarro-Aguiar 2017: 246). While Navarro-Aguiar does not go into as much detail as a genuinely interactionist grammar would demand, he clearly hints at instances in which some types of activity (collaborating on projects, informal conversations, etc.) are turned into instances of valuation. It could be insightful to look even more closely at how these interactions are turned into valuations (not in form, but in effect), especially given that participants explicitly try to keep these activities out of the institutional contexts that are usually on the radar of an institutionalist grammar of value.

The important points are not so much in the details of the story, but the heterogenous strategy underlying the designers' valuation efforts. Following recent scholarship in strategy-as-practice (Kornberger 2017), Navarro-Aguiar emphasises how designers could not follow one path, but had to adjust to occasioned circumstances and engage in several activities and sites simultaneously. Strategy, in this understanding, is not centrally planned but a result of partial adjustments to achieve "effective persuasion and dissuasion" (Navarro-Aguiar 2017: 74). Some moments turned out to be privileged in hindsight, but even then, the way designers managed to valorise their work had no special venues and only rare moments in which recognisable "valuation" took place. On the contrary, instances like their big meeting with upper management, which to outsiders intuitively looks like a moment of valuation, proved to be ineffective. Such an outright practice of valuation had to be suspended in favour of more covert activities. Navarro-Aguiar equally explains that practices of quantification were "a matter of manoeuvring around an organisational realpolitik" (Navarro-Aguiar 2017: 198) and "depended less on 'actors" belief in its objectivity" (Navarro-Aguiar 2017: 199). The scoring device constituted an intuitively recognisable practice of valuation, whose more strategic effect, however, was to gather different communities of practice in specific frontstage moments, while allowing the designers to continue their work on the backstage (Goffman 1959). If research in valuation was to focus only on the practices that intuitively and recognisably appear as valuations, it is going to miss the strategic importance of these other activities.

A second point of reference can be found in a study by Lury and Marres (2015), in which they develop the concept of "objectual practice" (Knorr-Cetina 1997) with a view to better understanding valuation in digital environments. They defend a Deweyan understanding which "locates valuation (…) beyond or before the realm of practical action. Valuation is not only something that is 'done'; it is something that happens, or is happening" (Lury and Marres 2015: 237). Making action the secondary phenomenon does not sit well with any notion of "doing valuation". Lury and Marres's account resembles the associationist grammar, in that they emphasise the importance of "environmental occasions" (Lury and Marres 2015: 237). They do not, however, show an interest for any ontological commitments or a search to locate the source of value. Just as in the strategy-in-practice perspective of Navarro-Aguiar, they emphasise that value emerges not necessarily where valuation is visible, made explicit and intuitively intelligible. Instead, there is discontinuity between the environment that makes things valuable and the actions of valuation.

Lury and Marres also claim that:

> One of the most significant characteristics of contemporary objectual valuation is social-ability, where the production of sociality is an -ability, a capacity that is rendered technically possible in processes of problematization and selection. This is not merely to say that objectual valuation produces or creates the social, but that the accomplishment of objectual valuation is to render sociality a structural possibility, a latent and never finished potential for processes of valuation. (Lury and Marres 2015: 250).

I take this to mean that what has traditionally been seen as the domain of sociology – "the social", social practices and institutions

(Knorr-Cetina 1997) – should be reconceived as a matter of abilities. The abilities of valuation direct the attention away from the "practices of valuation" towards what "render(s) sociality a structural possibility, a latent and never finished potential for processes of valuation".[1]

Maybe then, if we were to follow the cues provided by Navarro-Aguiar, and Lury and Marres, the reformulation of valuation studies entails moving past the rhetorical trope that favours valuation (the verb) over value (the noun). The problem of valuation/value is, then, only partially expressed through the three grammatical forms described here. As observers, we are able to see and describe this problem at work in the interactions of participants, in the formats of institutions, and in the experiences within heterogeneous material–semiotic networks. Each of these grammars displays distinct types of valuation practices and the work of students of valuations depends on these practices being intuitively intelligible. There should be nothing mysterious or hidden about somebody saying "I like it" in an interaction, or within the institutional format of a design meeting, or as a matter of experiencing the shifting shapes and materials in front of him/her. What Navarro-Aguiar's study demonstrates is that there is still something mysterious remaining about the problem of valuation/value, something that slips away from those practices of valuation and requires both the participants he observed and valuation scholars as a whole to move from one grammar of valuation to another. What he observes as the necessity for strategy is, I would contend, a result of the polysemy of value.

Conclusion

The polysemy of value is a problem that will stay with us. There is little point in denying the way terms work in ordinary as well as scholarly contexts. How seriously we take this problem and how we let it affect research is not a trivial matter. The suggestion presented

[1] Lury and Marres's suggestion to reformulate the problems of sociology in terms of "social-ability" tentatively suggests a new look at valuation/value. As an "-ability", it is possible to speak not primarily in terms of nouns or verbs, but adjectives: something is valuable, as in "with value", or value-able, i.e. in a position to be valued, or value-able as in "they are able to value". In a more recent book on "problem spaces", Lury plays with similar linguistic constructions of "knowledge-ability", "answer-ability" and "response-ability" (Lury 2020). Maybe rather than being stuck with fragmented or smothering understandings of value/valuation, there is something productive in adopting such neologisms. In this vein, "value-ability" would neither be an ordinary expression, that refers to a concrete, intuitively grasped scene of value/valuation, nor an abstract umbrella term. Whether or not we pursue such paths in our linguistic reformulation of valuation studies is ultimately less important, however, than the overall goal of finding descriptive avenues that recognise the polysemy of value as a real issue at the heart of valuation studies rather than as a mere inconvenience.

here was to see the polysemy of value as an issue at the heart of a potential reformulation of valuation studies. The problem with values is then also a problem within language.

Polysemy is not an inconvenience in this view, but a marker of a real issue. A ritualistic acknowledgement that value is a notoriously difficult term is not enough, if valuation scholars then proceed as if it had no consequences. Linguistic ambiguity runs the risk of becoming a pretext to use value as a container concept and include a range of issues that might just as well run under different banners like economic sociology, sociology of science, design research. For valuation studies to be reformulated as a domain of research it should have some clarity over a set of its problems and questions, and not come down to "the social construction of 'x'", in which "x" = "value", which is in turn defined anew in each new case study. Polysemy will, otherwise, unrecognisably fragmentise valuation studies as a whole.

The answer suggested here for the polysemy of value is not to agree on a shared definition of value. Such an attempt likely leads to the smothering of differences that we are easily able to attend to in ordinary language use (Ryle 2015). The grammatical investigations in this article are not only a countermeasure to fragmentation, but also to a general "sociology of value" (Heinich 2017, 2020). The interactionist, institutionalist and associationist grammars of value are different ways to address value through which scholars can address the problem of value in social life. In each of them value/valuation is rendered intuitively intelligible for both participants and observers. While the terms value or valuation may be used in all of them, the ways they operate are grammatically different. As a result, value/valuation appears as part of ordinary interactions, as much as they are part of explicit institutional formats, as well as the experience of acting in and through material–semiotic associations. Value is too rich and multifaceted to be reduced to one of these grammars and their corresponding social practices. We know this intuitively in ordinary language use, we should not forget in theorising. Acknowledging the polysemy of value, therefore, should be at the centre of any reformulation of valuation studies.

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References

Adams, Robin S., and Junaid A. Siddiqui. 2016. *Analyzing Design Review Conversations*. West Lafayette, IN: Purdue University Press.

ATELIER (Project) (ed.). 2011. *Design Things*. Cambridge, MA: MIT Press.

Austin, John L. 1962. *How to Do Things with Words*. Oxford: Oxford University Press.

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

Bidet, Alexandra. 2020. "Economizing as Exploring Valuations." *Valuation Studies* 7(1): 123–150.

Bidet, Alexandra, and François Vatin. 2013. "Acteur et mesure au travail." In *Traité de Sociologie Économique*, edited by Philippe Steiner and François Vatin, 711–747. Paris: PUF.

Bigger, Patrick, and Morgan Robertson. 2017. "Value Is Simple. Valuation Is Complex." *Capitalism Nature Socialism* 28(1): 68–77.

Billig, Michael. 2013. *Learn to Write Badly: How to Succeed in the Social Sciences*. Cambridge: Cambridge University Press.

Board of Editors. 2020. "Towards a Reformulation." Valuation Studies 7(1): 1–2.

Bogusz, Tanja. 2018. "Bourdieu and Dewey on Research Practice and Cooperation." In *Questions of Practice in Philosophy and Social Theory*, edited by Anders Buch and Theodore R. Schatzki, 157–175. New York and London: Routledge.

Boltanski, Luc. 2011. *On Critique: A Sociology of Emancipation*. Cambridge; Malden, MA: Polity Press.

Boltanski, Luc, and Arnaud Esquerre. 2020. *Enrichment: A Critique of Commodities*. Cambridge ; Medford, MA: Polity Press.

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

Boztepe, Suzan. 2007. "User Value: Competing Theories and Models." *International Journal of Design* 1(2): 55–63.

Brighenti, Andrea Mubi. 2018. "The Social Life of Measures: Conceptualizing Measure–Value Environments." *Theory, Culture & Society* 35(1): 23–44.

Brosch, Tobias, and David Sander. 2016. "From Values to Valuation: An Interdisciplinary Approach to the Study of Value." In *Handbook of Value: Perspectives from Economics, Neuroscience, Philosophy, Psychology and Sociology*, edited by Tobias Brosch and David Sander, 397–404. Oxford: Oxford University Press.

Bryant, Chris, Caspar Rodgers, and Tristan Wigfall (eds.). 2019. *New Modes: Redefining Practice*. Oxford: John Wiley & Sons.

Büscher, Monika. 2006. "Vision in Motion." *Environment and Planning A: Economy and Space* 38(2): 281–299.

Büscher, Monika, Gunnar Kramp, and Peter Gall Krogh. 2003. "In Formation: Support for Flexibility, Mobility, Collaboration, and Coherence." *Personal and Ubiquitous Computing* 7(3–4): 136–146.

Callon, Michel. 1984. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." *The Sociological Review* 32(1): 196–233.

Caracciolo, Marco. 2014. *The Experientiality of Narrative: An Enactivist Approach*. Berlin and Boston, MA: De Gruyter.

Cassin, Barbara, Emily Apter, Jacques Lezra, and Michael Wood (eds.). 2014. *Dictionary of Untranslatables: A Philosophical Lexicon*. Princeton, NJ: Princeton University Press.

Dewey, John. 1939. *Theory of Valuation*. Chicago, IL: Chicago University Press.

Dubuisson, Sophie, and Antoine Hennion. 1996. *Le Design: l'objet dans l'usage : La relation objet-usage-usager dans le travail de trois agences*. Paris: Presses de l'École des mines.

Eco, Umberto. 1986. *Semiotics and the Philosophy of Language*. Bloomington, IN: Indiana University Press.

Enfield, Nick J., and Jack Sidnell. 2017. *The Concept of Action.* Cambridge: Cambridge University Press.

Espeland, Wendy Nelson, and Stacy E. Lom. 2015. "Noticing Numbers. How Quantification Changes What We See and What We Don't." In *Making Things Valuable*, edited by Martin Kornberger, Lise Justesen, Jan Mouritsen, and Anders Koed Madsen, 18–37. Oxford: Oxford University Press.

Farías, Ignacio. 2015. "Epistemic Dissonance: Reconfiguring Valuation in Architectural Practice." In *Moments of Valuation. Exploring Sites of Dissonance*, edited by Ariane Berthoin Antal, Michael Hutter, and David Stark, 271–289. Oxford: Oxford University Press.

Farías, Ignacio, and Alex Wilkie (eds.). 2015. *Studio Studies: Operations, Topologies & Displacements*. London and New York: Routledge.

Fisher, Thomas. 2000. *In the Scheme of Things: Alternative Thinking on the Practice of Architecture*. Minneapolis, MN: University of Minnesota Press.

Forster, Michael N. 2004. *Wittgenstein on the Arbitrariness of Grammar*. Princeton, NJ and Oxford: Princeton University Press.

Garfinkel, Harold. 1964. "Studies of the Routine Grounds of Everyday Activities." *Social Problems* 11(3): 225–250.

Garfinkel, Harold. 1967. *Studies in Ethnomethodology*. Cambridge: Polity Press.

Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York: Anchor.

Goffman, Erving. 1986. *Frame Analysis: An Essay On the Organization of Experience*. Boston, MA: Northeastern University Press.

Goldberger, Paul. 2009. *Why Architecture Matters*. New Haven, CT: Yale University Press.

Gomart, Emilie, and Antoine Hennion. 1999. "A Sociology of Attachment: Music Amateurs, Drug Users." *The Sociological Review* 47(1_suppl): 220–247.

Gond, Jean-Pascal, Laure Cabantous, Nancy Harding, and Mark Learmonth. 2016. "What Do We Mean by Performativity in Organizational and Management Theory? The Uses and Abuses of Performativity." *International Journal of Management Reviews* 18(4): 440–463.

Goodwin, Charles. 1994. "Professional Vision." *American Anthropologist* 96(3): 606–633.

Greimas, Algirdas-Julien, and Julien Courtès. 1986. *Sémiotique: Dictionnaire raisonné de la théorie du langage*. Paris: Hachette.

Guggenheim, Michael. 2020. "How to Use ANT in Inventive Ways so That Its Critique Will Not Run out of Steam?" In *The Routledge Companion to Actor-Network Theory*, edited by Ignacio Farias, Celia Roberts, and Anders Blok, 64–72. London and New York: Routledge.

Heinich, Nathalie. 2017. *Des valeurs. Une approche sociologique*. Paris: Gallimard.

Heinich, Nathalie. 2020. "A Pragmatic Redefinition of Value(s): Toward a General Model of Valuation." *Theory, Culture & Society* 37(5): 75–94.

Helgesson, Claes-Fredrik, and Fabian Muniesa. 2013. "For What It's Worth: An Introduction to Valuation Studies." *Valuation Studies* 1(1): 1–10.

Hennion, Antoine. 1989. "An Intermediary between Production and Consumption: The Producer of Popular Music." *Science, Technology, & Human Values* 14(4): 400–424.

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

Hennion, Antoine. 2003. *Music and Mediation: Towards a New Sociology of Music*. London: Routledge.

Hennion, Antoine. 2004. "Pragmatics of Taste." In *The Blackwell Companion to the Sociology of Culture*, edited by Mark Jacobs and Nancy Hanrahan, 131–144. Oxford; Malden, MA: Blackwell.

Hennion, Antoine. 2015. "Paying Attention: What Is Tasting Wine About?" In *Moments of Valuation: Exploring Sites of Dissonance*, edited by Ariane Berthoin Antal, Michael Hutter, and David Stark, 37-56. Oxford: Oxford University Press.

Hennion, Antoine. 2017. "From Valuation to Instauration: On the Double Pluralism of Values." *Valuation Studies* 5(1): 69–81.

Hennion, Antoine. 2019. "Objects, Belief, and the Sociologist: The Sociology of Art as a Work-To-Be-Done." In *Roads to Music Sociology*, edited by Alfred Smudits, 41–60. Wiesbaden: Springer.

Hirschauer, Stefan. 2001. "Ethnografisches Schreiben und die Schweigsamkeit des Sozialen. Zu einer methodologie der Beschreibung." *Zeitschrift für Soziologie* 30(6): 429–451.

Houdart, Sophie. 2008. "Copying, Cutting and Pasting Social Spheres." *Science & Technology Studies* 21(1): 47–63.

Houdart, Sophie, and Chihiro Minato. 2009. *Kuma Kengo: An unconventional monograph*. Paris: Editions Donner Lieu.

Hutchby, Ian, and Robin Wooffitt. 1998. *Conversation Analysis: Principles, Practices, and Applications*. Cambridge; Malden, MA: Polity Press.

Hutter, Michael. 2015. "Dissonant Translations. Artistic Sources of Innovation in Creative Industries." In *Moments of Valuation: Exploring Sites of Dissonance*, edited by Ariane Berthoin Antal, Michael Hutter, and David Stark, 57–88. Oxford: Oxford University Press.

Hutter, Michael, and Ignacio Farías. 2017. "Sourcing Newness: Ways of Inducing Indeterminacy." *Journal of Cultural Economy* 10(5): 434–449.

Iedema, Rick. 2001. "Resemiotization." *Semiotica* 137(1): 23–39.

Knorr-Cetina, Karin. 1997. "Sociality with Objects: Social Relations in Postsocial Knowledge Societies." *Theory, Culture & Society* 14(4): 1–30.

Kornberger, Martin. 2017. "The Values of Strategy: Valuation Practices, Rivalry and Strategic Agency." *Organization Studies* 38(12): 1753–1773.

Krämer, Hannes. 2014. *Die Praxis der Kreativität: eine Ethnografie kreativer Arbeit. Gesellschaft der Unterschiede*. Bielefeld: transcript.

Latour, Bruno. 1988. *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press.

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

Latour, Bruno. 2007. "To Modernize or to Ecologize? That Is the Question." In *Technoscience: The Politics of Interventions*, edited by Kristin Asdal, Brita Brenna, and Ingunn Moser, 249–272. Oslo: Unipub.

Law, John. 2004. A*fter Method: Mess in Social Science Research*. London and New York: Routledge.

Law, John, and John Urry. 2004. "Enacting the Social." *Economy and Society* 33(3): 390–410.

Luck, Rachael. 2012. "'Doing Designing': On the Practical Analysis of Design in Practice." *Design Studies* 33(6): 521–529.

Luck, Rachael. 2014. "Seeing Architecture in Action: Designing, Evoking, and Depicting Space and Form in Embodied Interaction." I*nternational Journal of Design Creativity and Innovation* 2(3): 165–181.

Luff, Paul, Christian Heath, and Karola Pitsch. 2009. "Indefinite Precision: The Use of Artefacts-in-Interaction in Design Work." In *The Routledge Handbook of Multimodal Analysis*, edited by Jewitt Carey, 213–222. London: Routledge.

Lury, Celia. 2020. *Problem Spaces: How and Why Methodology Matters*. Cambridge; Medford, MA: Polity Press.

Lury, Celia, and Noortje Marres. 2015. "Notes on Objectual Valuation." In *Making Things Valuable*, edited by Martin Kornberger, Lise Justesen, Anders Koed Madsen, and Jan Mouritsen, 232–256. Oxford: Oxford University Press.

Lymer, Gustav. 2013. "Assessing the Realization of Intention: The Case of Architectural Education." *Human Studies* 36(4): 533–563.

Lymer, Gustav, Jonas Ivarsson, and Oskar Lindwall. 2009. "Contrasting the Use of Tools for Presentation and Critique: Some Cases from Architectural Education." I*nternational Journal of Computer-Supported Collaborative Learning* 4(4): 423–444.

Mondada, Lorenza. 2004. "Ways of 'Doing Being Plurilingual' in International Work Meetings." In S*econd Language Conversations*, edited by Gardner Rod and Wagner Johannes, 27–60. London: Continuum.

Mondada, Lorenza. 2012. "Video Analysis and the Temporality of Inscriptions within Social Interaction: The Case of Architects at Work." *Qualitative Research* 12(3): 304–333.

Muniesa, Fabian. 2014. *The Provoked Economy: Economic Reality and the Performative Turn*. London and New York: Routledge.

Murphy, Keith M. 2003. "Building Meaning in Interaction Rethinking Gesture Classifications." *Crossroads of Language, Interaction, and Culture* 5: 29–47.

Murphy, Keith M., Jonas Ivarsson, and Gustav Lymer. 2012. "Embodied Reasoning in Architectural Critique." *Design Studies* 33(6): 530–556.

Navarro-Aguiar, Ulises. 2017. *Negotiating the Value(s) of Design(Ing): An Organisational Inquiry*. Gothenburg: University of Gothenburg.

Oak, Arlene. 2011. "What Can Talk Tell Us about Design?: Analyzing Conversation to Understand Practice." *Design Studies* 32(3): 211–234. doi:10.1016/j.destud.2010.11.003.

Paine, Ashley, Susan Holden, and John MacArthur (eds.). 2021. *Valuing Architecture: Heritage and the Economics of Culture*. Amsterdam: Valiz.

Pomerantz, Anita. 1984. "Agreeing and Disagreeing with Assessments: Some Features of Preferred/Dispreferred Turn Shaped." In S*tructures of Social Action: Studies in Conversation Analysis*, edited by J. Maxwell Atkinson and John Heritage, 57–101. Cambridge: Cambridge University Press.

Potthast, Jörg. 2017. "'Sollen Wir Mal Ein Hochaus Bauen?' Das Architekturbüro Als Labor Der Stadt." In *Sollen Wir Mal Ein Hochhaus Bauen? Faksimileausgabe*, edited by Jörg Potthast, 1–84. Berlin: Botopress.

Reckwitz, Andreas. 2002. "Toward a Theory of Social Practices: A Development in Culturalist Theorizing." E*uropean Journal of Social Theory* 5(2): 243–263.

Ryle, Gilbert. 2015. Dilemmas: The Tarner Lectures 1953. *Cambridge Philosophy Classics edn*. Cambridge: Cambridge University Press.

Sacks, Harvey. 1992. *Lectures on Conversation: Volumes I & II*. Edited by Gail Jefferson. Oxford: Blackwell.

Sacks, Harvey, Emanuel A. Schegloff, and Gail Jefferson. 1978. "A Simplest Systematics for the Organization of Turn-Taking for Conversation." *Language* 50(4): 696–735.

Samuel, Flora. 2018. *Why Architects Matter: Evidencing and Communicating the Value of Architects*. London: Routledge.

Schatzki, Theodore R, Eike von Savigny, and Karin Knorr-Cetina (eds.). 2005. *The Practice Turn in Contemporary Theory*. London; New York (NY): Routledge.

Serres, Michel. 1982. *The Parasite*. Baltimore, MD; London: Johns Hopkins University Press.

Sharrock, Wes. 1995. "Ethnographic Work." *The Discourse Analysis Research Group Newsletter* 11(1): 3–8.

Silverman, David. 1998. *Harvey Sacks: Social Science and Conversation Analysis*. New York: Oxford University.

Stark, David. 2009. *The Sense of Dissonance: Accounts of Worth in Economic Life*. Princeton, NJ: Princeton University Press.

Strandvad, Sara Malou. 2014. "Contingencies of Value: Devices and Conventions at a Design School Admission Test." *Valuation Studies* 2(2): 119–151.

Streeck, Jürgen. 2008. "Depicting by Gesture." *Gesture* 8(3): 285–301.

Styhre, Alexander. 2011. "The Architect's Gaze: The Maintenance of Collective Professional Vision in the Work of the Architect." *Culture and Organization* 17(4): 253–269.

Teil, Geneviève, and Antoine Hennion. 2004. "Discovering Quality or Performing Taste? A Sociology of the Amateur." In *Qualities of Food*, edited by Mark Harvey, Andrew McMeekin, and Alan Warde, 19–37. Manchester and New York: Manchester University Press.

Tsing, Anna Lowenhaupt. 2005. F*riction: An Ethnography of Global Connection*. Princeton, NJ: Princeton University Press.

Waibel, Désirée, Thorsten Peetz, and Frank Meier. 2021. "Valuation Constellations." *Valuation Studies* 8(1): 33–66.

West, Candace, and Sarah Fenstermaker. 1995. "Doing Difference." *Gender & Society* 9(1): 8–37.

Wittgenstein, Ludwig. 1953. *Philosophical Investigations. Trans. G. E. M. Anscombe*. Oxford: Blackwell.

Yaneva, Albena. 2005. "Scaling Up and Down. Extraction Trials in Architectural Design." *Social Studies of Science* 35(6): 867–894.

Yaneva, Albena. 2008. "How Buildings 'Surprise': The Renovation of the Alte Aula in Vienna." *Science Studies* 21(1): 8–28.

Yaneva, Albena. 2009a. *The Making of a Building: A Pragmatist Approach to Architecture*. Oxford; New York: Peter Lang.

Yaneva, Albena. 2009b. "Making the Social Hold: Towards an Actor-Network Theory of Design." *Design and Culture* 1(3): 273–288.

Yaneva, Albena. 2013. *Made by the Office for Metropolitan Architecture: An Ethnography of Design*. Rotterdam: 010 Uitgeverij.

Yaneva, Albena. 2017. *Five Ways to Make Architecture Political: An Introduction to the Politics of Design Practice*. New York: Bloomsbury Academic.

Yaneva, Albena. 2020. C*rafting History: Archiving and the Quest for Architectural Legacy*. Ithaca, NY; London: Cornell University Press.

Johannes Coughlan is a PhD student and research assistant at the Humboldt-Universität zu Berlin. His research interests include cultural sociology, science and technology studies, architecture and design studies, and interpretive methodology. In his dissertation, he investigated the social construction of value in architectural practices. He studied architects at work through ethnographic field notes, interviews and video recordings for a period of six months. His research aims to show how mundane interactions and the use of equipment (magnet walls, tracing paper, models) can be a vantage point from which to discuss the ways architectural work negotiates its own value and the value of its products.