

PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a preprint version which may differ from the publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/213587>

Please be advised that this information was generated on 2020-11-24 and may be subject to change.

Performativity as the counterflow of actualisation. Elaborating the Vosselman's relational ontology of accounting based on the 'performativity thesis'

Forthcoming in: *De performatieve professor. Liber Amicorum voor Ed Vosselman*, Aernoudts Roeland, Minnaar Reinald, Visser Max, Wagenveld Koos (Eds), Radboud University, Nijmegen, p. 74-84

Arnoud Lagendijk and Freek de Haan

Accounting, argues Vosselman (2014, p. 197): "is not performative in the sense that it is in the hands of 'priests' that, through discursive strategies, try to convince others that the accounting-representations reflect a (desired) reality, but through discursive material practices and materialisations it intervenes in the construction of actions and actors". The spread and intrusion of accounting cannot be reduced to simply the work of ideology, beliefs and values. While ideological work plays a role, the main vehicle is through materialisation, moulding actions and actors, thus shaping the 'social' and 'organisational' of human and non-human co-existence and entanglement. Accountability should not be seen as a totalising affair rooted in a discursive hegemony, but as a multifarious mode of intervention. An important aspect of this intervention is the 'performativity' of accounting practices, that is, the way these practices recursively contribute to object and subject formation and materialisation. What Vosselman does not spell out are the different paths along which performativity and materialisations unfold. This chapter will shed light on these paths taking inspiration from Deleuze and Guattari's (1988) metaphysical notion of 'actualisation'.

The starting point for actualisation is that, in its fullness, materiality is essentially withdrawn, what Deleuze and Guattari describe as a 'virtual' world brimming with potentiality. Actualisation refers to the attainment and enactment of expressive forms, semiotic and semantic, giving materiality actual shape, functionality and mobility. Between the virtual and actual, there is constant movement, constant conversion (Buchanan, 2015). In it through these conversions, consequently, that objects/subjects emerge and make a difference to the world. Hence objects/subject gain agency and become 'performative'. What is more, this dynamism induces an evolutionary path of material development, giving rise to ever more complex and powerful expressive forms, functionality and mobility. Actualisation thus fuels trajectories of what is called 'ontogenetic becoming' (Ricart, 2013). While these trajectories are open-ended and variegated, they manifest certain moments ushering in radically new forms of realities, presenting major steps in the becoming of the world. Accounting, as acts based primarily on numbers and accompanying semiotic tools, can be understood as one such pervasive step. Through accounting, a previously hidden, only potential way of engaging with and moulding modern organisations and businesses has been brought to life, featuring transparency, traceability, and means-ends thinking (Muniesa, Millo, & Callon, 2007). As will be discussed below, accounting can be understood as the culmination of four trajectories of actualisation.

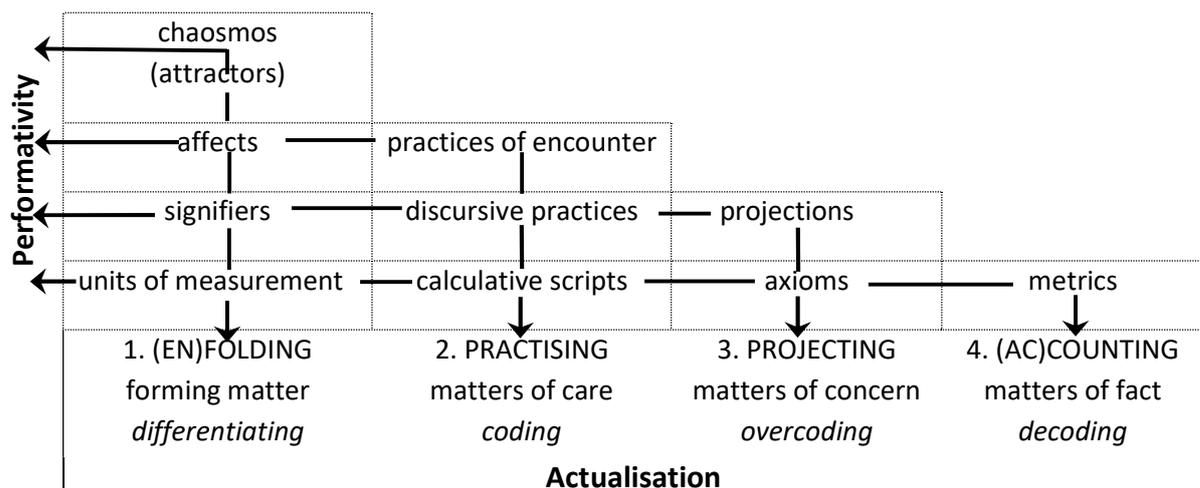
Four trajectories of actualisation

Actualisation entails the evolutionary trajectory from the primordial material state of the universe, what Deleuze and Guattari (1988) describes as 'chaosmos', to higher layers of order, capacity and

reach. This material evolution can also be characterised as a fundamental process of “ontogenetic becoming” in which the attainment of ordering and structuring itself is subject to evolution. In the words of Ricart (2013, p. 56), “[o]ntogenetic orders of potentialities as these units come together within a higher order collective and a larger structured becoming”. Moving from layer to layer, more complex, further actualised forms of order are created, reached by passing critical points of transformation. Such transformation does not do away with previous topologies of stabilisation and ordering, but overlays it, creating all kinds of interrelations and interdependencies. The notion of ‘trajectories of actualisation’ holds that these transformations are not induced by a fully formed empirical actuality, following given transcendental ordering principles. Rather, the underlying causal mechanisms present virtual yet immanent forces that progressively emerge from processes of actualisation, giving rise to ontogenetic becoming.

Drawing on Heidegger, Deleuze and Guattari, ontogenetic becoming is pictured as continual conversion between the virtual (withdrawn, concealed) and the actual (revealed), and between matter and form, resulting in a ‘double articulation’ of existential matter. Through time, material existence has achieved more advanced and complex orders, which can be traced back to four trajectories of actualisation (Lagendijk, Van Melik, & De Haan, 2014). The four trajectories are labelled here as ‘(en)folding’, ‘practising’, ‘interpreting’ and ‘(ac)counting’, manifesting an accumulation of connections (Fig 1). These will be discussed successively in this order. Two movements are pivotal in shaping the trajectories. First, the advancement in ontogenetic becoming moving from lower to higher orders, through successive processes of actualisation. Second, the way ‘higher order’ actualisations, from metrics down to practices, provoke and frame transformations at ‘lower order’ layers, redefining ontological realities in recursive, dialectical and differential manners. It is this is recursivity which underpins ‘performativity’.

Figure 1 – Ontogenetic becoming through *trajectories of actualisation*



source: partly based on Lagendijk, Van Melik and De Haan (2014) and De Haan, 2018

Trajectory One: (en)folding.

The first trajectory maps the evolution of the core particles of matter, from the primordial soup of 'chaosmos' to the precisely circumscribed units of measurement. A primitive force here is the phenomenon of 'folding', the emergence of variation and inflections in a material plane, provoking new connectivities and potentialities (Deleuze & Strauss, 1991). Folds create distinctions while maintain continuity. Imaginative examples are the folding of a piece of paper creating ridges, valleys and new points of contact. Through folding, matter becomes organised around certain topological nodes, attractors, giving rise to higher-order material layers. An ensuing process is *enfolding*, the dynamic intersecting of different planes, and the connecting of different entities not through interaction, but through co-constituting entanglement or what Barad (2007) calls 'intra-action'. Things and bodies are not pre-given in this encounter, but shaped and aligned through it, deriving their identity and subjectivity *through* their multiple entanglements and enfoldings.

Chaosmos presents the most intensive space of reality, manifesting what Deleuze (2004) describes as 'pure difference', still free from fixation or functions. Folding yields a first becoming of distinctions and boundaries, creating objects and encounter. Intensive space thus morphs into affective space, in which certain objects are drawn to each other, helping to co-constitute and become each other, while also creating distinctions and separations. Deleuze and Guattari (1988) give the classical example of the co-constitution between wasp and orchid, with the wasp becoming-orchid and the orchid becoming-wasp. Similarly, co-constitutive are anglers and fish (Bear & Eden, 2011), accountants and ledgers, professors and scholarly texts, etc. What drives 'becoming' are capacities to affect and be affected, in a setting in which there are no a-priori fixed and given object identities. Ontologically speaking, *affects thus precede objects*. Yet, the becoming and co-constitution of objects gives rise to orders and hierarchies, and thereby questions of power and ethics. Like in a dance, it is the capacity to mutually affect that shapes and foregrounds the objects, the dancers, and their own configurations and hinterlands (Law, 2004). Orchids and wasps further adapt to and challenge each other, as do anglers and fish, accountants and their numbers, a professor and his scriptures, etc., all in their own actual setting.

The second step in ontogenetic evolution through (en)folding yields a new capacity of object formation, namely of linguistic capacities to capture and transform the world through *signifiers*. Obviously, such (speech) acts can only emerge out of cognitive bodies with the physical capacity of comprehending and uttering speech. Linguistic capacities help to sort, order and connect the world in a radically new way, providing meaning and creating new forms of creating presences and absences. Signifiers take on a fundamentally performative role as what Deleuze and Guattari (1988) call 'orderwords'. Through their pivotal position in proliferating semantic webs, signifiers gain reach and nodality, endowing them with authoritative meanings and relational expressivity. Order stems from the way 'orderwords' frame and transform the world in a particular way. While requiring continual work and effort, orderwords constitute discursive entities and their 'hinterland', what it means to be an 'individual', 'event' or 'institution', and what is brought to presence in the act. Signifiers thus create boundaries and divisions between what is acknowledged and translated and what is neglected and 'othered'. So, like affects precede objects, *linguistic communication precedes discursive entities*. Through their bodily enactment, moreover, signifiers also evoke sentiments, such as familiarity, confidence, trust and faith. This, importantly, shapes and advances the affective space

in which communication evolves and cognitive bodies intra-act, recursively affecting the role of 'orderwords'.

Obviously, the second step in ontogenetic evolution has been pivotal in the constitution of human societies. Linguistic capacities have massively contributed to the creation of tribes, technologies, organisations, institutions, as well as power hierarchies and hegemony. The second step in ontogenetic evolution has seriously widened the gap and manifestation between presence and absence, between the revealed and the concealed. However, due to the creative and poetic nature of language, this has never amounted to full control and discursive closure. In the margin of 'orderwords' and their key connections, there is always the option of expressing alternatives, of revealing the neglected and re-representing the Other. Although channelled and conditioned in all kinds of ways, material's deep inclination to variation, distinction and creativity perseveres in the layer of linguistics. A key role in this openness is played by 'boundary concepts (Star & Griesemer, 1989), allowing other realities to enfold in prevailing semantic webs, possibly transforming the common understanding and performance of key signifiers. How far this may go crucially depends on the specific scope and qualities of the discursive practices, further discussed below.

The fourth and final step in ontogenetic evolution also entails acts of capturing and transformation, but in a very different way, namely through reducing entities to numbers in metrical representations (accounting). Metrical units are definite, requiring fully aligned and attuned contexts. Unlike linguistic signifiers, they do not warrant continual translation. They only require smooth alignment. Consequently, once a system of accounting is in place and operational, metrics allow for observing and acting 'at a distance' without friction or adaptation. Metrics provide categorical information of predefined attributes of well-cut entities. Objects enrolled through these spaces are homogenised and commensurable, turned into 'immutable mobiles', facilitating the often immensely powerful work of 'centres of calculation' (Latour, 2005). The latter include the financial, logistical and organisational dashboards of companies, stock markets, statistical bureaus, traffic control centres, etc.

In their performativity, metrics induce a totalising fold. Where signifiers and their semantic webs manifest a certain openness and interpretative intensity and flexibility, metrics are fully extensive and unequivocal. Unlike signifiers, numbers do not exhibit depth or interpretative flexibility through which qualitative variations and alternative realities can gain visibility and perhaps even acknowledgement. On the contrary, to be visible at all, that is, to be accounted for, requires much effort of attuning a context towards the metrical system. This has been reinforced by digitalisation, accelerating the circulation of metrics while burdening users, from their own context, to fuel the system with data and perform in line with the system (Power, 2004). At the metric layer, apart from rupture (non-alignment), a context has no other option than to fold into the system. In a metrical world, accordingly, the divide between what is present and absent turns into a hard cut.

Trajectory Two: practices

The first trajectory described so far, pictured the major strides in matter and object formation through the creative-evolutionary force of (en)folding. This force has been accompanied and accelerated by a second trajectory, in which the capacities necessary to form and enact affects, signifiers and metrics have been coded and circulated. Practices are acts of coding, based on genes, memes, habits and scripts which inscribe and transfer enactment. Vosselman's daily activity patterns, from preparing to go work in the morning to all the work meeting, teaching, writing to the winding down in the evening, up to the very moment of brushing his teeth, invoke practices in which Vosselman takes part, in which he is enrolled. In doing so, he greatly benefits from centuries of coding and scripting of human and social behaviour, brought to him through strings of circulation and translation. Vosselman, indeed, gives the impression of being a man of routines, partly rooted in more or less conscious deliberations concerning effectivity, efficiency and morality, and partly in what has always felt good and is not pressing for change.

In more scholarly words, practices evolve through the development of media that take on catalytic and circulatory functions, resulting in creatively repetitive practices (Gurney, 2013). Such media consist of a mobile form of imprints that, once inscribed in a fitting site of practice, forges processes of reproduction, circulation and connection. Through rhythms of imprinting (in practices) and inscription (in new contexts), these media help to channel processes of entanglement into certain directions, to reduce intensities and variations of encounters, and to produce more stable, repeated shapes and forms, infusing more complexity and enhanced capabilities. Coding thus results in 'operationally closed' or 'autopoietic' systems of practice, as defined by Maturana and Varela (1980). The autopoietic nature of the coding, in turn, defines the placid boundaries of the catalytically linked cycles shaping entities and populations of bodies (e.g. Vosselman), tribes (economists), organisation (university), political institutions etc.

Consequently, ecologies of material cycles and practices emerge, which evolve through probing and groping processes of continuous variation and more-or-less accidental topological 'selection'. So, what starts with a world of unbound affects and connectivities (Trajectory One), gradually turns into a somewhat coherent and evolving bundles of practices (Trajectory Two). While steering practices in a particular direction, the creative and constructive nature of these ecologies remains vested in the impulses of affects and novel encounters, amongst non-human as well as human entities (and their hybrid entanglements). Ecologies of practices, accordingly, are oriented much more towards what actor-network thinkers call 'matters of care', (de La Bellacasa, 2011). Focusing more on the human dimension Müller (2008, p. 330) describes these practices originating from affect as "the creative embodiment of the extra-discursive, pre-cognitive aspects of the social".

In engendering social and organisational worlds, a fundamental role is played by *discursive* practices and *calculative* scripts, as mediating and circulating sites in which signifiers and numbers evolve and are put to work. In both cases, critical questions may be posed on the scripting, routinisation and devising, that is, on the coding *behind* the semantics and metrics. What imprints emerge and actualise from the development of signifiers and semantic webs on the one hand, and metrical units and systems on the other, and how are they captured through practices? Which agents and tools are enrolled, in what kind of intra-action and mutual entanglement? How do these entanglements affect the roles and identities of the actors/actants involved? What matters of care guide this enrolment

and the evolution of practices? More specifically, discursive practices prompt questions on modalities of communication: who can say what, when and how, how are statements interpreted, considered and processed? Calculative practices, on the other hand, raise questions on the methods of counting, calculating and the processing of numerical results. In an economic context, Hiss (2013, p. 235) describes the role of practices as follows: “calculative practices enable the definition, determination, categorization, measurement and standardization of objects (and particular processes) by linking them to the structures and rules of (...) markets”. For Vosselman (2014, p. 197), the practice of accounting re-presents by mediating between, and entangling actors and materiality (measuring actants), which “creates calculability in strategic and operational practices in markets and organisations and how it may change who and what counts”.

Undoubtedly, in our ontologically layered reality, practices play a pivotal role. They code, imprint, circulate and inscribe ways of encounter, speech and calculating, encompassing the main vehicles of ontogenetic becoming. Their strength stems from their mobility and adaptability. Their role in performativity, moreover, stems from the way they act in between matter and object formation on the one hand (Trajectory One) and projection and accounting on the other (Trajectories Three and Four). Much of our social world can be comprehended through a focus on practices and performativity!

Trajectory Three: projections

Like most senior academics, Vosselman participates in meetings planning and debating all sorts of departmental and Faculty programmes (teaching curricula, research ‘hotspot’, Honours programme). In our experience, Vosselman generally makes a great contribution to the communication by precisely capturing core issues and dilemmas, assessing them on the basis of pertinent values, norms and ambitions. What do course evaluation scores imply for the development of a curriculum? How can a research programme genuinely embrace interdisciplinarity? In doing so, he both invokes signifiers which are very present in the organisation (teaching quality, research interdisciplinarity) and signifiers which are less present, both of moral and practical nature.

In our vocabulary, at the (third) layer of projection, versatile but myopic proliferation of practices gives way to distinction, reflection and conscious interpreting and decision making. Interpreting is essentially based on the cognitive and linguistic capacities for projection, representation, meaning-making and anticipation. Accordingly, an intense, totally open, and ever-changing ecology of practices is overcoded and reduced to a ‘decidable level of discourse that excludes other possible meanings’ (Müller, 2008, p. 331). By providing them with wider meaning and legitimacy, overcoding catalyzes the otherwise groping evolution of practices and channels their variation. Through the performativity of speech act and discourse, selection of practices and materiality shifts from accidental to more-or-less deliberate.

In human communication, overcoding consists of chains of signification, in which meaning and the effect of meaning (projection, decision) is produced. The relation of signifiers to reality is not given, but results from the repetitive articulation in speech acts. To repeat, linguistic communication precedes discursive entities. Put more simply, *signifiers precede the signified*. Indeed, the emptier a signifier, the easier it is to turn into an ‘orderword’ with an expanding semantic web and extensive

reach. 'Quality', both for research and teaching, 'interdisciplinary' and 'sustainable' each present a kind of empty signifier. Through their reach, the latter entail a "founded only in itself - in its own act of enunciation" (Mouffe, 1998, p. 137). Thus charged, orderwords help us to make meaningful and effective observations, interpretations, and projections on future possibilities. This serves, in turn, to steer decisions, and to intervene in the world beyond the scope of single encounters, affects and circulating practices. The main motivation here is what Latour calls 'matters of concern'.

Through the normalising role of orderwords, chains of signification transform into stable systems of regimes of meaning, with their own patterns of presences and absences, exhibiting their own 'matters of concern'. However, as argued before, such a system is never fully closed. No regime can be fully hegemonic. The innate emptiness of signifiers and orderwords implies that their meaning, with the help of (often relentlessly) repeated speech acts, can be modified. Perhaps Vosselman's essays on alternative readings of 'accountability' will incite such a modification. Alternative realities can also be folded into current regimes with the help of boundary concepts (like 'impact' bridging academic and societal work). From a chain perspective, such an intervention often takes place in two steps. First, what is absent or othered is made present within the regime, turning from absent absence to present absence – one of the main tasks of critical academic work. This then introduces new 'matters of concern' fuelling alternative ('green', 'fair', 'responsible') projections. Second, an attempt is made to transform the *present absence* into a *present presence*, turning the alternative mainstream. Perhaps the most pervasive challenge here, also bearing on accountability, is the exposure of how neoliberal ideas of market dominance and the sanctity of competition have penetrated deeply into discursive regimes and their influence on 'everyday practices' within schools, workplaces, communities and even families. Countering this presents a major challenge for both scholarly work and activists' groups.

However, the scope for openness and counter-politics, what Vosselman (2014, p. 184) calls a "relational ontology that is in politics", is conditional. It depends on the extent to which orderwords have gained 'symbolic authority'. Orderwords may become so normalised that they move, within the prevalent regime of meaning, beyond (re)interpretation and practical contingency (Muniesa et al., 2007). Absent absences fail to become present. The result is, for the time being, a full acceptance of an orderword's symbolic meaning and reach. Such a status may be achieved in two ways. First, it may be rooted in discursive practices that, through strict control and intervention, weed out any dissenting voice. Such indoctrination breeds 'despotic signifiers' (Deleuze & Guattari, 1988). Second, signifiers may turn into axiomatic abstractions, rooted in formal logic rather than in an ongoing phenomenological and communicative confrontation with worlds of practice. A fitting example of such an abstraction is offered by the notions of the 'market' and 'competition'. As Callon (2008) argues, while views on the market and competition differ markedly, the terms themselves are taken for granted, referring to intrinsic and fixed parts of our modern world rather than to a contingent set of practices. This axiomatic stature of orderwords plays a fundamental role in the last trajectory of actualisation

Trajectory Four: metrics and (ac)counting

While interpretations and projections involve overcoding, adding discursive contents, metrics entail *decoding*, the subtraction of qualitative contents and the reduction of entities to numbers. Where signifiers evolve and circulate through laborious chains, metrics flow effortless through well-demarcated 'network spaces' (Law & Mol, 2001). In network spaces, due to the axiomatic nature of underlying signifiers, units of measurement perform as immutable-mobile 'objectivised truths', strengthening particular takes on what entails organisational or societal value and quality. Espeland and Stevens (2008, p. 432) assert that: "quantification facilitates a peculiarly modern ontology, in which the real easily becomes coextensive with what is measurable". In general, this foregrounds the economic (and the readily quantifiable non-economic), the individual framed within a numerical system, and the linear. Vosselman (2014, p. 197) aptly describe this reversal and ensuring reductionism as follows: "rather than turning absence into presence accounting turned presence into absence; it obscured all kinds of moral hazard in the network of relationships".

What is more, completing the fourfold of ontogenetic becoming, metrics only deal with the actual and concrete. Where both practices, with its adaptable cycle of imprinting and inscription, and projections, with its future exploration, embrace the possible (Genosko, 2002), metrics embrace a here-and-now factuality. In Latour's terms, matters of care and concern make way for matters of *fact*. Like chaosmos, there is nothing withdrawn in the world of metrics. However, while chaosmos owes this material concreteness to its state of pure difference, metrics owe this to their blindness for the outside world. In the words of Power (2004, p. 775): "Critical data that cannot be readily quantified are marginalized and rendered invisible, and proxy measures end up representing the thing itself". While, as explained before, due to its factuality, metrics are a source of great power and achievements, as manifested throughout our society, it also poses great dangers and challenges. The danger is that behavioural and organisational strategies and practices become fully devoted to coping with performance indicators, rankings and certifications, making metrics self-fulfilling without reaching the intended material effects. Organisational, societal and policy systems risk to become solely geared to meeting and extending quantifiable objective and targets. Not only are 'centres of calculation' seriously blind; supported by the lure of objectivity, rationality and aesthetics, and accompanying promises of modernity and progress, they run a serious risk of mistaking their pretentious selective views for an all-enlightening panoptic readings.

The linchpin here is performativity. Since we have reached the apex of ontogenetic becoming, there is no higher layer to recursively modify systems of metrics (Fig. 1). A higher level of selection is absent, although the particular nature of metrics may also bring about their own undoing. On the one hand any metric is haunted by its own contingency and therefore suggestive of its own undoing and of critical pathways through alternative projections and divergent encounters. On the other, there is the option of deliberate deconstruction, reflection and resistance. Such an act of resistance, moreover, needs to break metrics' performativity towards interpretations and projections. It also needs to unsettle ruling calculative scripts. It needs to carefully consider how (ac)counting practice enframe subjects and objects, and to what extent one should force the latter into a single frame of measurement. Opposition can only come, as Vosselman (2014, p. 195) illustrates, from an "emerging concerned group". Without opposition, as Introna (2009, p. 31) asserts building on Heidegger: "we [will] have all become 'standing reserve', on 'stand by' for the purposes of the network – enframed (...) by the calculative logic of our way of being" ..

Conclusion

This aim of this chapter was to revisit and elaborate Vosselman's reading of performativity-based accounting through the lens of actualisation. The story can be succinctly summarised in five points

1. The relational ontology advocated in Vosselman's paper may benefit from the ontological multiplicity implied by the fourfold of material folding, encounter/practice, interpretation/projection and metrics/accounting.
2. These four layers stems from a longwinded process of 'ontogenetic becoming', building on each other through a myriad of intersections and interrelations (Figure 1) in what are called 'trajectories of actualisation'.
3. In these trajectories, performativity presents a recursive counterflow in which higher-order layers strengthen their evolution by influencing lower-order layers: metrics shaping projections, which in turn shape the capacities of practices and folding.
4. Metrics and accounting hold the apex position, but without openness to other realities; the latter can only be achieved through unsettling axioms at the level of projections and system breakdown; a major challenge here is curtailing the performativity of metric systems.
5. Academic writings as Vosselman's paper hopefully make a contribution to this unsettling and a critical stance towards the role of metrics and accounting; however, given the magnitude of the challenge, and the pervasiveness of performativity, much more will be needed.

References (extracted from the bibliography, pp. 280-309)

- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*: Duke University Press.
- Bear, C., & Eden, S. (2011). Thinking like a fish? Engaging with nonhuman difference through recreational angling. *Environment and Planning D: Society and Space*, 29(2), 336-352.
- Buchanan, I. (2015). Assemblage theory and its discontents. *Deleuze Studies*, 9(3), 382-392.
- Callon, M. (2008). Economic markets and the rise of interactive agencements: from prosthetic agencies to habilitated agencies. In T. Pinch & R. Swedberg (Eds.), *Living in a material world: Economic sociology meets science and technology studies* (pp. 29-56). Cambridge, MA: MIT Press.
- de La Bellacasa, M. P. (2011). Matters of care in technoscience: Assembling neglected things. *Social Studies of Science*, 41(1), 85-106.
- Deleuze, G. (2004). *Difference and repetition*. New York: Continuum.
- Deleuze, G., & Guattari, F. (1988). *A thousand plateaus : capitalism and schizophrenia* (5th Repr. ed.). London: The Athlone Press.
- Deleuze, G., & Strauss, J. (1991). The fold. *Yale French Studies*(80), 227-247.
- Espeland, W. N., & Stevens, M. L. (2008). A sociology of quantification. *European Journal of Sociology/Archives Européennes de Sociologie*, 49(3), 401-436.
- Genosko, G. (2002). *Félix Guattari: an aberrant introduction*: A&C Black.
- Gurney, D. (2013). Sketches Gone Viral: From Watercooler Talk to Participatory Comedy. In R. Becker, N. Marx, & M. Sienkiewicz (Eds.), *Saturday Night Live* (pp. 254-274). Bloomington: Indiana University Press.
- Haan, F. de. (2018). Beyond the Elephant of Gentrification: relational approaches to a chaotic problem In L. Lees & M. Phillips (Eds.), *Handbook of Gentrification Studies*. Cheltenham Glos: Edward Elgar.
- Hiss, S. (2013). The politics of the financialization of sustainability. *Competition & Change*, 17(3), 234-247.
- Introna, L. D. (2009). Ethics and the speaking of things. *Theory, Culture & Society*, 26(4), 25-46.
- Lagendijk, A., Van Melik, R., & De Haan, H. E., H. Ploegmakers & S. Kayasu. (2014). Comparative approaches to gentrification: A research framework. *Tijdschrift Voor Economische En Sociale Geografie*, 105(3), 358-365.
- Latour, B. (2005). *Reassembling the Social. An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Law, J. (2004). *After method: Mess in social science research*: Routledge.
- Law, J., & Mol, A. (2001). Situating technoscience: An inquiry into spatialities. *Environment and planning. Part D, society and space*, 19, 609-621.
- Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and cognition : the realization of the living*. Dordrecht: D. Reidel Pub. Co.
- Mouffe, C. (1998). Deliberative democracy or agonistic pluralism? *Dialogue International Edition*(07-08), 9-21.
- Müller, M. (2008). Reconsidering the concept of discourse for the field of critical geopolitics: Towards discourse as language and practice. *Political Geography*, 27(3), 322-338.
- Muniesa, F., Millo, Y., & Callon, M. (2007). An introduction to market devices. *The sociological review*, 55(s2), 1-12.
- Power, M. (2004). Counting, control and calculation: Reflections on measuring and management. *Human Relations*, 57(6), 765-783.
- Ricart, E. (2013). From being to ontogenetic becoming: Commentary on analytics of the aging body. *Anthropology & Aging*, 34(3), 52-60.
- Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, 'Translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19, 387-420.
- Vosselman, E. (2014). The 'performativity thesis' and its critics: Towards a relational ontology of management accounting. *Accounting and Business Research*, 44(2), 181-203.