Exhibiting new materialisms and new realisms : the influence of contemporary anti-anthropocentric philosophies on 21st century curatorial practices

Exhibiting New Materialisms and New Realisms: the Influence of Contemporary Anti-Anthropocentric Philosophies on 21st Century Curatorial Practices

Valentina Ravaglia

PhD in Humanities and Cultural Studies
(ex London Consortium)
Birkbeck, University of London

Current version: 3 March 2024

I declare that the work presented in this thesis is my own. Where I have drawn from other sources, this has been indicated as appropriate.

This text follows the *MHRA Style Guide*, 3rd ed. (London: Modern Humanities Research Association, 2013).

Abstract

Recent anti-anthropocentric developments in philosophy, challenging the presumption that humanity occupies a focal and privileged position in the cosmos, have exerted an undeniable influence on artistic and curatorial practices, particularly in the past fifteen years. However, the exact nature and scope of these exchanges is yet to be clearly defined and systematically examined. This thesis traces a partial history of this phenomenon as a confluence of exhibition-making, art theory and aspects of philosophies that can be grouped under the rubrics of 'new materialisms' and 'new realisms', pinpointing core themes, evolving approaches, misunderstandings and underlying problems along the way. In doing so, I posit that by channelling art, science and philosophy as complementary ways of understanding the world, curatorial practices can play an essential role in revealing the mechanisms through which humans perceive and process reality. My argument is that the category of 'the curatorial' — a function of knowledge transmission — plays a key role in reframing one's position as a 'subject' tracing imaginary boundaries around 'objects'.

The core chapters of this thesis presents a number of case studies, beginning with *dOCUMENTA(13)* (2012) as an especially notable event in this partial history of 'new materialist exhibitions', followed by the exhibition *Les Immatériaux* (Centre Pompidou, Paris, 1985) as a key early example and focussing on a number of representative exhibitions taking place in Europe and the US in the 2000s and 2010s, in parallel with an analysis of critical responses and other relevant texts. These include *Making Things Public: Atmospheres of Democracy* (ZKM, Karlsruhe, 2005) and *Speculations on Anonymous Materials* (Museum Fridericianum, Kassel, 2013). Special attention is given to the curatorial activities of philosophers Bruno Latour and Robin Mackay/Urbanomic, as well as to the influence of Object-Oriented Ontology. Two theoretical chapters provide the foundations for a neomaterialist curatorial theory, beginning with the redefinition of a number of fundamental terms, such as 'sapience', 'art' and 'the curatorial'. The conclusion extrapolates a number of observations and guiding principles for curatorial practices to contribute to a reframing of humanity's position, and to do so in ways that can relate directly to urgent matters of ecology and politics.

Keywords: the Curatorial, New Materialisms, New Realisms, Speculative Realism, exhibition-making, transdisciplinarity

Table of Contents

List of Illustrations

Fig. 14, p. 108: Lyotard's adapted version of Lasswell's and Jakobson's communication models, showing the five-fold structure underpinning *Les Immatériaux* (orig. published in Thierry Chaput, 'Entrée en matière,' *Petit Journal*, 28 March–15 July 1985, Paris, p. 2).

Fig. 15, p. 109: The floorplan for *Les Immatériaux* as published on the exhibition catalogue, *Album et Inventaire* volume, n. p., and colour-coded to show the five thematic strands (plus the 'Labyrinth of Language'). From 'Les Immatériaux. Lumière matière et matériau', «*leurs lumières*» website, <http://www.ednm.fr/leurslumieres/?page_id=608> [accessed 13 October 2021].

Fig. 16, p. 110: *Les Immatériaux*, installation shot, Centre Georges Pompidou, Paris, 1985.

Fig. 17, p. 112: *Les Immatériaux*, installation shot showing a visitor wearing the wireless headset and prehending the scents presented in the 'Simulated Aroma' site. Photo by Jean-Claude Planchet.

Fig. 18, p. 114: *Les Immatériaux*, installation shot showing the interactive Minitel computers and, in the background, one of the many white mannequins dotting the exhibition.

Fig. 19, p. 117: *Les Immatériaux*, installation shot showing the computer-aided car prototyping in the 'Self-perpetuation' site.

Fig. 20, p. 118: *Les Immatériaux*, installation shot showing a *Télélumière* and electromagnetic spheres by Takis.

Fig. 21, p. 125: Bruno Latour during one of the talks/demostrations of *The Theater of Proof*, *Laboratorium*, Antwerp, 1999.

Fig. 22, p. 128: Installation view of *Laboratorium*'s main venue, Antwerp, 1999.

Fig. 23, p. 130: *Iconoclash. Beyond the Image Wars in Science, Religion, and Art*, ZKM, Karlsruhe, 2002, installation view showing artworks by Marcel Duchamp, Kasimir Malevich and Elaine Sturtevant.

Fig. 24, p. 131: *Making Things Public. Atmospheres of Democracy,* ZKM, Karlsruhe, 2005, installation view.

Fig. 25, p. 133: Michel Jaffrennou and Thierry Coduys, *The Phantom Public*, 2005.

Fig. 26, p. 135: *Making Things Public. Atmospheres of Democracy,* ZKM, Karlsruhe, 2005, installation view.

Fig. 27, p. 138: Publicity for the conference *Speculative Realism: A One Day Workshop*, Goldsmiths, University of London, 27 April 2007.

Fig. 28, p. 143: Pamela Rosenkranz, exhibition view of the works installed as part of *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

Fig. 29, p. 147: *Speculative Solution cards*, published by Urbanomic on the occasion of the premiere of Florian Hecker's *Speculative Solution* at *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

Fig. 30, p. 149: Pamela Rosenkranz, exhibition view of the works installed as part of *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

Fig. 31, p. 151: John Gerrard, *Lufkin (near Hugo, Colorado)*, 2009, exhibition view of the work installed in the room 'Art and the Sublime' as part of *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

Fig. 32, p. 153: *New York to London and Back — The Medium of Contingency*, Thomas Dane Gallery, 2011, installation view showing works by Alison Knowles, Pamela Rosenkranz and Raha Raissnia.

Fig. 33, p. 156: Robin Mackay and Reza Negarestani, *Unboxing the Machines. Toy Model AGI Playset*, 2018.

Fig. 34, p. 160: *Speculations on Anonymous Materials*, Museum Fridericianum, 2013, installation views with works by Yngve Holen and Pamela Rosenkranz.

Fig. 35, p. 161: *Speculations on Anonymous Materials*, Museum Fridericianum, 2013, installation views with works by Katya Novitskaya and Ken Okiishi.

Fig. 36, p. 164: *Speculations on Anonymous Materials*, Museum Fridericianum, 2013, installation views with works by Timur Si-Qin.

Fig. 37, p. 165: *nature after nature*, Museum Fridericianum, 2014, installation view works by Jason Loebs and Ajay Kurian.

Fig. 38, p. 166: *Inhuman*, Museum Fridericianum, 2015, installation view works by Oliver Laric and Nicolas Deshayes.

Fig. 39, p. 170: *Animism*, Haus der Kulturen der Welt, Berlin, 2012, installation views with historical documents and works by Daria Martin and Len Lye.

Fig. 40, p. 172: *Animism*, Haus der Kulturen der Welt, Berlin, 2012, installation view with Victor Grippo's *Tiempo, 2da. versión*, 1991 and *Les statues meurent aussi*, 1953, by Chris Marker and Alain Resnais.

Fig. 41, p. 174: *Animism*, Haus der Kulturen der Welt, Berlin, 2012, installation view with vitrines including documentary materials and Angela Melitopoulous and Maurizio Lazzarato's three-channel video installation *Assemblages*, 2010.

Fig. 42, p. 204: Three hand stencils found in the Maltravieso cave, Spain (colour-enhanced).

Fig. 43, p. 209: A brown stagemaker, also known as tooth-billed bowerbird (*Scenopoeetes dentirostris*) male arriving at his court with a new leaf. Atherton Tablelands, Wooroonooran National Park, Queensland, Australia. Photo: Tim Laman.

Fig. 44, p. 212: Judi Werthein, *Brinco*, 2005.

Fig. 45, p. 224: *c. 7,500* (curated by Lucy Lippard), 1973, installation view, Walker Art Centre, Minneapolis, Minnesota.

Fig. 46, p. 248: The former London gallery and headquarters of Arts Catalyst; installation view during the *Dreamed Native Ancestry [DNA]* exhibition, 2017.

Acknowledgements

I am endlessly grateful to Barry Curtis and Ben Cranfield for their guidance and saintly patience. I have not made it easy — for any of us!

Special thanks to Tom Trevatt, Matthew Gale, Helen O'Malley, Elvira Dyangani Ose, Andrea Lissoni, Sook-Kyung Lee, Laura Leuzzi and Lue Cuttiford, who have helped me complete this thesis in many different ways (some of which they may not be fully aware).

The most special of thanks goes to Jonathan Arnold, who conversely knows all too well.

Introduction

A number of recent developments in philosophy have brought the question of humanity's position with respect to the rest of the cosmos to the fore, complicating the question of our relationship with and access to 'reality' by challenging anthropocentrism as the default viewpoint. These anti-anthropocentric philosophical positions variously challenge the presumption that humanity and its ways of interfacing with reality occupy a focal and privileged position with respect to the universe. While not new, these tendencies have grown increasingly vocal since the 1990s, in parallel with an awareness of matters of ecological crisis and transhumanist discourses. They have also come to exert an undeniable influence on artistic and curatorial practices, particularly in the 2000s and 2010s. This thesis looks back at this moment of convergence, both as a historically/culturally situated phenomenon and as a source of unresolved, still very current theoretical questions, whose intersection with notions of 'the curatorial' in particular is yet to be discussed in depth.

In the chapters to follow I will analyse some key features and moments of this phenomenon, discussed as a particular confluence of exhibition-making, art theory and aspects of the heterogeneous network of theories I will refer to as 'new materialisms' and 'new realisms'. In doing so, I posit that by channelling art, science and philosophy as complementary ways of understanding the world, *curatorial practices can play an essential role in revealing the mechanisms through which humans perceive and process reality*. My argument is that the category of the curatorial — defined in this text as a function of knowledge transmission at large — can play a key role in reframing one's position as a subject tracing imaginary or arbitrary boundaries around 'objects', and thus in acknowledging and compensating for our cognitive biases while connecting our individual perspective to the much larger contexts and complexly interrelated systems in which we are deeply enmeshed.[1]

Reacting to, while often at the same time building upon, post-structuralist theories, particularly their overwhelming emphasis on language as the fundamental strategy for mediating and/or constructing reality through culture, new materialisms and new realisms (abbreviated hereafter to 'NM/NR') approach matters of epistemology and metaphysics through an understanding of reality existing first and foremost *outside* the human mind and of cognition as a kind of species-specific interface, often basing their positions on a critical

[1] See my Chapter 7, esp. pp. 220-3.

dialogue with current insights from science and technology. Their emphasis, in an *extremely* general sense, is thus on those aspects of reality and of our species' understanding of it that cannot be reduced to societal factors nor to human *logos* as if existing in isolation, with a commitment to exposing anthropocentrism and logocentrism as fundamentally baseless: a kind of self-centred ideology which has profound ecological ramifications and urgently needs to be challenged in every aspect of our experience. In this sense, to express anti-anthropocentric perspectives through cultural forms that are specific to humanity — artistic practices, but also philosophy itself, the formulations of science and everything in between — may appear on the surface to be a fundamentally paradoxical endeavour. Among other things, this text addresses the conundrum of attempting to decentre human knowledge *through* cultural artefacts, including but not limited to art, and pays particular attention to those employing strategies that emphasise the interplay of material interactions and processes of perception in knowledge production, or that intentionally bounce back and forth between internal, embodied, affective perspectives and attempts to grasp reality rationally in order to think *beyond the human*.

Defining cultural artefacts as our species' way of processing and communicating knowledge, I often return to their basis in hard-wired cognitive faculties, originating in sensual prehension, which is to say in *aesthetic* or *aesthesic* faculties (to return to its etymological sense, from the Greek *aisthánomai*, 'to perceive').[2] A large section of the way humanity interfaces with reality is through sensual stimuli, and therefore aesthetic perception (or *aisthesis*) is to be considered as an integral part of the ways in which *Homo sapiens* processes knowledge: different from logic and reason not because it is antithetical to them, but rather because it is a *fundamental condition* for these faculties.[3] In this sense, if one must find a defining difference between artistic practices and all other forms of knowledge production — a conditional premise that, as I will argue, is in any case inherently problematic —, this can be said to consist in art's reliance on sense perception: its function of providing humanity with a

---

[2] I am borrowing the term 'prehension' from Alfred North Whitehead's process philosophy here, meaning that *all entities experience*, not only living organisms, and this mutual ability to perceive by interacting with aspects of other entities is key to understanding the relational, processual based of reality-as-becoming. See Alfred North Whitehead, *Process and Reality* (New York: The Free Press, 1978), esp. pp. 18-30. I will explain my differentiation between the adjectives 'aesthetic' and 'aesthesic' in Chapter 6; for now, it shall suffice to say that they can be understood as synonymous.

[3] *Aisthesis* is not the only form of prehension for living organisms: it is rather a category of prehension among others, which for now I will define as that affecting a living organism's sense receptors. Again, Whitehead is a useful reference for understanding that 'consciousness is not necessarily involved' in all kinds of prehension (A. N. Whitehead, *Process and Reality*, p. 23).

space for the exercise of aspects of cognitive faculties that are pre-rational and extra-logical, alongside — in fact, always *including* — the exercise of rational thought.[4]

Pre-rational and extra-logical processes are necessary to knowledge production *outside of art* as well, as cognition generally needs the formulation of hypotheses on aspects of reality that are not yet known or verifiable, which is to say it requires empirical *and* speculative processes on the way to reaching logical conclusions: a *performative* process based on a feedback loop of sensual experiences and conjectural propositions. Art (as a kind of cultural exchange dependant at least in part on *aisthesis* and pre-rational affects) can thus be understood as an activity that is fully complementary to science and philosophy (as well as all other possible forms of *episteme*): a manifestation of human behaviours based on shared cognitive functions and similarly preoccupied with interpreting reality by manipulating it, in a way that is distinct from and irreducible to other forms of knowledge production.[5]

Curatorial practices concerned with communicating knowledge through a materialist-realist lens therefore have the opportunity to channel art, *among other artefacts*, as a way of conveying the complexity of reality, through the contents and processes artworks are capable of bringing together and setting in motion. In this sense, I believe it is especially important to frame artistic practices in relation to other modes of knowledge production through critical modes of presentation and display platforms. This thesis mainly focuses on curatorial practices that utilise artworks as their primary narrative conduit, even when presented alongside other types of objects. However, my theoretical position is committed to emphasising the importance of considering the category of the curatorial as *inherently transdisciplinary*. By reframing the curatorial as a shared tool for cultural expression in its widest sense, I hope to reveal ways for curatorial practices to function differently as ways of producing and communicating knowledge across and beyond disciplinary boundaries, making ostensibly distinct epistemological registers and strategies resonate with one another in order for their recipients to experience, understand and act *otherwise*.

---

[4] Peter Osborne, *Anywhere or Not at All. Philosophy of Contemporary Art* (London / New York: Verso, 2013), esp. pp. 46-51.

[5] Throughout this thesis I tend to refer to art, science and philosophy as a sort of all-encompassing tripartite epistemological system, whereby all knowledge production is reducible to these three 'classical' categories. This needs more analysis as I know it to be an unhelpfully schematic and rather Eurocentric form of terminological reduction. I mostly adhered to it for convenience's sake, but I acknowledge that myth and spirituality are also kinds of knowledge and indeed interfaces with reality, and that their conspicuous absence from this thesis is a blindspot in my methodology.

Following an overview of NM/NR philosophies, the text to follow analyses a few case studies of recent exhibitions showing the influence of NM/NR, seeking to demonstrate the application of different anti-anthropocentric notions and viewpoints as part of their curatorial aims, with varying degrees of success and clarity. These case studies offer a sketch for a genealogy of this particular history of curatorial practices, taking the 1985 group exhibition *Les Immatériaux* as a key precursor and focussing on a number of notable and representative exhibitions taking place in Europe and the US in the 2000s and 2010s, followed by a selection of critical responses on the intersection of anti-anthropocentric philosophies with artistic and curatorial practices. The latter chapters of the thesis aim to provide the foundations for a neomaterialist curatorial theory, beginning with the redefinition of a number of fundamental terms, such as 'sapience', 'art' and 'the curatorial'.

Overall, this text presents my personal interpretation of a historically situated phenomenon, a knowingly partial story about the relationship between a notable (if heterogeneous) current in philosophical discourse and its (comparably varied) interpretations within the sphere of exhibition-making and art criticism. In its own way, this thesis can also be interpreted overall as *a* case study, an analysis of a particular moment of encounter and exchange between philosophy and art-centric curation among other comparable ones in the parallel histories of these fields. It also suggests possible paths and correctives to push these dialogues — between curatorial practices across different arenas, as well as between art and NM/NR — forward in the future, in ways that can relate directly to urgent matters of ecology and politics, the former understood as integral to an expanded understanding of the latter, and vice-versa.[6] In this sense I maintain that reframing the position of humanity, at the level of both collective assemblages and individual subjectivities, through the curatorial — understood as a function inherent in the transmission of knowledge through culture — can (indeed, *must*) have tangible consequences on the way human beings relate to and behave with respect to the reality they inhabit, *including but very much not limited to other people*.

On the thesis' genesis

This thesis has had a very long gestation and has changed considerably since its first formulation as a proposal on the growing influence of 'thing theory' on art-centric curatorial practices. In the late 2000s, long before I first heard of 'Speculative Realism' or 'Object-

[6] André Gorz, *Ecology as Politics* (1980: Boston: South End Press; orig. 1975, 1977).

Oriented Ontology', and before becoming fully aware of the import of new materialism in its various guises, I had started observing a trend across an increasing number of contemporary art exhibitions, which I initially interpreted as a focus on the literal object status of an artwork and on artistic practices as ways of thinking through discourses on material culture established in the 1980s-90s. I took an interest in a number of group shows prominently featuring the words 'object(s)' or 'thing(s)' as part of their titles, most notably *Part Object Part Sculpture*, (Wexner Center for the Arts, Columbus, OH, 2005-06), *The Uncertainty of Objects and Ideas* (Hirshhorn Museum, Washington, 2006), *Unmonumental. The Object in the 21st Century* (New Museum, New York, 2007-08) and the 5th Berlin Biennale, titled *When Things Cast No Shadow* (Berlin, 2008), and decided to start investigating this phenomenon from there to see what, if anything, lay beneath its surface.[7]

These shows explored the contemporary use of everyday objects, impoverished materials and debris of mass consumption as media, with a strong emphasis on the ready-made and on sculptural assemblages constructed from found objects and DIY construction techniques: a return to *bricolage* that seemed to say something about people's shifting relationship with matter and objects, and to do so at a time when discourse around the ever-accelerating innovations in digital technologies pointed in the opposite direction: virtuality and dematerialisation.[8] These surveys seemed mostly preoccupied with grouping certain recent artistic practices together based on formal conceits and shared media, but also tended to reflect on the 'object status' of artworks and/or their components, variously presented as products of labour, tools, commodities, specimens, political stakes, burdens, traces, supports, residues, solid bodies subject to the laws of physics and so on. They were clearly symptomatic of a growing interest in objecthood in artistic and curatorial practices, a phenomenon which at that time I identified primarily with Bill Brown's 'thing theory', re-interpreted through the lens

---

[7] Helen Molesworth, *Part Object Part Sculpture*, exh. cat. (Columbus, OH / University Park, PA: Wexner Center for the Arts, The Ohio State University / Pennsylvania State University Press, 2005); Anne Ellegood and Johanna Burton, *The Uncertainty of Objects and Ideas: Recent Sculpture*, exh. cat. (Washington, DC: Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, 2007); Richard Flood et al., *Unmonumental. The Object in the 21st Century*, exh. cat. (New York, NY / London: Phaidon, 2007); Elena Filipovic and Adam Szymczyk (eds.), *When Things Cast No Shadow: 5th Berlin Biennale for Contemporary Art*, exh. cat. (Zurich: JP|Ringier, 2008).

[8] See for instance Dieter Roelstraete, 'Art as Object Attachment. Thoughts on Thingness', in Filipovic and Szymczyk (eds.), *5th Berlin Biennale for Contemporary Art: When Things Cast No Shadow*, exh. cat. (Zurich: JP|Ringier, 2008), pp. 444-45.

of Arjun Appadurai's socio-anthropology of things on the one hand and Heidegger's writings on thingness and tools on the other.[9]

Of the exhibitions I initially identified as case studies, one stood out among the rest in many ways: *Making Things Public. Atmospheres of Democracy* (ZKM - Center for Art and Media, Karlsruhe, 2005), co-curated by the philosopher/anthropologist Bruno Latour and the director of ZKM Peter Weibel, demonstrated a much more overtly transdisciplinary scope, presenting artworks alongside exhibits delving into matters of science, technology and politics in order to weave a complex and non-linear narrative loosely based on the principles of Actor-Network Theory (ANT).[10] The exhibition presented itself as a spatialised visual essay on democracy, exemplifying Latour's ideas around society as an all-encompassing, dynamic network of relationships connecting human and non-human 'actants'. The show itself could thus be read as an *assemblage*, as well as an *assembly*, or a 'parliaments of things', and serve as a microcosmic model for an extended definition of politics, a *Dingpolitik*, where (power) relationships between people and things, human and non-human actors, were discussed as real stakes, or 'matters of concern', in democratic processes.[11]

The process of researching this exhibition — after the fact, from documentation only — was my first exposure to ANT, and a turning point in the chain reaction that informed this thesis in its current form. Through the myriad contributions to the enormous catalogue for *Making Things Public* I began to connect thing theory, and art-centric curation's interest in it, to a dizzying array of thinkers and texts, spanning a range of disciplines and taking me in a rather different direction from the rest of my initial list of case study exhibitions, both methodologically and in terms of content.[12] Since I intended to take my interest in 'thingness as a curatorial conceit' on a discursive spiral that would eventually expand outwards from art-

---

[9] See Arjun Appadurai, 'Commodities and the Politics of Value', in A. Appadurai (ed.), *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge: University of Cambridge, 1986); Bill Brown, 'Thing Theory ('The Subject)', *Critical Inquiry*, 28, 1 (2001), pp. 1-22; Martin Heidegger, 'The Origin of the Work of Art' and 'What is a thing?', in *Poetry, Language, Thought,* trans. by A. Hofstadter, (New York, NY: Harper & Row, 1975; orig. 1935-36 and 1935), and *The Question Concerning Technology and Other Essays*, trans. by William Lovitt (New York, NY: Harper & Row, 1977).

[10] See especially Bruno Latour, *Science in Action* (Cambridge, MA: Harvard University Press, 1987) and *Reassembling the Social. An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005). Also see my Chapter 3, pp. 123-36.

[11] Bruno Latour, 'From Realpolitik to Dingpolitik or How to Make Things Public', in B. Latour and P. Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2005), pp. 14-41.

[12] Bruno Latour and Peter Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2005).

centric curatorial practices into more hybrid methodologies, I resolved to make this exhibition my (first) anchor point and to use its catalogue as a navigational aid.

Around this time, the literature on art and objecthood that I was attempting to survey also began to grow at a fast pace. While researching other exhibitions co-curated by Latour (see Chapter 4), I noticed that the names of several contributors to the *Making Things Public* catalogue — Graham Harman and Donna Haraway above all — began to appear more and more often in recent issues of mainstream English language art publications.[13] Initially, I found myself especially drawn to Harman's 'object-oriented philosophy' as a perspective that appeared to not only bridge Heidegger's 'tool theory' and ANT, but also to set up an original philosophical theory where objects took centre stage.[14] Additionally, object-oriented ontology (OOO, pronounced 'triple-oh') was also fast becoming a recurring reference point in a number of art publications and catalogue essays, due in no small part to its emphasis on the role of aesthetics as 'first philosophy'.[15]

Reading Harman also introduced me to speculative realism (SR), a brief point of encounter between philosophers grappling in different ways with the relationship between reality and knowledge beyond human cognition, of which Harman considered OOO to be a subset. Once more, references to my current subjects of interest seemed to suddenly multiply in art-centric literature, and I was struck by the way SR was framed in relation to art despite its calls for thinking *beyond human faculties* (as I will explain in Chapters 1 and 5). This exposure to SR helped me understand that the relationship between humans and objects could be far more productive as a theoretical concern when considered as a sort of metaphor or metonymy for the boundaries between subjectivity and objectivity, or between 'human' and 'non-human'. At this point, I realised I needed to formulate a new research question that could allow me to approach these themes meaningfully through a discussion of their intertwining with curatorial practices. Were the exhibitions I had began to examine 'simply' a reflection of the philosophical *Zeitgeist* being thematised and illustrated via art, or do contemporary curatorial practices have something to contribute to these discourses that complements and goes beyond the methods afforded by philosophy alone?

My visit to *dOCUMENTA (13)* in Summer 2012 provided a perfectly timed turning point in my research — and indeed, a watershed moment in the cultural phenomenon I had just begun to identify as my field of research. The 2012 edition of Kassel's quinquennial

---

[13] E.g. periodicals such as *Frieze*, *Artforum* and *Art Monthly*.

[14] Graham Harman, *Tool-Being. Heidegger and the Metaphysics of Objects* (Chicago and La Salle, IL: Open Court, 2002); G. Harman, *The Quadruple Object (*Winchester / Washington: Zero Books, 2011).

[15] G. Harman, *Art and Objects* (Cambridge: Polity, 2020), p. xii.

contemporary art survey — the main subject of Chapter 2 of this thesis — touched on issues of objecthood and objectivity, epistemology and ontology, analogue materiality in relation to digital technologies and scientific epistemologies at large, ecological thinking, networks as metaphors for complexity and, most importantly, the limits and trappings of human knowledge in relation to the growing influence of the notion of the Anthropocene.[16] All in a vast exhibition that drew attention to (and thus in a sense 'thematised') the lack of a central theme, as a self-reflexive strategy aimed at reframing large-scale exhibitions as sites for knowledge production. The exhibition and its extensive catalogue(s) made explicit references to OOO but also to the writings of Donna Haraway and Karen Barad, drawing my attention to ecofeminist new materialisms as counterpoints to SR: theories offering very different ways of approaching the question of thinking and acting beyond the human. The nexus between object-oriented ontology/speculative realism and new materialism, which my exposure to *dOCUMENTA (13)* helped crystallise in my mind as a multifaceted phenomenon worth thinking through jointly, expanded the scope of my inquiry from just things and/as objects to much more profound questions of ontology and of the limits of human epistemology. What is more, *dOCUMENTA (13)*'s treatment of these subjects *not only as content but also as operational principles* helped me think about their relevance in relation to exhibition-making practices actively reflecting on the curatorial as an epistemic function.

In light of these developments, I came to realise that the question of objecthood from which I started my journey was but a facet of a much more interesting conversation around the perspective shift required to think beyond human experience and, by extension, beyond one's own subject position: a dose of Copernican revolution to apply as a corrective to cognitive biases still dominating 'western culture' as well as academia. In other words, the earlier surge of interest in thingness now appeared to me as a symptom and an offshoot of what Rosi Braidotti called the 'posthuman' and Richard Grusin described as the 'nonhuman turn': a moment of reckoning, slowly brewing for decades in discrete corners of European and English-speaking academia, that just as humanity was never at the centre of the universe, 'the humanities' needed to recalibrate accordingly and fully turn into the *inhumanities* Jean-Francois Lyotard had begun to theorise in the 1980s.[17] As we face the consequences of climate change as a cascade of interconnected crises of our own making, the importance of

---

[16] See Will Steffen et al, 'The Anthropocene: Conceptual and Historical Perspectives', *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, n. 369 (2011), pp. 842–867. *dOCUMENTA (13)* explicitly referenced the Anthropocene as a subject of interest in the *100 Notes - 100 Thoughts* series of booklets published in advance of and during the exhibition: n. 053 is an essay by Jill Bennett titled *Living in the Anthropocene* (Ostfildern: Hatje Cantz, 2011). Reprinted in *dOCUMENTA (13) catalog 1/3* , pp. 345-47.

[17] See esp. Jean-François Lyotard, *The Inhuman* (Cambridge: Polity Press, 1991; orig. 1988).

questioning Anthropocentrism and human exceptionalism (among other damaging chauvinisms) becomes harder to deny and resist; in fact it has become a matter of the utmost political urgency.

If the idea of assuming an anti-anthropocentric perspective intuitively seems ill-suited to thinking in political terms, this is because we *Homo sapiens* tend to assume a biased, self-centred position from which exclusionary lines are drawn: a skewed understanding of politics as a realm where only human decisions, human opinions, human actions matter, as if it has ever been possible to isolate these — to isolate 'us' — from the rest of the cosmos. Rejecting anthropocentrism or the distinction between nature and culture does not equal disparaging human agency or denying the importance of human negotiations when measured against our wider relationship with matter and with other actants: rather, it leads to reconsidering politics from a different, more holistic perspective, one that allows us to think of *politics as ecology*, as an endless negotiation of identity boundaries and material relationships where no system operates in absolute seclusion and defining edges are either temporary or fictitious, if not both at the same time.

Methodology

In reformulating my research question, I found that I had three intersecting concerns:

1) the (re)definition of the 'NM/NR nexus' as a polyphony of anti-anthropocentric perspectives;
2) the influence and relationship of these philosophical strands on curatorial practices across disciplines (*including but not limited to* the sphere of art);
3) the question of the curatorial as a transdisciplinary mode of knowledge production that can be made to work alongside philosophy, and of what this reframing of the curatorial means vis a vis the channelling of artistic practices as epistemological tools with unique and distinctive properties.

As I was starting to sketch out this 'triangular field of interest', I found that most of the relevant literature covered only one or two poles at a time at best, and never in a way that provided a satisfactory definition or anything resembling a systematic overview. The vast majority of essays and publications dedicated to the relationship between NM/NR philosophies and contemporary curatorial practices took the form of anthologies, and even when dealing explicitly with particular exhibitions and their (alleged) claims to be linked to or

inspired by NM and/or NR, featured authors mostly limited themselves to pointing out perceived shortcomings, inconsistencies, inadequacies and misunderstandings.[18] The task of trying to reconcile these philosophical strands with curatorial discourses by establishing a shared theoretical vocabulary still remained largely underdeveloped.

This text attempts to tackle and fill this gap, outlining characteristics and commitments of new materialist and new realist philosophies in a way that stresses their heterogeneity while also providing an explanation for their joint discussion as a network of references informing 21st century curatorial practices. It also provides a (necessarily partial) chronicle of the development of this network of interconnected influences through analyses of key events, texts and critical responses.

Identifying the three intersecting concerns outlined above helped me realise that, in order to analyse this phenomenon and its development, I would need to apply a mix of methodological approaches, alternating aspects of the history of ideas, curatorial theory, exhibition histories and philosophical traditions including aspects of semiotics, post-structuralism and the very post-humanist strands that also form part of the subject of this text's historical analysis. This doctoral thesis originated at the London Consortium, whose Phd programme in Humanities and Cultural Studies explicitly encouraged the crossing and blurring of disciplinary boundaries. Its deliberately loose and experimental framing invited a kind of methodological fluidity that seemed particularly appropriate to the analysis of a sphere of cultural influence operating in the discursive space between philosophy and curatorial practices.

A call for transdisciplinarity and the hybridisation of methodologies is also part of my argument for rethinking the function of 'the curatorial' through an NM/NR filter. I was especially inspired by the notion of 'diffraction patterns', as described by Donna Haraway and Karen Barad, as a figure for thinking about ways of generating knowledge through the friction between different phenomena, including different disciplines and methods, in a way that emphasises not (or not just) their commonalities but rather the emergence of patterns of

---

[18] The publications I consider closest to the intents of this thesis are: Robin Mackay, Luke Pendrell and James Trafford (eds.), *Speculative Aesthetics* (Falmouth: Urbanomic, 2014); Christoph Cox, Jenny Jaskey and Suhail Malik, *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015); David Joselit, Carrie Lambert-Beatty and Hal Foster (eds.), 'A Questionnaire On Materialisms' , in *October*, Issue 155 (Winter 2016), pp. 3-110; Tristan Garcia and Vincent Normand (eds.), *Theater, Garden, Bestiary. A Materialist History of Exhibitions* (Lausanne / Berlin: ECAL-University of Art and Design Lausanne / Sternberg Press, 2019); Beatrice von Bismark and Benjamin Meyer-Krahmer (eds.), *Cultures of the Curatorial: Curatorial Things* (Berlin: Sternberg Press, 2019).

difference.[19] In the latter chapters of this thesis, I look at a number of terms with existing, well-established meanings (*aisthesis*/aesthetics, the curatorial), but reinterpret them by taking their meaning apart through a look at the history and evolution of their usage on the one end, and by formulating a novel definition that follows a logic more closely aligned with non-anthropocentric and neomaterialist approaches. I however also return to the existing definitions, believing that the new readings I propose don't aim to supplant them, but rather to be considered in parallel and in conversation with one another, as their points of divergence and incompatibility can function as springboards for further analysis focussing precisely on that space of difference or discomfort.

A principle of the diffractive method is also to keep in mind the role of one's experience in interpreting certain ideas: a recognition of an author's positions in a way that is comparable to the way an observer interferes with a scientific experiment by being an integral part of the system that includes the testing apparatus, or even by literally enabling the outcome at the subatomic material level (i.e. by causing the collapse of the wave function in quantum physics). In this thesis, I occasionally provide a more personal and anecdotal perspective as a practicing curator, or as a direct witness to a curatorial event qua audience member: this is a way to acknowledge my subject position, though I have opted not to use my direct experience through a sustained or systematic engagement with autoethnography. It is rather again a nod to new materialist concerns, and particularly with Barad's agential realism, as explained in Chapter 2.

Parts of this text (Chapters 1 and 3-6), analyse selected exhibitions and publications as case studies. I consider exhibitions and curatorial activities as expanded, complex phenomena ('constellational', to borrow Beatrice von Bismarck's term), including visual documentation, press releases, accompanying publications, related events, coeval critical responses and secondary literature, as well as direct experience in those cases when I was able to visit the exhibitions or events myself.[20] This approach is taken from the methods established in the academic field of exhibition studies, though I chose to limit my sources to existing literature and published sources. I did not for instance consult archives on those projects to look for unpublished documents, and I avoided generating additional primary sources such as

---

[19] See Karen Barad, *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), pp. 28-30, 71-94; cfr. Donna Haraway, *Modest_Witness@Second_Millennium.FemaleMan© Meets OncoMouseTM. Feminism and Technoscience* (New York: Routledge, 1997), pp. 268, 273.

[20] Beatrice von Bismarck in 'Curating/Curatorial. A Conversation between Irit Rogoff and Beatrice von Bismarck', in Beatrice von Bismarck, Jorn Schafaff, Thomas Weski (eds.), *Cultures of the Curatorial* (Berlin: Sternberg Press, 2012), p. 26.

interviews with curators and visitors, as I did not deem them necessary to the kind of analysis in which I am primarily interested: that of the discourses surrounding the influence of NM/NR as circulated in the public-facing literature produced in the period of time under examination (primarily 2005-2016, with an earlier foray in Chapter 3 into a historical precedent from 1985).[21]

I chose the case studies based on their explicit connection to the philosophical strands I define in this text as the NM/NR nexus, which I will describe and justify at length in Chapter 2. I was especially interested in cases of exhibitions curated or co-curated by philosophers who have made key contributions to NM/NR's anti-anthropocentric discourses; in the cases discusses in Chapter 3, I look at curatorial projects that have seen the direct involvement of foundational figures such as Jean-François Lyotard and Bruno Latour, while Chapter 4 recounts some of the activities of Robin Mackay and his publishing company Urbanomic, which were instrumental to the meteoric rise of Speculative Realism.

The remaining exhibitions discussed in this text were chosen due to their overt references to NM/NR ideas and their anti-anthropocentric philosophical commitments, clearly manifested in their curatorial framing. As I have already mentioned, *dOCUMENTA (13)* was a personal catalyst for the formulation of the research questions underpinning and structuring this text, and I consider the network of references collected in the bibliography published in its main catalogue to be highly representative of the range of ideas set in dialogical motion by what I describe as the expanded NM/NR phenomenon, *as reflected in art discourse at that time*. This exhibition was also frequently identified in the art-centric literature as an especially notable, visible and well-attended example of an exhibition questioning anthropocentric paradigms and addressing the then still novel concept of the Anthropocene, and thus constitutes an undeniable turning point that a thesis on these subjects could simply not ignore.[22]

The other exhibitions discussed here have varied connections to NM/NR themes, such as direct references to key philosophical texts (e.g. *Speculations on Anonymous Materials, Inhuman*) or important notions used as thematic foci (*Nature after Nature*, *Animism*). As it is often the case in selecting examples for a knowingly partial and incomplete study such as this, an element of arbitrariness rooted in serendipitous encounters and personal preferences also played a part. Again, I have approached this editorial task as a

---

[21] A notable exception where I consulted directly with a curator involved in one of the case studies was my exchange with Adrian Shaw, a Tate colleague at the time of that conversation, on Urbanomic's involvement in the 'Late at Tate: The Real Thing' event, held at Tate Britain on 3 September 2010. See my p. 143.

[22] See for instance Daniel Birnbaum, 'Documenta 13', *Artforum*, vol. 51, no. 2 (October 2012), pp. 254-5.

practicing curator, and indeed I maintain that such exercises of interpretive selection are expressions of the curatorial function making the transmission of knowledge possible at a fundamental level, as I will argue later in this text. Nevertheless, I have based my selection of case studies in research conducted by surveying art periodicals and anthologies published in English primarily between 2005 and 2016, taking note of exhibitions often mentioned in relation to core NM/NR subjects such as agency beyond the human sphere, the relationship between nature and culture and object-oriented ontologies.

I considered many more case studies for inclusion, but I believe that the final selection of case studies and referenced examples reflects a representative range of significant subjects. Other examples have come to my attention after writing the bulk of this text, and in fact there is strong potential for continuing this research project by extending the range of case studies up to the present; the pool of exhibitions relevant to the subject of this thesis has significantly grown since 2016, and as of 2024 references to post-anthropocentric philosophical notions have become commonplace in curatorial texts. While these recent developments and their reasons are certainly worthy of discussion, as they imply a recognition and further spread of NM/NR notions among artists and curators, this is a task for a different thesis. I have preferred to limit the time period under analysis here to 2016 as a year of noticeable, if temporary, loss of interest in these subjects in the mainstream art press — a historical development discussed in Chapter 6. This limiting parameter allowed me to devote the latter part of the thesis to a series of theoretical arguments focussing on a redefinition of certain key terms and notions, with the purpose of applying the principles of NM/NR to curatorial theory at a fundamental level: not just as content to interpret and transmit, but as methods for reevaluating the purpose of 'the curatorial' as a function of knowledge production.

Outline of the thesis' chapters

The thesis opens with a chapter that can be interpreted as an extension of the introduction, where I run through the core tenets, thinkers and terms behind the philosophies I define as New Materialisms and New Realisms and map the phenomenon of their joint influence which is the subject of the remainder of the text. Although some attempts have been made in other texts to provide surveys for NM and NR, I have noticed a dearth of texts approaching these two strands in parallel, with their shared anti-anthropocentric concerns

seldom being *explicitly* recognised as a unifying factor. Here I explain my reasons to name and describe distinct and even antithetical philosophies together, to treat their admixture as a *relational* grouping, if it is possible to discuss their conjoined reception in a way that brings them together as a collective 'causal nexus'.

Chapter 2 presents an analysis of 2012's *dOCUMENTA (13)*, assembled by Artistic Director Carolyn Christov-Bakargiev and her vast team of collaborators. Its curatorial development was informed by new materialist and ecofeminist texts, and at least partly enmeshed with then recent debates on Speculative Realism and Object-Oriented Ontology. It is therefore in itself a key example of the growing relevance of NM/NR for artistic and curatorial practices at that time, as well as representing a watershed moment for the further spread of those ideas as part of the cultural *Zeitgeist*. *dOCUMENTA (13)* however avoided the explicit naming of those theoretical concepts as its subject matter, challenging the thematic exhibition format by striving to express complexity rather than to simplify it through taglines or pre-digest it through summary statements. Visitors explored it like an ecosystem, a loose network of artworks presented as distinct *moments of experience* that allowed their meaning — and the overall curatorial narrative — to gradually and cumulatively emerge as dialogues between artistic practices and other modes of knowledge production, outside the realm of art and often of human cognition.

The case studies in Chapter 3 present some key examples of exhibitions co-curated by philosophers whose writings have been influential on the more recent NM/NR wave: *Les Immatériaux*, a 1985 exhibition co-curated by Jean-François Lyotard and Thierry Chaput for the Centre Georges Pompidou in Paris, and a number of exhibitions co-curated by Bruno Latour, including the aforementioned *Making Things Public: Atmospheres of Democracy* (ZKM, Karlsruhe, 2005). In this chapter I discuss *Les Immatériaux* (and Lyotard's concurrent interest in 'the inhuman') as an important precursor of the recent surge in anti-anthropocentric transdisciplinary curatorial projects, and analyse Latour's curatorial style where different epistemological apparatuses — different *optics* — are put to work together and in relationship to one another, particularly notions of representation in science, politics and visual cultures.

The fourth chapter looks at the rise of Speculative Realism as an example of a philosophical discourse brought together through what I consider to be curatorial intents and methodologies, while also influencing curatorial practices through distinct avenues. Among the projects under examination in chapter 4 are the activities of publishing company Urbanomic, a trilogy of group shows held at the Museum Fridericianum overtly inspired by SR texts (*Speculations on Anonymous Materials*, 2013; *Nature after Nature*, 2014; *Inhuman*, 2015)

and the *Animism* project curated by Anselm Franke for various venues between 2010 and 2014.

Chapter 5 analyses notable critical responses to these projects and other related publications, with a focus on the secondary literature addressing the intersection of NM/NR ideas with artistic and curatorial practices. These texts themselves are examined as further interpretations of new materialist and new realist themes, in turn influencing their reception. Highlighting some of the most frequently and vehemently debated aspects of these discourses, this chapter follows their evolution of up until 2016, a time I identify and explain as a moment of crisis.

From this point onward, the thesis switches to a more inductive theoretical mode, partly developed in response to the practices and ideas discussed in the previous chapters, but also built from the ground up as a stand-alone set of arguments and propositions.

Chapter 6 offers anti-anthropocentric reinterpretations of widely used terms or notions — sapience, art/artefacts, aesthetics/*aisthesis* — in order to provide lateral views on their meaning and interrelations in light of the historical and philosophical contexts under examination in this text. This chapter addresses some of the key questions of this thesis as whole: how can artistic, philosophical and scientific formulations claim to oppose anthropocentrism while simultaneously and fundamentally constituting the greatest justification for human exceptionalism? What are the practical uses of these decentring exercises for our species and its future? Can such professions of ontological and epistemological humility become a driving force for reshaping human beings' relationship to the reality they inhabit?

In Chapter 7 I gather existing definitions of 'the curatorial', posited as a theoretical category and distinct from curat*ing* as a set of applied practices and techniques. I then reinterpret the curatorial as a fundamental component in the production and communication of knowledge: a kind of anthroposemiotic function. The final part of the chapter offers a formulation of 'the non-anthropocentric curatorial' as a tool for prehending the real, capable of making different knowledges amplify each other while also revealing their respective functions as kinds of cognitive heuristics.

Finally, the conclusion makes a case for embracing transdisciplinarity in curatorial practices, in order to allow different epistemological modalities to resonate with one another and to be experienced as events of knowledge that engage both sensual and intellectual faculties, revealing and amplifying the connections between the two.

Chapter 1.
New materialisms, new realisms: an outline

The philosophical approaches I consider in this thesis as having exerted an increasing influence on curatorial practices in the past two decades are not easy to define in the format of a compact introductory summary — not without conceding to a few knowingly questionable generalisations. It certainly makes little sense to consider the slippery philosophical morass I call 'NM/NR' as anything resembling a coherent movement; if this grouping of anti-anthropocentric philosophies is to be of any discursive use, it is to be thought at best as a loose network of people and concepts, where concerns and commitments partially overlap, and only from particular observation angles. Nevertheless, I believe there are valid historical reasons for bringing these heterogeneous strands together within the remit of this research project, as at the very minimum their overlap has *practically* manifested itself through the networks of references used by the curators of the exhibitions forming my main case studies and in the art-orientated literature emerging alongside and in response to them (often using umbrella terms preceded by disclaimers on their tentativeness and arbitrariness, not too dissimilar from this very paragraph).[23] I myself do not consider the 'NM/NR network' as a monolithic group, and much of this thesis is devoted to clarifying precisely the misunderstandings and misconceptions caused by hasty groupings and sweeping generalisations.

Having said this, it is possible to recognise at least two major subsections or strands, widely referred to in the recent literature as 'new materialism(s)' and 'speculative realism'. The reason for this split resides in their relatively distinct genealogies and in the existence of positions or orientations within each strand where notable differences can be observed, most notably their approaches to 'philosophies of access' (or 'correlationisms', or 'subjectalisms'), though there has been much confusion and debate on the specifics of each designation and on the true extent of their overlap.[24] In this section I will try to briefly outline these two main strands, since they are often addressed as such in the rest of the thesis — usually because they

---

[23] See for example Christoph Cox, Jenny Jaskey and Suhail Malik, 'Introduction', in C. Cox, J. Jaskey and S. Malik (eds.), *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015), pp. 15-31.

[24] Levi Bryant, Nick Srnicek and Graham Harman, 'Towards a Speculative Philosophy', in L. Bryant, N. Srnicek and G. Harman (eds.), *The Speculative Turn. Continental Materialism and Realism* (Melbourne: re.press, 2011). On 'subjectalism': Quentin Meillassoux, 'Iteration, Reiteration, Repetition. A Speculative Materialist Analysis of the Sign Devoid of Meaning' (orig. 2012), in A. Avanessian and S. Malik (eds.), *Genealogies of Speculation. Materialism and Subjectivity since Structuralism* (London and New York: Bloomsbury, 2016), pp. 117-197.

are referred to as such in my sources. I have also inserted some terms, precursors, outliers and frequently associated figures gravitating around these fields.

Reframing Human Subjectivities: New Materialisms

The field of 'new materialism' emerged in the late 1990s as a reaction to the prevalence of post-structuralist and social constructivist approaches in philosophy and cultural studies, which tended to disregard or overlook aspects of reality seen as laying 'outside' the forms of mediation enabled by the human mind (language, culture, representation, 'text', etc.).[25] By this time, Jacques Derrida's deconstruction, Lacan's psychoanalytic theory and the 'linguistic turn' in general were *de facto* dominating the humanities (including art history and theory) in Anglo-American academic milieus as well as continental Europe, and exerting a strong influence on the reception of other positions, including those with a materialist orientation, historical (i.e. Marxian) or otherwise. Analytical philosophy was at that point decidedly unfashionable, especially in relation to art theory.

References to nature, biology and scientific methodologies, particularly in relation to notions of ontology, were seen at that time with extreme suspicion by the vast majority of social constructivists, whose aim was precisely to disprove the very possibility of objective knowledge ever being truly attainable.[26] This had profound implications for cultural studies and especially for feminist thinkers, for whom the question of the sexed body is practically inescapable, no matter how hard gender studies tried to bypass it by using the theory of performativity as a deflection (indeed, Judith Butler herself addressed the issue of the 'bodily life that could not be theorized away' in her 1993 book *Bodies That Matter*).[27] According to Elizabeth Grosz, writing in 2004,

> social, political, and cultural theorists, particularly those interested in feminism, antiracism and questions of the politics of globalisation, […] have forgotten […] not just the body, but that which makes it possible and which limits its actions: the precarious, accidental, contingent, expedient, striving, dynamic status of life in a messy, complicated, resistant, brute

[25] Diana Coole and Samantha Frost, 'Introducing New Materialisms', in D. Coole and S. Frost (eds.), *New Materialisms: Ontology, Agency, and Politics* (Durham / London: Duke University Press, 2010), pp. 1-43.

[26] Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', in *Feminist Studies*, Vol. 14, No. 3. (Autumn, 1988); republished in D. Haraway, *Simians, Cyborgs and Women. The Reinvention of Nature* (New York & London: Routledge, 1991), pp. 183-8.

[27] Judith Butler, *Bodies That Matter. On the Discursive Limits of Sex* (New York & London: Routledge, 1993), p. ix.

> world of materiality, a world regulated by the exigencies, the forces, of space and time. We have forgotten the nature, the ontology, of the body, the conditions under which bodies are encultured, psychologized, given identity, historical location, and agency.[28]

Around this time, several thinkers tried to formulate alternatives and correctives to this perceived lack of attention to biology and materiality, many with a shared interest in the writings of French philosophers Gilles Deleuze and Félix Guattari, which maintained an eccentric position with respect to the 'default logocentrism' of other postmodern thinkers. Deleuze's recovery of the monist thought of 17th century philosopher Baruch / Benedict de Spinoza was crucial in this sense, providing a different genealogy against the doctrine of mind-body dualism as established by Descartes and the primacy of transcendental thought in (European) philosophy after Kant.[29] The writings of Michel Foucault and Jean-François Lyotard were also especially important to materialist feminist critiques of the more extreme versions of social constructivism. These alternative lineages made it possible to theorise the production of knowledge — and its connections with power dispositifs — *outside* the strictly representational regimes of language-based (Saussurian) semiosis.[30] Rather than De Saussure, these authors looked at the semiotics of logician Charles Sanders Peirce and the linguistics of Louis Hjelmslev, again recovered from relative obscurity by Deleuze and Guattari.[31] Around this time, the process philosophy of Alfred North Whitehead (a foundational figure for the analytical school) also began to be cited as an influence, particularly through the work of philosopher of science Isabelle Stengers.[32]

The terms 'neo-materialism' or 'new materialism' were first seen in writings by Italian-Australian Rosi Braidotti (as early as 1991 and 1994, most notably in the 2000 essay 'Teratologies', included in an anthology on *Deleuze and Feminist Theory*) and Mexican-American Manuel DeLanda (in 'The Geology of Morals, A Neo-Materialist Interpretation',

---

[28] Elizabeth Grosz, *The Nick of Time: Politics, Evolution and the Untimely* (Durham, NC: Duke University Press, 2004), p. 2.

[29] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. by B. Massumi (London/New York: Continuum, 1987; orig. 1980), pp. 170, 280-7, 558; G. Deleuze, *Spinoza: Practical Philosophy*, trans. by R. Hurley (San Francisco, CA: City Lights, 1988; orig. 1970).

[30] Though he does not figure much in this chapter, we will encounter Lyotard again as a precursor of NM/NR anti-anthropocentric positions in the third chapter of this thesis; see my pp. 119-43. Ferdinand de Saussure, *Course in General Linguistics*, trans. R. Harris, (La Salle, IL: Open Court, 1983; orig. 1916).

[31] G. Deleuze and F. Guattari, *A Thousand Plateaus*, pp. 155-164 (on abstract machines); pp. 585-6 nn. 40-1; cfr. Inna Semetsky, 'Semiotics', in A. Parr (ed.), *The Deleuze Dictionary - Revised Edition* (Edinburgh: Edinburgh University Press, 2010), pp. 243-4.

[32] Isabelle Stengers, *Thinking with Whitehead: A Free and Wild Creation of Concepts* (Cambridge, MA: Harvard University Press, 2002).

then in his 2000 book *A Thousand Years of Non-Linear History*), both writers whose thought is deeply influenced by Deleuze's *oeuvre*.[33] In different ways, their texts proposed the importance of the physical body and of material processes at large in enabling (human) culture, through a series of dynamic exchanges that make it impossible to separate 'mind' from 'matter', as well as 'nature' from 'culture'. In this sense, new materialist theories decentre the human perspective not in favour of another entity presumed external to the mind, of 'materiality' as something other than 'humanity' or of the thinking subject. Rather, they acknowledge the *relational* nature of human subjectivities as transient material formations: the shift is towards the *processes of exchange* that constitute matter, including the way humans perceive and interact with it, at both individual and collective levels.[34]

If in historical materialism the emphasis had traditionally remained on humanity as ontologically separate from its 'material conditions', this relatively novel approach to materialism intended to recalibrate its subjects and methods of analysis by positing that human society and epistemology must be *integrated with* and *co-constituted* by the same dynamics that shape the physical fabric of the cosmos.[35] Braidotti has also called this perspective 'posthuman', a way of rethinking the nature of subjectivity from a monistic, materialist, non-anthropocentric, transdisciplinary perspective. She has described the 'posthuman turn' as distinct from 'postmodern anti-humanism': both reject classical humanist ideas on 'human nature' as an autonomous, universal notion, the sole measure of all things, but the latter still maintains the arbitrary distinction between 'the humanities' and the technosciences at a methodological and ideological level.[36] Importantly, the new materialist posthuman is also different from the kind of posthumanism celebrating either the death of 'man' or the technoscientifically-enabled 'next stage of evolution', as both of these notions still

---

[33] Rosi Braidotti, 'Teratologies', in I. Buchanan and C. Colebrook (eds.), *Deleuze and Feminist Theory* (Edinburgh: Edinburgh University Press, 2000), pp. 156–72; Manuel DeLanda, 'The Geology of Morals, A Neo-Materialist Interpretation', <http://www.t0.or.at/delanda/geology.htm> [accessed 14 October 2021]; Manuel DeLanda, *A Thousand Years of Non-Linear History* (New York: Zone Books, 1997).

[34] R. Braidotti, *The Posthuman* (Cambridge: Polity, 2013), esp. pp. 57, 99, 158-9. Cfr. Karen Barad, *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007), pp. 40-5.

[35] However, historical materialism remains a strong and explicit reference point for many new materialists, particularly through the mediation of Louis Althusser. Rosi Braidotti has mentioned Althusser as an especially important influence on her via Deleuze; it was Althusser who began the 'rehabilitation' of Spinoza in the 1970s, and Braidotti has singled out Althusser's late essay on aleatory materialism as having a particularly strong impact on Deleuze (L. Althusser, 'The Underground Current in the Materialism of the Encounter', 1986, in *The Philosophy of the Encounter*, London and New York: Verso, 2006, pp.163-207). See 'Interview with Rosi Braidotti', in Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Ann Arbor: Open Humanities Press, 2012), p. 20.

[36] R. Braidotti, *The Posthuman* (Cambridge: Polity, 2013), esp. pp. 13-54.

remain trapped in the essentially anthropocentric paradigm new materialisms (henceforth abbreviated as 'NM', always implying a *plural* form) strive to oppose.[37]

In order to stress the role of reality supposedly 'outside the mind' in epistemological processes, some of these new materialist positions make a point of holding a *realist* stance, which is to say they stress that objects/entities do exist in the world independently of subjective cognitive-representational abilities. This viewpoint is technically the opposite of strong social constructivist positions denying (or at least questioning) the existence of an ontologically independent, a-subjective reality; however very few social constructivists genuinely hold such a radical anti-realist view, so realist commitments in NM are mostly used to counter critiques of objectivity and science as inherently specious methodologies, in those cases when they are accused to be *always* ideologically compromised and thus presented as necessarily antagonistic positions. Most 'matter-realisms', as Braidotti sometimes also calls these approaches, do not deny the validity and insights of social constructivist critiques, but rather aim to find philosophically sound justifications for dialogues and alliances with scientific epistemologies, in order to overcome the impasse generated by the polarisation of 'science as *absolute* objectivity' vs. 'constructivist critique as obstinate relativism'.

For instance, thinking knowledge production as based in relational material processes makes it viable for NM to take on board notions of performativity outside social constructivist cultural paradigms: it is possible to read this aspect of Judith Butler's thought in a neomaterialist key, as demonstrated for example in the works of Karen Barad, which argue that matter participates in the construction of meaning by enacting its own contingent boundaries (a subject which I will address in more detail later).[38] In general, NM were never meant to be understood *in opposition* to poststructuralism or deconstruction, constituted as a solid adversary faction. Rather, their propositions tried to cut oblique paths *through* poststructuralist thought that allowed questions of matter and ontology back into their

---

[37] *Ibid.* and cfr. K. Barad, *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning*, p. 136. My 'NM' abbreviation applies to the noun form ('new materialisms') and sometimes to the adjective form (e.g. 'new-materialist' or 'neomaterialist').

[38] See K. Barad, 'Meeting the Universe Halfway: Realism and Social Constructivism without Contradiction ', in L. Hankinson Nelson and J. Nelson (eds.), *Feminism, Science, and the Philosophy of Science* (Dordrecht: Kluwer, 1996), pp. 161-94; K. Barad, 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter', *Signs: Journal of Women in Culture and Society*, vol. 28, no. 3 (2003), pp. 801-31; and of course, K. Barad, *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning* (2007), esp. pp. 59-66 and 132-185.

methodologies and posited at least the possibility of *thinking objectivity*, if not of knowing objectively.[39]

Some figures associated with NM offer arguments against epistemological relativism while maintaining an ambiguous relationship towards realism. For example, American feminist author and primatologist Donna J. Haraway has been writing about the fraught relationship between feminism and scientific objectivity since the late 1970s, contesting the disembodied perspective of social constructivists as perpetuating the divide and mutual distrust between the 'two cultures' of science and the humanities (as famously defined — and in so doing, as Rick Dolphijn and Iris van der Tuin have argued, *cemented* — by C. P. Snow in 1959).[40] Haraway laid out her proposition for grounding epistemology in material reality without giving in to either 'the ideological doctrines of […] scientific objectivity' or postmodern relativisms in her influential 1988 essay 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective'.[41] For Haraway, finding a way to discuss hard, quantifiable facts from within the ranks of intersectional feminism was an urgent political task: refusing to claim stakes in scientific discourses and praxes was not going to help preventing the structures of patriarchal, colonial, military and capitalist power from weaponising the fast-evolving technoscientific industries as instruments of continuing oppression.[42] In response, Haraway writes,

> I would like to insist on the embodied nature of all vision, and so reclaim the sensory system that has been used to signify a leap out of the marked body and into a conquering gaze from

---

[39] On this subject, particularly on the contested definitions of new materialist feminisms with respect to other feminist strands of thought past and present, see Sara Ahmed, 'Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the "New Materialism"', *European Journal of Women's Studies*, Vol. 15(1), pp. 23–39, and Iris van der Tuin, 'Deflationary Logic: Response to Sara Ahmed's 'Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the "New Materialism"', *European Journal of Women's Studies*, Vol. 15(4), pp. 411–416.

[40] Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Ann Arbor: Open Humanities Press, 2012), p. 90. On Haraway's theory of situated knowledges as a 'nonrelatiivist antirealist' position, alongside other examples, see K. Barad, *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning* (2007), p. 44.

[41] Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', in *Feminist Studies*, Vol. 14, No. 3. (Autumn, 1988); republished in D. Haraway, *Simians, Cyborgs and Women. The Reinvention of Nature* (New York & London: Routledge, 1991), p. 184.

[42] *Ibid*., pp. 185-7. The term 'technoscience' is first introduced as a neologism in the literature under examination in Jean-François Lyotard, *The Postmodern Condition* (1984, orig. 1979) and in Bruno Latour, *Science in Action* (1987), though Belgian philosopher Gilbert Hottois claims to have used it first in 1978. See Michael A. Peters, 'Anti-scientism, technoscience and philosophy of technology: Wittgenstein and Lyotard', *Educational Philosophy and Theory*, published online 20 Aug 2019, <https://www.tandfonline.com/doi/full/10.1080/00131857.2019.1654371> [accessed 4 May 2020].

> nowhere. […] This gaze signifies […] one of the many nasty tones of the word *objectivity* to feminist ears in scientific and technological, late industrial, militarized, racist and male dominant societies […]. I would like a doctrine of embodied objectivity that accommodates paradoxical and critical feminist science projects: feminist objectivity means quite simply *situated knowledges*.[43]

Haraway reached this position by considering how technoscientific instruments of observation could only make claims to factual truth from very specific and contingent positions, rather than (that is to say *prior to*) overarching hypotheses transcending particularities (the 'gaze from nowhere'):

> The 'eyes' made available in modern technological sciences shatter any idea of passive vision […]. There is no unmediated photograph or passive camera obscura in scientific accounts of bodies and machines; there are only highly specific visual possibilities, each with a wonderfully detailed, active, partial way of organizing worlds. All these pictures of the world should not be allegories of infinite mobility and interchangeability, but of elaborate specificity and difference and the loving care people might take to learn how to see faithfully from another's point of view […]. That's not alienating distance; that's a possible allegory for feminist versions of objectivity.[44]

In order for this stance to function as an alternative to relativisms, Haraway describes the notion of situated knowledges as a way of coming to grips with subjective positions, not of denying their validity by appealing to ideas of objectivity that are equally detached from the contingencies of matter. It is also a way of engaging with routinely overlooked and subjugated positions in order to actively challenge hegemonic biases and the totalising tendencies accompanying positivist claims of scientific authority:

> The alternative to relativism is partial, locatable, critical knowledges sustaining the possibility of webs of connections called solidarity in politics and shared conversations in epistemology. Relativism is a way of being nowhere while claiming to be everywhere equally. The 'equality' of positioning is a denial of responsibility and critical enquiry. […] But it is precisely in the politics and epistemology of partial perspectives that the possibility of sustained, rational, objective enquiry rests. […] The knowing self is partial in all its guises, […] always constructed

---

[43] *Ibid*., p. 188. Emphasis in the original text.

[44] *Ibid*., p. 190.

> and stitched together imperfectly, and therefore able to join with another, to see together without claiming to be another. […] There is no way to 'be' simultaneously in all, or wholly in any, of the privileged (subjugated) positions structured by gender, race, nation, and class.[45]

For Haraway, in order to ground knowledge in objectivity it is important to take into consideration the partial, situated positions existing outside the strictly human sphere as well: the positions of animals and machines, the position of inorganic matter and all their possible hybrids — the imbrication of human bodies and technological prostheses being one prominent example thereof. In 1985 she had published her 'Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s' (later republished in an updated version titled 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century' in *Simians, Cyborgs and Women. The Reinvention of Nature*, 1991), where she advocated for perspectives situated beyond ontological binaries and essentialising categories such as biological sex, gender, class, race and other fixed (or fix*ing*) identities.[46] The part-human-animal/part-machine, part-organic/part-inorganic, part-body/part-data, genderless figure of the cyborg helped her theorise a future direction for society where these dichotomies can be abandoned not based on cultural construction alone, but *because this is the direction in which the technosciences also point*, in their case through claims based on what they consider to be 'objective' and 'rational' thought. For Haraway this is an opportunity to rethink social relationships away from current capitalist, masculinist, white-supremacist power dynamics: by striking an alliance between the technosciences and socialist / feminist commitments, individual and collective actions in our — then incipient — 'informatics' society can be both steered away from spurious notions of identity and towards ethics of solidarity or 'affinity'.[47] For Haraway this is *the only way to reclaim information technologies and oppose their complicity with ongoing structures of oppression*, as the latter have learnt to evolve alongside them much faster and to turn them into even more effective tools of exploitation.

In Haraway's view, 'objects of knowledge' (including humans) are not to be considered as passive resources to be exploited but always as 'actors or agents', responsive because of their own embodied properties and interactions with their environments, from their situated

---

[45] *Ibid*., p. 191-3.

[46] D. Haraway, 'Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s', *Socialist Review,* No. 80 (1985), pp. 65-108; republished as 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century', in *Simians, Cyborgs and Women. The Reinvention of Nature* (1991), pp. 149-181.

[47] *Ibid*., p. 155.

perspective.[48] This way of extending the notion of agency beyond 'conscious' living organisms is also a basic tenet of 'Actor-Network Theory' (ANT) in sociology and philosophy of science, with Bruno Latour being a prominent figure and an especially influential one for NM/NR.[49]

First developed in the early 1980s at the Centre de Sociologie de l'Innovation (CSI) of the École Nationale Supérieure des Mines de Paris, where Latour was based, ANT stemmed from his interest in how science moves from the realm of highly specialised research methodologies and laboratory practices to the larger mechanisms affecting society at every level. ANT posits that scientific knowledge and technological innovation are not simply driven by the people involved in certain industries, but should be understood as the result of constantly shifting networks of relationships between *actors*, which is to say any entity capable of *acting* with/upon other entities, including intangible and even imaginary notions. All actors are able to contribute to a series of exchanges, although in different ways and to different extents: an enlarged political ecology, or what Isabelle Stengers calls a 'cosmopolitics'.[50] Latour goes as far as to propose a 'parliament of things', where all actors — human and non-human, animate and inanimate — would be taken into account as stakeholders in the governance and decision-making processes affecting a deeply interconnected planet which includes but is not limited to human society.[51]

Latour often uses acts of speech as analogies: scientists, he argues, have elected themselves as spokespeople for 'mute' things, and are as unreliable and potentially biased as all such mediators can be. In this sense, his analyses of networks identify issues with power imbalances, emerging through social systems at play from scientific communities to parliamentary democracies, both real and speculatively expanded to include all manners of 'things'. He is however also careful to mitigate the tendency of this kind of cosmopolitical thinking to anthropomorphise non-human actors by attributing them familiar human properties and behaviours they don't actually possess: indeed, in *Politics of Nature: How to*

---

[48] D. Haraway, 'Situated Knowledges', p. 198.

[49] However, Haraway has been critical of Latour's emphasis on agonistic dynamics in the construction of scientific discourses as presented in *Science in Action*: as a battle of resources, willpower and wit crowning winners and disregarding everyone else. See Bruno Latour, *Science in Action* (Cambridge, MA: Harvard University Press, 1987); cfr. D. Haraway, *Modest_Witness@Second_Millennium.FemaleMan© Meets OncoMouseTM. Feminism and Technoscience* (New York: Routledge, 1997), p. 34.

[50] B. Latour, *Politics of Nature: How to Bring the Sciences Into Democracy* (Cambridge, AM / London: Harvard University Press, 2004; orig. 1999), p. 239-40; Isabelle Stengers, *Cosmopolitics I* (Minneapolis: University of Minnesota Press, 2010; orig. 1997-2003) and *Cosmopolitics II* (Minneapolis: University of Minnesota Press, 2011; orig. 1997-2003).

[51] B. Latour, *We Have Never Been Modern* (Cambridge, MA: Harvard University Press, 1993; orig. 1991), p. 142; *Politics of Nature*, p. 228; 'From Realpolitik to Dingpolitik', in B. Latour and P. Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2005), p. 24.

Bring the Sciences into Democracy (orig. 1999, first English translation 2004), Latour introduced the term *actant* 'to rid the word [actor] of any trace on anthropomorphism'.[52] The focus on the actor-network *relationship* thus becomes a strategy to think in terms of contingent (eco)*systems*, rather than essentialising the positions of 'object' and 'subject' as fixed and autonomous entities. I will return to ANT and Latour's perspective in relation to the latter's curatorial endeavours as part of Chapter 3.

In 'Situated Knowledges', Haraway also introduced the notion of 'materialsemiotic actor', 'to highlight the object of knowledge as an active, meaning-generating axis of the apparatus of bodily production, without ever implying immediate presence of such objects or […] their final or unique determination of what can count as objective knowledge at a particular historical juncture.'[53] She thus stressed that relational dynamics are not limited to the formation of matter from an ontological or essentialist perspective, but also and simultaneously to the formation of *meaning* — something that will become especially relevant in my later discussion of the 'curatorial function' as a way of channelling meaning and choreographing subject positions.

In general, new materialists tend to agree that matter and meaning are functionally inseparable, and that if meaning emerges from the properties of material through certain processes of exchange — including such 'materialsemiotic' feedback loops —, then knowledge itself cannot ever be limited to the 'subject' position of an isolated observer. In other words, the very idea of one's subjectivity is 'materialsemiotically' (or, as Karen Barad would say, *onto-epistemologically*) produced and always contingent ('situated').[54]

In this perspective, material properties themselves are not fixed and inert but *emergent*, which is to say resulting from complex interconnected processes, including those by which matter organises itself on a subatomic and molecular level and extending all the way to modes of interaction happening at the level of macroscopic systems. DeLanda refers to these processes as 'morphogenesis', borrowing the term from developmental biology to channel the Bergsonian-Deleuzian concept of 'becoming': self-organizing processes, 'an endogenous topological form (a point in the space of energetic possibilities for this molecular assemblage)'.[55]

---

[52] B. Latour, *Politics of Nature*, p. 75.

[53] *Ibid.*, p. 200.

[54] Karen Barad, *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), pp. 42-4 and 409 n. 10.

[55] Manuel DeLanda, 'Deleuze, Diagrams, and the Open-ended Becoming of the World', in Elizabeth Grosz (ed.), *Becomings. Explorations in Time, Memory and Futures* (Ithaca and London: Cornell University Press, 1999), p. 33.

The related Deleuzian term 'assemblage' is also key in DeLanda's writings. Assemblages can be defined as 'complex constellations of objects, bodies, expressions, qualities, and territories that come together for varying periods of time to ideally create new ways of functioning.'[56] The properties of an assemblage cannot be reduced to its individual components, but only *emerge* through the relationships collectively set in motion as a particular and temporarily-constituted network. Considering life itself to be such an emergent feature, DeLanda also stresses the active role of inorganic matter in morphogenetic processes: he has lamented the disproportionate amount of attention humans place on what they perceive to be living organisms, a bias which has historically prevented our species from understanding that *all* matter exists in a state of perpetual becoming. He has termed this cognitive bias 'organic chauvinism', a skewed view which makes it especially difficult for human beings to come to terms with the fact that 'living creatures and their inorganic counter-parts share a crucial dependence on intense flows of energy and materials' and that their 'organic bodies are, in this sense, nothing but temporary coagulations in these flows'.[57]

A comparable notion of becoming is also especially important in the writings of feminist materialist Elizabeth Grosz, which rethink notions of subjectivity and political agency in their inextricable connection to (extra-human) dynamic material processes. Since the late 1980s, her texts have offered highly original post-humanist re-readings of a diverse range of thinkers, from feminist authors thinking notions of sexuality and body politics such as Julia Kristeva and Luce Irigaray, philosophers with vitalist tendencies such as Nietzsche, Bergson and Deleuze, phenomenologist Merleau-Ponty, proponents of the linguistic turn including Derrida and Lacan, and more. In the introduction to her 2005 book *Time Travels: Feminism, Nature, Power*, she explains her neomaterialist understanding of the notion of becoming as a way of redefining both the notion of 'ontology' itself *and* its role in shaping society and politics past and future: in this view, subjectivity and social relations 'are in part structured […] by impersonal or pre-personal, subhuman, or inhuman forces, forces that may be construed as competing microagencies rather than as the conflict between singular, unified, self-knowing subjects or well-defined social groups.[58]

---

[56] Graham Livesey, 'Assemblage', in A. Parr (ed.), *The Deleuze Dictionary*, p. 18. Cfr. M. DeLanda, *A New Philosophy of Society: Assemblage Theory and Social Complexity* (London and New York: Continuum, 2006), and M. DeLanda, *Assemblage Theory* (Edinburgh: Edinburgh University Press, 2016).

[57] M. DeLanda, *A Thousand Years of Nonlinear History* (New York: Zone Books, 1997), pp. 103-4.

[58] Elizabeth Grosz, *Time Travels: Feminism, Nature, Power* (Durham, NC: Duke University Press, 2005), pp. 5-6.

Therefore, to understand how these inhuman forces and microagencies affect our life, our understanding of reality, our ways of knowing and interfacing with the world is key to giving shape to those choices and behaviours that *are* under human control, even if — or precisely *because* — they only are to a limited extent. Thinking of matter and subjectivities *becoming together* and never coalescing into fixed ideas, our understanding of identity formation and of political thinking as ways for our species to be in and with the world, changes the purpose and remit of politics altogether by positioning them in a cosmic, more holistic perspective.

One could consider this viewpoint to be essentially an evolution of what Marx's (and Engels') 'dialectical materialism' was *supposed* to do, were it to function in radical contrast to Hegel's teleological understanding of history (as Marx and Engels suggested in Part I of *The German Ideology*), updated to reflect what 'real world conditions' look like to late 20th-early 21st century humans and to take on board some of the lessons of 20th century philosophies and cultural studies.[59] Many critics do in fact argue that the novelty of 'new materialism' is in this sense overstated, considering that many philosophers — e.g. Althusser, Foucault, Lyotard, Deleuze and Guattari — had already set out to carry out a version of exactly that task through their reappraisals of and deviations from the legacy of Marxist thought.[60]

Karen Barad's 'agential realism'

Building on the legacy of Lyotard and Deleuze, some NM authors are especially explicit in weaving the philosophical and political lessons of the second half of the 20th century with scientific discoveries and hypotheses that have irreversibly changed our understanding of matter at large. For instance, the field of physics has been profoundly revolutionised by the appearance of the theories of relativity and of quantum mechanics in the early 20th century, watershed moments that have since made the boundary between science and metaphysics appear blurrier than ever. One thinker who has taken up the challenge of reconciling the principles of quantum mechanics with late 20th century critical methods is American philosopher Karen Barad, whose writings draw as much from Donna Haraway's posthuman

---

[59] Karl Marx and Friedrich Engels, *The German Ideology. Part one: with selections from parts two and three, together with Marx's 'Introduction to a critique of political economy'* (2nd ed., London: Lawrence and Wishart, 1974; orig. c.1846).

[60] See Diedrich Diedrichsen, 'Is Marxism a Correlationism?', in C. Cox, J. Jaskey and S. Malik (eds.), *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015), pp. 61-69.

ecofeminism and Judith Butler's performativity theory as they do from the 'philosophy-physics' of Niels Bohr.[61] Her 2007 book *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning* lays out her theory of 'agential realism', a philosophical approach positing not only that matter and meaning cannot fundamentally be separated, but also that understanding their interdependence can shed light on the nature of intentionality and agency, thus serving as a foundation for a unified 'ethico-onto-epistem-ology' based on 'an empirically accurate understanding of scientific practice'.[62]

The starting point for agential realism is Bohr's principle of complementarity: the fact that although elementary particles (quanta) possess properties of both waves and particles (the 'wave-particle duality' principle), they cannot *simultaneously* behave as waves and particles. For Bohr this 'duality paradox' is not an epistemological but a *metaphysical* matter: it is not a function of what we can or cannot *know* about quanta, as a particle exists as a field of equally valid possibilities — the principle of 'quantum superposition' — until its behaviour is *physically* determined by an external interference, as described mathematically through the 'wave function collapse'. In fact, a particle's behaviour can be determined by its relationship with other, spatially separate particles: it's the phenomenon of quantum entanglement, according to which a pair or group of particles share their quantum state, so that the state of one cannot be described independently of the state of the others, no matter how far away. In other words, the properties of matter depend on a form of interaction, or better still of *intra-action*, a Baradian neologism signifying 'the mutual constitution of entangled agencies' — a sort of rephrasing of Whitehead's notion of 'prehension': 'in contrast to the usual 'interaction,' which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action.'[63]

Barad proposes a 'posthumanist performative theory' as a way of rethinking the possibilities of knowledge and locating them 'outside' the mind, beyond the realm of logocentric representations such as human cognition or language, and of shifting the focus on the performative, agentic properties of matter at large:

> The move toward performative alternatives to representationalism shifts the focus from questions of correspondence between descriptions and reality (e.g., do they mirror nature or

---

[61] K. Barad, *Meeting the Universe Halfway*, p. 24.

[62] *Ibid*., p. 26 and cfr. pp. 89-90.

[63] K. Barad, *Meeting the Universe Halfway*, p. 33.

> culture?) to matters of *practices, doings, and actions*. [Conversely,] social constructivist and traditional realist approaches get caught up in the geometrical optics of reflection where, much like the infinite play of images between two facing mirrors, the epistemological gets bounced back and forth, but nothing more is seen.[64]

Optical metaphors are recurring discursive tools in *Meeting the Universe Halfway*, and in particular the notion of 'diffraction'. Barad borrows the notion of 'diffractive method' from Haraway, who had introduced the concept of 'diffraction patterns' in *Modest_Witness@Second_Millennium* (1997) as an alternative to linear, self-similar 'reflections': 'Diffraction does not produce 'the same' displaced […]. A diffraction pattern does not map where differences appear, but rather maps where the *effects* of difference appear.'[65] This analogy functions on multiple levels: Haraway intended it primarily as a way to catalyse knowledge as a force for creativity, collaboration and change instead of trapping it within 'geometries of sameness'; at the same time, diffraction patterns are the product of physical wave interferences, and their observation in a laboratory setting provided empirical proof of the wave-particle duality. Barad continues:

> What often appears as separate entities (and separate sets of concerns) with sharp edges does not actually entail a relation of absolute exteriority at all. Like the diffraction patterns illuminating the indefinite nature of boundaries […] the relationship of the cultural and the natural is a relation of 'exteriority within.' This is not a static relationality but a doing — the enactment of boundaries […].[66]

Agential realism follows Bohr in 'scaling up' the metaphysics derived from the observations of quantum physics to every level of experience, or intra-action, by rejecting the notion that what functions as an entity possesses inherently determined properties, including at the level of human cognition: differences are rather *enacted* by material assemblages and should be understood as contingent effects of 'agential cuts', which articulate the world by forming boundaries at different scales.[67] These boundaries form transient 'primary ontological units', not separate 'things' with fixed property and meanings but rather what Barad calls

---

[64] K. Barad, *Meeting the Universe Halfway*, p. 135. My emphasis.

[65] D. Haraway, 'The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others', in L. Grossberg, C. Nelson, and P. Treichler (eds.), *Cultural Studies* (New York: Routledge, 1992), pp.295-337. Also see D. Haraway, *Modest_Witness@Second_Millennium*, pp. 268, 273.

[66] K. Barad, *Meeting the Universe Halfway*, pp. 135-6.

[67] *Ibid*., pp. 137-9.

phenomena: 'phenomena do not merely mark the epistemological inseparability of observer and observed, or the results of measurements; rather, *phenomena are the ontological inseparability/entanglement of intra-acting 'agencies.'* That is, phenomena are ontologically primitive relations — relations without preexisting relata.'[68] Thus unlike Bohr, who in his philosophical writings concentrated on the *epistemological* implications of these findings, Barad stresses the inseparability of knowledge from these processes of 'mattering', *by treating agential realism as an entanglement of ontology and epistemology*.[69]

For Barad, phenomena in general can emerge through iterative processes, which is to say through repetition: each instance is contingent, but patterns do emerge, including morphogenetic patterns correlating with certain material constraints.

Humans may or may not intentionally take part in intra-actions constituting particular phenomena. When they do, Barad argues, it is crucial to understand just how deeply their actions are intertwined with (what they register as) their environment. This is an understanding of causality that goes well beyond holistic ideas of how 'everything is (causally) connected' in ecological systems, and most importantly it changes the way agency itself is to be understood: if there are no entities with defined boundaries and inherent features, *both causes and effects emerge through intra-actions*, and agency too must be understood as a *contingent* configuration.[70] To speak of 'human' agency, of subjectivity and subject positions in general, is to speak of particular instances of *iteratively enacted phenomena contingently constituted into subjects*.

In this view, not only is agency not the sole domain of humans; rather, it is the condition for matter in general. Barad provides a radical redefinition of what the agency in agential realism is:

> agency […] cannot be designated as an attribute of subjects or objects (as they do not preexist as such). It is not an attribute whatsoever. Agency is […] the enactment of iterative changes to particular practices […] through the dynamics of intra-activity. Agency is about […] reconfiguring material-discursive apparatuses of bodily production, including the boundary articulations and exclusions that are marked by those practices in the enactment of a causal structure.[71]

---

[68] *Ibid*., p. 139.

[69] *Ibid*., p. 137.

[70] *Ibid.*, p. 176.

[71] *Ibid.,* p. 178.

This is where the phenomena we understand as 'humans', 'subjects', 'we'/'us', have an active role to play: a certain amount of choice is at play in how we participate in ongoing material enfoldings. As she noted, 'the enactment of boundaries' is 'a doing […] that always entails constitutive exclusions and therefore requisite questions of accountability.'[72] In particular, Barad argues, *what we know* and *how we know it* matters, and to be able to know objectively carries a considerable ethical weight when we are directly involved in the enacting of certain differential cuts. Where the boundaries are drawn, who is excluded and who is included (both human and non-human, organic and inorganic) by the parts of our actions we can actively shape, can set in motion a cascade of consequences:

> Objectivity means being accountable for marks on bodies, that is, specific materializations in their differential mattering. […] Cuts are agentially enacted not by willful individuals but by the larger material arrangement of which 'we' are a 'part.' […] Indeed, ethics cannot be about responding to the other as if the other is the radical outside to the self. Ethics is not a geometrical calculation; 'others' are never very far from 'us'; 'they' and 'we' are co-constituted and entangled through the very cuts 'we' help to enact.[73]

Agential realism implies that intra-action is also a form of 'knowing', insofar as boundary-making constitutes phenomena both as matter and as meaning, and that what we understand as cognition is also a type of material intra-action. In this sense, agential realism is a kind of pan-psychism, though rather than extending cognitive faculties to inanimate things, here it is the notion of cognition itself — in its common understanding as a prerogative of certain living beings — that is thoroughly subverted. Indeed, all categories such as 'living' and 'inanimate things' are fundamentally put into question as contingent (material-semiotic) phenomena. The same goes for ethics, which are also not understood as uniquely human, nor separable from material processes at large. However this does not mean *responsibility* is distributed among all phenomena equally: agential realism is no excuse for fatalism and moral disengagement. In fact, Barad suggests, it should have the opposite effect. As long as 'we' are constituted as subjectivities, whatever that 'we' or 'I' is understood to be, for however long that particular phenomenon/apparatus of selfhood is constituted, *it* becomes accountable for its share of intra-acting:

---

[72] *Ibid.*, p. 136.

[73] *Ibid.*, pp. 178-9.

> Responsibility is not ours alone. And yet our responsibility is greater than it would be if it were ours alone. Responsibility entails an ongoing responsiveness to the entanglements of self and other, here and there, now and then. […] Meeting each moment, being alive to the possibilities of becoming, is an ethical call, an invitation that is written into the very matter of all being and becoming. We need to meet the universe halfway, to take responsibility for the role that we play in the world's differential becoming.[74]

Intersections with vitalisms and affect theory

While Barad maintains a certain distance from vitalism, careful to avoid 'organic chauvinism' and pointing out where her language seems to come across as too anthropomorphising, other new materialists embrace it without qualms: Rosi Braidotti and Elizabeth Grosz often discuss their positions as neomaterialist vitalisms, using language that emphasises the ability of matter to self-organise and variously qualifies it as life-like.[75]

Jane Bennett's *Vibrant Matter: A Political Ecology of Things* lays out a version of vital materialism that is explicitly indebted to Bergson's *élan vital*, complemented with the brand of 'vital force' proposed by German biologist and philosopher Hans Driesch (a property he called 'entelechy'), though unlike these two she locates this vitality squarely within a monistic understanding of matter, owing much to Spinoza's notion of *conatus*, the 'striving to continue to exist'.[76] Bennett's vital materialism also calls for the extension of the notion of agency to non-human entities, basing her critique of dualisms such as 'nature' and 'culture', or humanity as separate from its 'environment', on scientific observations that stress the complexity and interconnectedness of human and non-human in the many material assemblages constituting reality: 'In a world of vibrant matter, it is thus not enough to say that we are 'embodied.' We are, rather, an array of bodies, many different kinds of them in a nested set of microbiomes.'[77]

Bennett hopes that an understanding of the vital properties of matter can usher in a new era of ecopolitics, where both animate and inanimate entities can participate in political discourse. Not unlike Latour's proposition of a 'parliament of things', Bennett hopes for a 'a

---

[74] *Ibid.*, pp. 394-6.

[75] R. Braidotti, *The Posthuman*, esp. pp. 55-7; E. Grosz, *The Nick of Time: Politics, Evolution and the Untimely* (2004).

[76] Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010), p. 112-3; cfr. Baruch (Benedict de) Spinoza, *Ethics Demonstrated in Geometrical Order (Ethica Ordine Geometrico Demonstrata)*, Part III, prop. 6.

[77] *Ibid.*, pp. 2, 22.

theory of action that more explicitly accepts nonhuman bodies as members of a public, more explicitly attends to how they, too, participate in conjoint action, and more clearly discerns instances of harm to the […] bodies of animals, vegetables, minerals, and their ecocultures.'[78] However, while Latour offers detailed sociological analyses of the mechanisms of exchange and translation at play in ANT, Bennett remains rather vague on the programmatic and normative value of her 'vibrant materialism' when it comes to political praxis.[79]

Ultimately, the notion of vibrant materialism works best as a challenge to received notions of human subjectivity and ingrained anthropocentric biases. Bennett admits that perhaps the anthropomorphising tendencies of vitalism could be forgiven as a useful heuristic, a metaphorical, rhetorical shortcut that can be deployed strategically in aid of the counterintuitive lessons of matter-realism: 'Maybe it is worth running the risks associated with anthropomorphizing (superstition, the divinization of nature, romanticism) because it, oddly enough, works against anthropocentrism: a chord is struck between person and thing, and I am no longer above or outside a nonhuman 'environment'."[80]

Overall, the question of anthropomorphic tendencies in vitalist and pan-psychist strands of NM/NR remains divisive. This aporia is one of the points of contention most often leveraged against NM/NR, and a point I will discuss in more detail in Chapters 4 and 5.

Another way in which some of the thinkers associated with new materialism reject logocentrism and the mind-body dualism is by stressing how *rational* cognitive processes are not the only ways for humans to interface with reality: pre-conscious, emotional, sensual forms of interaction with our surroundings and our own bodies are also deeply implicated in ways that are impossible to separate from thought in embodied mechanisms of knowledge formation. This becomes especially obvious when attempting to reconcile philosophical formulations with the ways in which neurophysiology explains the processes of cognition.

Emphasising the relational nature of these interaction as material feedback loops, NM also stress that the same is true of the way a subject acts upon its surroundings. The influence of Deleuze and Guattari is also felt here, particularly via the notion of 'affect', borrowed from

---

[78] *Ibid.*, p. 103.

[79] *Ibid.*, pp. 107-8. Nevertheless, Bennett seems to imply that some chauvinistic prejudice will never go away; in fact, she confesses, 'I also identify with members of my species, insofar as they are bodies most similar to mine. The political goal of a vital materialism is not the perfect equality of actants, but a polity with more channels of communication between members.' (ibid., p.104).

[80] *Ibid.*, p. 120.

Spinoza's *Ethics*.[81] Affects are processes of transformation exerted by and upon bodies, including sensations and emotions, but irreducible to either.[82] As explained by philosopher (as well as translator of Deleuze and Guattari's *A Thousand Plateaus*) Brian Massumi, '*L'affect* (Spinoza's affectus) is the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act.'[83] He also makes a distinction from the separate term '*L'affection* (Spinoza's *affectio*)', 'each such state considered as an encounter between the affected body and a second, affecting, body'.[84] This is especially relevant when thinking (and curating) art through a new materialist lens; I will expand on this notion from Chapter 6 to pick up this thread in relation to notions of aesthesic prehension.

There are many more notions, influences and authors I could cover on the (expanded) feminist and post-human side of new materialism (Catherine Malabou, N. Katherine Hayles, Elizabeth A. Povinelli, Anna Tsing and Vicki Kirby immediately come to mind); it is extremely difficult to do justice to a field this polymorphic and methodologically open. Several essays and publications functioning as introductions to NM and affect theory have nonetheless been published in the past decade, which have proved invaluable to my own research; besides Braidotti's *The Posthuman* (2013), I am particularly indebted to the anthology *New Materialisms: Ontology, Agency, and Politics*, edited by Diana Coole and Samantha Frost (2010), the book *New Materialism: Interviews & Cartographies* edited by Rick Dolphijn and Iris van der Tuin (2012) and, more specifically in relation to artistic practices, Estelle Barrett's and Barbara Bolt's edited volume *Carnal Knowledge. Towards a 'New Materialism' through the Arts* (2013). On affect theory, *The Affect Theory Reader* by Melissa Gregg and Gregory J. Seigworth (particularly their introduction, 'An Inventory of Shimmers') is an especially insightful source.

After this *very* compressed cavalcade through the basics of new materialism, it is time to move on to a whirlwind tour of what I consider to be the second main strand of NM/NR, a younger phenomenon (and arguably a rather short-lived one) that nonetheless managed to

---

[81] B. Spinoza, *Ethics*, Part III: 'The Origin and Nature of the Affects'. For a translation that uses the term 'affects', see B. Spinoza, *A Spinoza Reader. The Ethics and Other Works*, ed. and trans. by E. Curley (Princeton, NJ: Princeton University Press, 1994), pp. 152-97. Cfr. Gilles Deleuze, *Spinoza: Practical Philosophy*, trans. by R. Hurley (San Francisco, CA: City Lights, 1988), pp. 17-22.

[82] See Gregory J. Seigworth & Melissa Gregg, 'An Inventory of Shimmers', in *The Affect Theory Reader*, pp. 1-25, esp. 1-9, and Felicity J. Colman, 'Affect', in Adrian Parr (ed.), *The Deleuze Dictionary - Revised Edition*, Edinburgh University Press, 2010, pp. 11-4.

[83] Brian Massumi, 'Notes on the Translation and Acknowledgements', in Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. by B. Massumi (London/New York: Continuum, 1987; orig. 1980), p. xvii.

[84] *Ibid.*

exert a remarkable influence on artistic and curatorial practices — indeed for a short time arguably stronger than that of ecofeminist matter-realisms: *speculative realism*.

Against the Subject: Speculative Realism and Object-Oriented Philosophy/Ontology

The binomial label of speculative realism (SR) was coined *ad hoc* for a conference held at Goldsmiths, University of London in April 2007, which brought together four philosophers with a common interest in theorising ways of understanding and describing reality beyond its relation to humanity.[85] On a superficial level, SR can be said to have a similar motivation to that of the matter-realisms discussed above: to take a critical distance from the limitations of post-structuralist philosophies enthralled with the 'linguistic turn', indebted as they were to Cartesian mind-body dualisms and post-Kantian idealisms, and to return to discourses over ontological matters through renewed dialogues with technoscientific knowledges, while equally careful not to retrench into positivist fallacies.[86] However, SR's core propositions are much more radical in rejecting post-structuralist approaches to subjectivity than the vast majority of NM positions.

Speculative realists gathered around a staunch rejection of what they sometimes refer to as the 'philosophies of access', which is to say all theories positing the necessity of the mind — as the locus of human forms of cognition — in order to access knowledge of a reality (presumed to be) external to a given subject. French philosopher Quentin Meillassoux calls all approaches to epistemology as a function of human subjectivity and culture — from Wittgenstein to phenomenology to radical anti-realisms to moderate constructivist currents — 'correlationisms', where the term refers to 'the idea according to which we only ever have access

---

[85] *Speculative Realism: A One Day Workshop*, Goldsmiths, University of London, 27 April 2007.

[86] Levi Bryant, Nick Srnicek and Graham Harman have also used the label 'Speculative Turn' in the title of their anthology on the subject — a playful riff on SR's antagonistic position towards the hegemony of the 'Linguistic Turn'. See Levi Bryant, Nick Srnicek and Graham Harman, 'Towards a Speculative Philosophy', in L. Bryant, N. Srnicek and G. Harman (eds.), *The Speculative Turn. Continental Materialism and Realism* (Melbourne: re.press, 2011), p. 1; cfr. Rick Elmore, 'Speculative Realism', in P. Gratton and Paul J. Ennis, *The Meillassoux Dictionary*, pp. 156-8. Another umbrella term that has been used to refer to this strand of philosophy is 'continental' or 'post-continental realism', as used for instance by Paul J. Ennis, co-founder of the 'flagship' periodical *Speculations. Journal of Speculative Realism*, which published six issues between 2010 and 2015. See Paul J. Ennis, *Continental Realism* (Winchester / Washington: Zero Books, 2011), and his earlier *Post-Continental Voices. Selected Interviews* (Winchester / Washington: Zero Books, 2011). Previously, John Mullarkey / Ó Maoilearca had published an overview of what he called 'post-continental philosophy', grouping together Gilles Deleuze, Alain Badiou, Michel Henry and François Laruelle; see J. Mullarkey, *Post-Continental Philosophy. An Outline* (London / NEw York: Continuum, 2006). See also R. Brassier, 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), p. 411.

to the correlation between thinking and being, and never to either term considered apart from the other.'[87] Meillassoux later introduced the term 'subjectalism' specifically in response to vitalist strains of new materialisms and other strands of anti-anthropocentric thinking that he still considers to be too anthropomorphic, precisely because they transfer properties of human subjectivity and/or cognition to matter at large.[88]

The four 'canonical' SR thinkers at the centre of the foundational 2007 conference were Meillassoux, British philosophers Ray Brassier and Iain Hamilton Grant, and (then Cairo-based) American Graham Harman. The 'Speculative Realism' title was intended for a one-off use rather than as an official definition for a proposed 'movement'; indeed, not even the core group who spoke at the 2007 Goldsmiths event was ever truly compact in subscribing to it.[89] Brassier and Meillassoux, for example, do not think of themselves as realist philosophers in the strict sense of the term; the latter has referred to his own ideas as 'speculative materialism', a label which predates (and possibly inspired) the SR moniker.[90] The unexpected juxtaposition of speculation and realism did however address two of their main shared areas of interest: a robust critique of constructivist modes of thought and a return to ontology as a way to formulate hypothetical definitions for the absolute, external reality understood as existing independently of thinking subjects and which can only be known through the mediation of logical assumptions (if at all, as some thinkers associated with SR do in fact reject the possibility that the absolute can ever truly be known).[91] In this sense, SR too can be interpreted as a kind of anti-humanism, since it strives to point out the fallacies of anthropocentric perspectives so that *Homo sapiens* can better understand its contingent place in the universe. Unlike NM, however, SR showed little interest in engaging with epistemological and ethical questions that might emerge in response to this radical act of decentering. Its primary aim was

---

[87] Quentin Meillassoux, *After Finitude. An Essay on the Necessity of Contingency*, (London: Continuum, 2008; orig. 2006), p. 5. However, on anti-correlationism as the minimum criterion for inclusion under the moniker, see Ray Brassier, 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), pp. 416-17.

[88] Q. Meillassoux, 'Iteration, Reiteration, Repetition. A Speculative Materialist Analysis of the Sign Devoid of Meaning' (orig. 2012), in A Avanessian and S. Malik (eds.), *Genealogies of Speculation. Materialism and Subjectivity since Structuralism* (London and New York: Bloomsbury, 2016), pp. 117-197.

[89] R. Brassier, *Nihil Unbound. Enlightenment and Extinction* (Basingstoke: Palgrave Macmillan, 2007), pp. xii, 31; R. Brassier, 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes*, pp. 407-421.

[90] Q. Meillassoux, *After Finitude*, p. 121. In fact Meillassoux was included as one of four key 'new materialist' philosophers by Dolphijn and Van der Tuin in their book *New Materialism: Interviews & Cartographies*, though his radical distance from DeLanda's, Braidotti's and Barad's positions and approaches is clearly and explicitly stated by the authors (p. 16).

[91] Steven Shaviro, 'Speculation', in P. Gratton and P. J. Ennis, *The Meillassoux Dictionary* (Edinburgh: Edinburgh University Press, 2014), pp. 156-8; Q. Meillassoux, *After Finitude*, p. 34.

rather to define what exists outside the sphere of human thoughts and interactions altogether, establishing the parameters to imagine and describe a universe without humans: a kind of disembodied philosophy that is practically the obverse of NM's situated knowledges.

Deleuze and Guattari — particularly their recovery of Spinozist monism — are also important references for SR (at least in the case of Meillassoux, Grant and Brassier), particularly via Alain Badiou, who positioned Deleuze as a rationalist philosopher whose focus on immanence served as a much-needed alternative to phenomenology and social constructivisms.[92] At the same time, specific Deleuzian positions are just as often critiqued by SR thinkers, although for sometimes radically different reasons; notably, Meillassoux considers Deleuze's brand of vitalism a way of 'absolutizing the correlation itself'.[93]

Another shared influence on philosophers associated with SR is an open acknowledgement of the influence of analytical philosophy, and the intent to overcome the perceived divide and opposition between the analytical and continental traditions. While this is also true of matter-realisms, SR's involvement with the analytical school is more direct and systematic, particularly in the case of Brassier and Harman.

In spite of their common antipathy towards the linguistic turn and social constructivisms, the four core thinkers of SR have rather distinct approaches to anticorrelationism. It might in fact be more correct to talk about the core *texts* of SR, to reflect its emergence as a particular moment that the majority of its initial proponents have since moved beyond.

Meillassoux's essay *After Finitude. An Essay on the Necessity of Contingency* (2006, with Ray Brassier's English translation published in 2008) is often cited as the main catalyst for the temporary alliance of the 'four horsemen of anticorrelationism', precisely by giving their common enemy — the 'philosophies of access' — a name to band against.[94] *After Finitude* lays out a speculative materialist theory of reality as *absolute*, which is to say that which can be proven as existing independently of thought. Meillassoux also calls this notion 'the great outdoors', a notion of radical exteriority from the realm of subjectivity, in other words the mind-independent reality which correlationisms seem unable to think independently of its

---

[92] Alain Badiou, *Deleuze. The Clamor of Being* (Minneapolis: University of Minnesota Press, 1999); Sjoerd van Tuinen, 'Deleuze: Speculative and Practical Philosophy', in A. Avanessian and S. Malik (eds.), *Genealogies of Speculation. Materialism and Subjectivity since Structuralism*, pp. 93-114.

[93] Q. Meillassoux, *After Finitude*, p. 37; cfr. G. Harman, *Prince of Networks: Bruno Latour and Metaphysics*, (Melbourne: re.press 2009), p. 101, and (for a much later, post-SR-phase text) Ray Brassier, (2015). 'Deleveling: Against "Flat Ontologies."', in: V. Dijk, et al. (eds.), *Under Influence - Philosophical Festival Drift (2014)* (Antwerp: Omnia, 2015), pp. 64-80.

[94] Ian Bogost, *Alien Phenomenology, or What it's like to be a thing* (Minneapolis, MN: University of Minneapolis Press, 2012), p. 5.

relation to human access.[95] Meillassoux — whose teacher and mentor was Badiou — maintains that it is possible to attain knowledge of the absolute through pure reason and mathematics; he considers the central task of his philosophy to be the search for a proof of this metaphysical premise.

Much of *After Finitude* is occupied by an analysis of how correlationism has become the predominant paradigm in European and Euro-American philosophy. As Meillassoux explains, a prominent strategy employed in epistemology consists in breaking down observations of reality into *primary qualities* and *secondary qualities*; the latter are functions of the relation between a subject and an object, while the former refer to the 'thing in itself', or the 'thing without me'.[96] While Kant insisted that the dependence of secondary qualities on subjective conditions should extend to primary qualities as well (what Kant called the 'Copernican turn'), Meillassoux suggests that the opposite is true: primary qualities can be expressed or described in the symbolic language of mathematics, and '*all those aspects of the object that can be formulated in mathematical terms can be meaningfully conceived as properties of the object in itself*.'[97] In other words, Meillassoux considers Kant's understanding of the Copernican revolution to be but a *reactionary misunderstanding* of the real insight of Copernicus: the idealist transcendental method subordinates reality to our representations of it, and therefore puts humanity *even more fundamentally at the centre of the universe* than it was under the Ptolemaic system. As a consequence, attempts to describe reality outside this relation have been accused, post Kant, of being naive forms of realism, while objectivity has become widely understood to depend on the consensus of the scientific community.[98] The *de facto* hegemony of correlationist philosophies after Kant has reinforced the idea that objectivity is not *absolute* truth: reality can only be said to be as observed by humans (or as 'given to a subject') and can only be verified *intersubjectively*, i.e. among humans.[99]

The argument of *After Finitude* is, at its core, a complex logical demonstration of the possibility of knowing something of reality *outside* the correlational paradigm, without relying on the subjective dimension of consciousness or the representational mediations of language. Central to his theory is the notion of the 'ancestral realm', a reality which existed before humanity, indeed before life on earth, and the related notion of the 'arche-fossil', any material

---

[95] Bart Zaantvoort, 'Absolute', in P. Gratton and Paul J. Ennis, *The Meillassoux Dictionary*, p. 20; Q. Meillassoux, *After Finitude*, p. 7.

[96] *Ibid*., p. 2.

[97] *Ibid*., p. 3. Italics in the original.

[98] *Ibid*., pp. 4-5.

[99] *Ibid*., pp. 12-15.

that provides proof of the existence of an ancestral reality: 'for example, an isotope whose rate of radioactive decay we know, or the luminous emission of a star that informs us as to the date of its formation.'[100] If correlationist philosophies posit that it is impossible to think reality outside of its relation to us, how are we to understand factual descriptions of phenomena that have taken place before humanity even existed? In what way can these 'dia-chronic notions', which is to say those statements scientists are capable of inferring from the measurement of arche-fossils be said to be true in an absolute sense?

Rather that answering this question directly, Meillassoux turns to the arguments of what he calls the 'strong' variant of correlationism, namely those philosophies that deny the possibility of absolute reality, in order to prove their fundamental inconsistency. Meillassoux thus aims at refuting correlationism *from within*, by using its own internal logic against itself. Namely: if strong correlationists believe that nothing can be known *absolutely*, then they are forced to uphold 'the absence of reason for any reality' (a postulate that Meillassoux terms the 'principle of facticity').[101] He further extrapolates that *'only contingency alone is absolutely necessary'*: this is what he calls the 'principle of factiality', or the 'principle of unreason'.[102] Meillassoux explains this as a paradoxical rationalism based on a 'performative contradiction': 'reason clearly demonstrates that you can't demonstrate the necessity of laws: […] laws are not necessary. They are facts, and facts are contingent. They can change without reason.'[103] His speculative materialism turns facticity into an eternal principle, a temporal notion which Meillassoux calls 'hyper-chaos': 'the equal contingency of order and disorder, of becoming and sempiternity.'[104]

Meillassoux admits that this line of reasoning, whilst having profound ontological implications, is not particularly helpful in proving that science is capable of objective descriptions of the absolute. His work following the publication of *After Finitude* addresses this

---

[100] Q. Meillassoux, *After Finitude*, p. 10.

[101] Q. Meillassoux, 'Time without Becoming', paper delivered at the Centre for Research in Modern European Philosophy, Middlesex University, May 2008; online at <https://speculativeheresy.files.wordpress.com/2008/07/3729-time_without_becoming.pdf> [accessed 11 May 2020]; reprinted in *Spike* 35 (2013, pp. 91-105), p. 97. Cfr. Q. Meillassoux, *After Finitude*, pp. 38-42.

[102] Q. Meillassoux, *After Finitude*, pp. 60, 79-81.

[103] Q. Meillassoux, 'Time without Becoming', p. 102.

[104] *Ibid*. Cfr. Q. Meillassoux, *After Finitude*, p. 38-42.

issue by focusing on the possibility of articulating reality — in its hyper-chaotic and a-subjective existence — using language, particularly the sign-language of mathematics.[105]

Partly based on Meillassoux's theory as laid out in *After Finitude*, Ray Brassier's 2007 book *Nihil Unbound* upholds an understanding of reality as utterly indifferent to humanity and devoid of meaning, alongside other sentimental values projected onto it by a species in denial, historically unable to handle that harshest of truths. Brassier's reappraisal of nihilism is based on the idea that the moment of 'disenchantment' propelled forward by the Enlightenment's appeal to reason is not to be resisted nor diluted, because only through scientific images can we understand the reality of nature outside the mind, and base our decisions upon the truth that can be learned from intellectual discovery unhindered by unfounded beliefs. Indeed, Brassier reminds us (by channelling the Jean-François Lyotard of *The Inhuman*, first published in French in 1988) that extinction is a historical fact: it *will* happen, due at the latest to the inevitable demise of the star we call Sun, eventually followed by the all-destroying heat-death of the universe.[106] This inexorability practically means that *human extinction has already happened*: in Brassier's view we all are, and always were, *already dead*.[107] Much like the arche-fossil for Meillassoux, the fact of human extinction should be understood as a sufficient reason to deny the validity of subjective, correlationist schemas of thought. In the absence of any meaning or purpose, all that remains is a 'will to know', driving human beings to seek explanations for phenomena which can however become subject to distortions and misunderstandings.[108]

Besides Meillassoux, Brassier bases his theories on Adorno and Horkheimer's critique of scientific reason (i.e. *Dialectic of Enlightenment*, orig. 1947, first published in English in 1972), as well as Alain Badiou's mathematics-based ontology and François Laruelle's 'non-philosophy' (Brassier was indeed instrumental in bringing the latter to the attention of English-speaking academics). Wilfrid Sellars' defence of the objectivity of 'scientific images' in opposition to the illusions of the 'manifest images' of everyday experience is especially key to

---

105 Meillassoux's later essay 'Iteration, Reiteration, Repetition. A Speculative Materialist Analysis of the Sign Devoid of Meaning' (orig. 2012, published in English in 2016) grapples precisely with this problem. Meillassoux has also written extensively on Stéphane Mallarmé's poem *Un coup de dés jamais n'abolira le hasard* (1897-8), which he considers to function as an encrypted code containing insights on the poet's own radical understanding of contingency. See Q. Meillassoux, *The Number and the Siren. A Decipherment of Mallarmé's* Coup de Dés (Falmouth / New York: Urbanomic / Sequence Press, 2012).

106 J. F. Lyotard, *The Inhuman* (Cambridge: Polity Press, 1991; orig. 1988).

107 R. Brassier, *Nihil Unbound*, pp. 223-30.

108 *Ibid.*, p. 205-39.

Brassier's argument.[109] Sellars described the distinction between the 'scientific image' and the 'manifest image', the latter being synonymous with human access, or knowledge as informed by the human mind, conforming to the filters of sensual perception, societal norms, desires and morality. Manifest images however are the only frameworks through which scientific images can be developed in the first place, and the two have to be merged in a 'stereoscopic synthesis' through rational thinking.

Iain Hamilton Grant was connected to the anti-correlationist perspective through his take on the philosophy of nature and his connected critique of the post-Kantian tendency to forget the *physics* in *metaphysics*.[110] In his 2006 book *Philosophies of Nature After Schelling* he calls for a return to the 'naturephilosophy' of Friedrich Wilhelm Joseph von Schelling, a key figure of German idealism (though rather neglected in the Anglophone world, compared to Fichte and Hegel), as a model to recover the importance of Plato's physics as the foundation and necessary core for a metaphysics that takes into account scientific claims to objectivity. Like Meillassoux, Grant also blames Kant's 'Copernican turn' with shifting the focus of philosophy heavily on the side of human forms of subjectivity, and to the primacy of organic life forms over inorganic matter.

Grant argues that contemporary philosophy should in fact return to Schelling's understanding of naturephilosophy as 'a physics of organization', whereby organization is a power of 'the self-construction of matter': a physicalist understanding of metaphysics that does not look down on matter as the grounding substratum — a physicalist 'reduction' —, but understands the potentiality of matter as that upon which everything, including human consciousness, is constructed. Therefore, a thorough understanding of nature/*physis* is the necessary foundation of any metaphysics. Quoting Schelling, Grant maintains that 'By way of philosophy […] humanity is to be carried beyond simple representation'.[111] Grant too grapples with Lyotard and Deleuze as two of the few 20th century, 'post-Kantian' philosophers to have in his view given serious consideration to the matter of nature.

Compared to the previous three figures, Graham Harman has developed a rather unique approach to anticorrelationism, whereby the primacy of human access is countered by reframing human perception as just another form of causal relation between *objects* — a category including entities on any scale and level of complexity, existing or imaginary,

---

[109] Wilfrid Sellars, 'Philosophy and the Scientific Image of Man', in *Science, Perception and Reality* (London: Routledge and Kegan Paul, 1963), pp. 1–40; W. Sellars, *Empiricism and the Philosophy of Mind* (Cambridge, MA: Harvard University Press, 1997).

[110] Iain Hamilton Grant, *Philosophies of Nature After Schelling* (London / New York: Continuum, 2006), p, viii.

[111] *Ibid.*, p.3.

including intangible concepts and fictional characters. At the same time, Harman maintains that 'objects can only make indirect contact with one another': direct access to the absolute is thus inherently precluded.[112] In other words, Harman maintains that things-in-themselves are fundamentally 'withdrawn from presence', not just for humans but for every *thing*.

Harman has been promoting a unique fusion of elements borrowed from Alfred North Whitehead's theory of perception as a process moving from object to subject, Heidegger's tool analysis, Husserl's phenomenology of 'sensual objects', Latour's ANT, Manuel DeLanda's assemblage theory and a number of lesser-known analytical philosophers since his 1999 doctoral dissertation titled 'Tool-Being: Elements in a Theory of Objects', for which he coined the moniker of 'object-oriented philosophy'.[113] A few years and publications later, his position had gathered a robust following, most prominently with Timothy Morton and Ian Bogost. In its expanded discursive version, this school of thought has become widely known as Object-Oriented Ontology (OOO).[114]

Harman bases his definition of 'object' on Latour's understanding of actants: essentially anything that can *act*, including imaginary entities, concepts and sets of things with collective nouns. Like Latour, Harman — and other OOO philosophers — often use extensive lists of seemingly unrelated things (a trope Ian Bogost has given the name of 'Latour Litany'), meant to show the variety and expansive understanding of what he considers to be a fundamental ontological unit, putting all such disparate entities on the same plane of existence; Harman refers to this as 'flat ontology' (another coinage originally by Bogost).[115] Unlike ANT, however, OOO's object is defined less by its agency than by its essential *unity*: 'an object is real when it forms an autonomous unit able to withstand certain changes in its pieces' and still retain its identity.'[116]

Harman is adamant that, in order to understand how reality works at a fundamental level, objects should not be reduced to either distinct qualities or separable components (including units of matter such as subatomic particles, or what he has disparagingly called 'the

---

[112] L. Bryant, N. Srnicek and G. Harman, 'Towards a Speculative Philosophy', in L. Bryant, N. Srnicek and G. Harman (eds.), *The Speculative Turn*, p. 8.

[113] Harman later published an expanded version as *Tool-Being. Heidegger and the Metaphysics of Objects* (Chicago and La Salle, IL: Open Court, 2002).

[114] The term was coined by Levi Bryant in 2009. Graham Harman, 'Series Editor's Preface', in Levi R. Bryant, *Onto-Cartography: An Ontology of Machines and Media* (Edinburgh: Edinburgh University Press, 2014), p. IX. Also see L. Bryant, 'Onticology–A Manifesto for Object-Oriented Ontology, Part 1'. *Larval Subjects* blog, <https://larvalsubjects.wordpress.com/2010/01/12/object-oriented-ontology-a-manifesto-part-i/>, published 12 January 2010 [accessed 15 February 2021].

[115] I. Bogost, *Alien Phenomenology*, pp. 38-9.

[116] G. Harman, *The Quadruple Object (*Winchester / Washington: Zero Books, 2011), p. 123.

dull realism of mindless atoms and billiard balls'), nor to their effect on other objects (in the form of experiences, representations, relations); Harman call these two common strategies 'undermining' and 'overmining'.[117] According to Harman, undermining cannot account for the emergence of properties that make an object more than the sum of its parts, while overmining 'allows objects no surplus of reality beyond whatever they modify, transform, perturb or create': 'an object cannot absorb or respond to feedback unless it is receptive, and this requires that it be more than what it currently does.'[118]

Harman also notes that undermining and overmining often go hand in hand what he calls *duomining*. This is the approach to matter taken by most materialisms, including — he notes — Meillassoux's speculative variant, 'which ruthlessly undermine when they treat ultimate particles, fields, strings, or indeterminate 'matter' as the ultimate layer of the cosmos, but then ruthlessly overmine when claiming that mathematics can exhaust the primary qualities of this genuine layer.'[119] In general, Harman and OOO consider new materialism to be an especially insidious enemy: indeed, Harman has proposed the term 'immaterialism' for approaches like OOO, explicitly refuting NM's variant of duomining which he locates in its emphasis on the multiplicity, dynamism and contingency of matter as overarching and all-encompassing properties of matter.[120]

In OOO, not all objects are equally *real*, however: Harman distinguishes between *real* objects (the things-in-themselves) and *sensual* objects, which depend on their manifestations to other objects.[121] Additionally, objects can have *real qualities* and *sensual qualities*; Harman's philosophy is centred on what he calls the 'fourfold structure', articulating the different kinds of interactions between these four aspects.[122] The 'real' side is always concealed, existing in a withdrawn state that can never be accessed, while the experience of an object — its *prehension*, a term borrowed from Whitehead's writings — happens through indirect contact with their sensual translations, which in OOO are considered objects in their own right (Harman calls this principle of interaction-by-proxy 'indirect' or 'vicarious causation').[123] Importantly, the

---

[117] G. Harman, 'On Vicarious Causation', in *Collapse II*, p. 187; G. Harman, *The Quadruple Object*, pp. 5-19.

[118] G. Harman, *Immaterialism*, pp. 10-1.

[119] *Ibid.*, p. 12.

[120] *Ibid.*, pp. 13-6.

[121] G. Harman, *The Quadruple Object*, pp. 16-26.

[122] *Ibid.*, pp. 76-81, 95-109.

[123] G. Harman, *Guerrilla Metaphysics: Phenomenology and the Carpentry of Things* (Chicago: Open Court, 2005), pp. 147-234; G. Harman, 'On Vicarious Causation', in *Collapse II*, pp. 187-221. On prehension, see Alfred North Whitehead, *Process and Reality* (New York: Free Press, 1978), pp. 18-20.

relation between humans and other objects — what is usually understood as an exceptional form of prehension, i.e. knowledge or 'cognition' — is *ontologically* no different from that happening among all other objects interacting with one another.[124] In other words, in OOO all objects encounter one another — and the other's qualities — in the sensual realm; what is normally understood to be a matter of physical interaction is actually based on prehensions or 'sensual encounters'. Objects thus have 'senses', though in some cases this faculty may remain only potential (i.e. there can be objects without relations of any kind, 'perfectly real without ever being discovered').[125] Harman concedes that this is a form of panpsychism — (or 'polypsychism', in his words), but not of the naively anthropomorphising kind which extends human abilities to inanimate things.[126] For Harman, this is to misunderstand what the sensual realm actually is: 'panpsychism has no need to project special human traits onto rocks and atoms. In fact, philosophy needs a more dedicated speculation on the different levels of psyche at different levels of objects.'[127]

Although he posits the existence of things-in-themselves, Harman often stresses that OOO is far more interested with what happens in the 'realm of the sensual'. While real objects and real qualities do nothing but exist in a latent dimension forever hidden from view (and touch, and any such kind of prehension), all cosmic dynamics and causal interactions happen through intermediary objects only possible in the phenomenal realm.[128] In this sense, Harman assigns a fundamental role to the field of aesthetics, understood in its original etymological sense as the sphere of perception or 'the study of the […] relationship between objects and their own qualities.'[129] Of the many permutations of the fourfold, Harman singles out the tension between real objects with sensual qualities — what he calls *allure* — as especially crucial, as it is the only moment when the real object is translated into the phenomenal realm, however fleetingly and ineffably: 'This fusion occurs for example in artworks of any sort […]. Instead of the direct sort of contact that we have with sensual objects, there is an allusion to the silent [real] object in the depths that becomes vaguely fused with its legion of sensual

---

[124] *Ibid.*, pp. 118-9.

[125] *Ibid.*, p. 123.

[126] *Ibid.*, pp. 118-23.

[127] *Ibid.*, p. 120.

[128] G. Harman, 'On Vicarious Causation', in *Collapse II*, p. 195.

[129] G. Harman, *Art and Objects* (Cambridge: Polity, 2020), p. xii.

qualities.'[130] Allure is thus posited as both a key concept in OOO at large and as the basis for its theory of art.[131]

With its emphasis on the ultimate unknowability of things, OOO's position is opposed to Meillassoux's and Brassier's contention that it is in fact possible to attain knowledge of the absolute through pure rationality. According to Harman, 'things are simply not convertible into knowledge; relations fail to exhaust their relata'.[132] Also, by his own admission, Harman is 'the only one in the group [of the canonical SR thinkers] who cares at all about objects'; so, despite OOO's visibility as a subset of SR, its overlap with the interests and methodologies of the other three core SR figures is actually rather limited.[133] At the same time, Harman also became the strongest defendant of the SR label, continuing to embrace it — indeed, actively promoting it in the manner of a 'brand identity' — even while thinkers outside OOO had already started distancing themselves from it as too limiting and misleading.[134]

In the case of SR, too, there is much more I should say if I were to give it a proper overview. For the sake of brevity, I shall only limit myself to naming a few other authors associated with SR (sometimes arguably) besides those named above, such as Tristan Garcia, Eugene Thacker and Ben Woodard; Reza Negarestani in particular deserves more attention and makes a few notable appearances later in this text.

In terms of reference literature and overviews on SR, besides the aforementioned *Speculative Turn* anthology edited by Bryant, Srnicek and Harman (2011) and the journal *Speculations* (six issues, 2010-15), the most notable is Peter Gratton's *Speculative Realism. Problems and Prospects* (2014). Edinburgh University Press has also been publishing a series of books collectively titled 'Speculative Realism', edited by Harman and part of his continuing efforts to keep the SR 'brand' alive through readings of other philosophers and cultural phenomena (e.g. phenomenology, deconstruction, British Romanticism, Deleuze, science fiction) through a broadly defined anti-correlationist lens; the subjects covered by this series often offer more or less polemical forays into the wider NM/NR territory.

---

[130] G. Harman, *The Quadruple Object*, p. 104.

[131] G. Harman, *Art and Objects*, *passim.*

[132] G. Harman, *Immaterialism*, p.29.

[133] Graham Harman interviewed by Thomas Lovegrove in 'Speculative Realism', *Sleek*, 36 (Winter 2012/13), p.139; cfr. Harman, 'On the Undermining of Objects: Grant, Bruno, and Radical Philosophy', in L. Bryant, N. Srnicek and G. Harman (eds.), *The Speculative Turn*, p. 25.

[134] R. Brassier, 'Against an Aesthetics of Noise' (2009), <https://www.ny-web.be/artikels/against-aesthetics-noise/ >; R. Brassier, 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes*, pp. 399-421 (also see Wolfendale's own pp. xiv and 401-2).

I will revisit the emergence of SR and OOO in more depth in Chapter 4, particularly in relation to the attention these philosophical strands have received from art practitioners, writers and curators, which will give me a chance to pick up on particular commitments and questions raised by SR and OOO, alongside and compared to the larger NM/NR field. Since for a number of years SR received a disproportionate amount of attention from the art world with respect to NM, I thought it necessary to introduce both sides in parallel in this chapter. I wanted to ensure that post-humanist ecofeminists got the credit they are due for establishing their own dialogical networks much earlier than SR — and well before the four core speculative realists found their way into a number of *Art Review*'s 'Power 100' lists.[135]

Considering the past internecine fights and ongoing polemics surrounding the SR label, and in order to resist spreading further confusion regarding its inflated use, going forward I will variously refer to speculative, anti-correlationist/subjectalist, materialist or realist elements as contextually opportune, and limit mentions of SR to those contexts where it is explicitly invoked in reference to the 'canonical four' and their joint ventures.

Hubris on a planetary scale?

One of the subjects that is nearly universally relevant throughout the full extent of the NM/NR spectrum is the notion of 'deep time', a reframing of humanity's vantage point with respects to the almost unthinkably vast scales of cosmic and telluric events: the geological perspective on history embraced by DeLanda or Meillassoux's notions of ancestrality and the arche-fossil are both exemplary in this sense.[136] In a seemingly paradoxical twist, a frequent corollary to the deep time argument takes the form of the acknowledgement of the massive impact of human activities on the planet and their consequences on its ecosystem(s), including ubiquitous references to the notions of 'Anthropocene' and, increasingly,

---

[135] 'The Power 100', *Art Review*, November 2013, p. 164; 'The Power 100', *Art Review*, November 2014, p. 166; 'The Power 100', *Art Review*, November 2016, p. 157. Interestingly, Bruno Latour only debuts at no. 9 in 2017, with *Art Review* citing OOO and SR as indebted to him ('The Power 100', *Art Review*, November 2017, p. 109). Meanwhile Donna Haraway charted in 2016, at no. 43 ('The Power 100', *Art Review*, November 2016, p.121), in 2017 at an astonishing no.3 ('The Power 100', *Art Review*, November 2017, p. 103).

[136] The notion of 'deep time' was introduced by John McPhee in *Basin and Range* (New York: Farrar, Straus and Giroux, 1981).

'Capitalocene' (Haraway has added 'Plantationocene' to this list, while advocating for a shift to a fully posthuman, multispecies assemblage she playfully calls the 'Chthulucene').[137]

The notion of Anthropocene was introduced in 2000 by chemist Paul Crutzen and biologist Eugene Stoermer to refer to the current geological epoch (as distinct from the Holocene), characterised by measurable Anthropogenic changes to the fabric of the planet itself, which by now are significant enough to be observed in stratigraphical records.[138] The proposed dates for the start of the Anthropocene vary depending on the chosen markers in the Earth's strata, ranging from the beginning of the industrial revolution to the 1960s — the latter in reference to what is referred to as 'the Great Acceleration' of the post-WWII years or the detonation of the first atomic bombs.[139] Other scientists have proposed much earlier starting dates, such as the arrival of Europeans in the Americas in the 15th century or the beginning of the Agricultural Revolution 12–15,000 years ago.[140]

Meanwhile, an increasing number of voices from the enlarged field of the (post-)humanities have voiced concerns regarding the use of a generalised notion of '*anthropos*' in the root of this novel appellation, as it implies that the geological change is to be attributed to the species as a whole.[141] First of all, such a demarcation does not help the attempts to dissolve ontological distinctions between 'humanity'/'culture' and 'nature'; even more importantly, it weakens its political import by downplaying the historical reasons behind the irresponsible depletion of non-renewable resources, as well as the mass displacement, exploitation and destruction of forms of life seen as inferior and disposable, *including other humans*. From this point of view, to take significant moments in the closely interconnected

---

[137] D. Haraway, 'Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin', in *Environmental Humanities*, vol. 6, 2015, pp. 159-165; D. Haraway, *Staying with the Trouble. Making Kin in the Chthulucene* (Durham / London: Duke University Press, 2016), pp.30-57, 99-103. According to Haraway, the 'Plantationocene' neologism was proposed collectively by participants in a conversation held at Aarhus University by the AURA group (Aarhus University Research on the Anthropocene); the transcripts were published as Donna Haraway, Noboru Ishikawa, Scott F. Gilbert, Kenneth Olwig, Anna L. Tsing and Nils Bubandt, 'Anthropologists Are Talking – About the Anthropocene', in *Ethnos*, Volume 81, Issue 3, 2016, pp. 535-564.

[138] See Will Steffen et al, 'The Anthropocene: Conceptual and Historical Perspectives', *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, n. 369 (2011), pp. 842–867.

[139] T. J. Demos, *Against the Anthropocene. Visual Culture and Environment Today* (Berlin: Sternberg Press, 2017), p. 8.

[140] *Ibid.*; Erle Ellis, Kees Klein Goldewijk, Marie-José Gaillard, Jed O. Kaplan, Alexa Thornton, Jeremy Powell, Santiago Munevar Garcia, Ella Beaudoin and Andrea Zerboni, 'Archaeological assessment reveals Earth's early transformation through land use', in *Science*, vol. 365, no. 6456 (30 August 2019), pp. 897-902.

[141] See for example Heather Davis and Etienne Turpin, 'Art & Death: Lives Between the Fifth Assessment & the Sixth Extinction', in H. Davis and E. Turpin, *Art in the Anthropocene: Encounters among Aesthetics, Politics, Environments and Epistemologies* (London: Open Humanities Press, 2015), pp. 7-10; T. J. Demos, *Against the Anthropocene. Visual Culture and Environment Today* (Berlin: Sternberg Press, 2017), esp. pp. 40-57.

histories of 'exploration', colonisation and industrialisation as symbolic milestones has a very different meaning from a focus on clearly defined stratigraphic markers satisfying strict scientific criteria: by the time the first atomic bomb was tested in 1945, much irreversible damage had already been done. If we want to avoid — or at least try to mitigate — further damage, attention needs to be paid to the root causes of our planetary crises more than to their most visible symptoms.

Conversely, the alternative term 'Capitalocene' defines the new epoch as engendered by the impact of an *economic system* that is inherently based on the unequal distribution of wealth and resources: capitalism as a macrostructure, assemblage or apparatus *driven* by decisions taken by a small amount of humans in control of the means of extraction.[142] Shifting the emphasis onto material-historical causes also makes it harder to separate the histories of colonialism from the root causes of environmental destruction; conquests and attendant genocides of indigenous populations become inseparable from deforestation, monoculture-induced loss of biodiversity and other cascading factors contributing to mass extinctions. As T. J. Demos has pointed out, the notion of ecology itself — coined by German biologist Ernst Haeckel in 1866 — is the product of a rhetoric of humanity's domination over nature that is in equal parts positivist and imperialist: 'Ecology's disciplinary formation coincided with the height of European colonialism, a regime not limited to the governing of peoples but also the structuring of nature. [I]dealized and exoticized nature has been colonised in concept as well as in practice.'[143] In order to put an end to the oligarchies driving planetary imperialism, T. J. Demos argues, a political ecology needs to move away from any residue of the ideological paradigm that has engendered the enmeshed regimes of subjugation of people and of 'natural resources': 'decolonizing nature entails transcending human-centered exceptionalism, no longer placing ourselves at the center of the universe and viewing nature as a source of endless bounty.'[144] A strong emphasis on politics and ecology, considered as mutually entangled and just as intertwined with the history of technoscientific innovations, is the most obvious and urgent way in which NM/NR can look at certain aspects of historical materialisms as a model or foundation for transformative political praxes.

---

[142] D. Haraway, 'Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin', in *Environmental Humanities*, vol. 6, 2015, pp. 159-165; T. J. Demos, *Against the Anthropocene. Visual Culture and Environment Today*, pp. 54-6.

[143] T. J. Demos, *Decolonizing Nature. Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016), p. 14.

[144] *Ibid.*, p. 19.

In their defence, the notions of Anthropocene and Capitalocene demonstrate how at the same time a scientific/rational approach to time scales can support the Copernican principle that humanity is not a privileged observer, while providing evidence to acknowledge just how radical the impact of our species' cumulative behaviour on our shared environment over hundreds of thousands of years has been. It is a long overdue recognition that human exceptionalism, turned into a faith or ideology, leads to catastrophe: hubris leading to a slow tragedy unfolding on a planetary scale. The ontological humility proposed by anti-anthropocentric perspectives should therefore not be interpreted as a dismissal of humanity's impact and of species-specific forms of agency; on the contrary, it calls for an optical adjustment precisely so that the imbrication of humanity with respect to the rest of the cosmos can be better understood, in order to address urgent matters of politics and ecology in the present that are very much our responsibility.

However, there are as many ways to interpret the deflation of humanity's cosmic significance as there are thinkers writing on the subject, and polemics on its political interpretations abound. For instance, Brassier and Negarestani are strongly opposed to the idea that anti-anthropocentric disenchantment should lead to a debasing of humanity's potential as a collective of rational beings. Negarestani makes a clear distinction between the 'humiliatory credo of antihumanism' and the notion of *inhumanism* as a way of affirming humanity's significance through a strictly rational redefinition of its unique ontological properties. Negarestani's inhumanism rejects any notion of epistemological finitude and asserts *intellect as humanity's ability to redefine and modify itself*.[145]

Positioning his inhumanism against the calls for a 'limit to growth' coming from most environmentalist movements (e.g. 'deep ecology'), Negarestani thus advocates for solutions embracing rapid technoscientific developments, as the solutions to ongoing political-ecological problems can for him only be found in the constant revision afforded by rationality. This means continuing the project of the Enlightenment without falling into the cognitive and philosophical traps that have taken it off-course in the past, rather than attempting to return to a 'lost balance' with nature that never existed, or to deny the import of what fundamentally

[145] Reza Negarestani, 'The Labor of the Inhuman, Part I: Human', in *e-flux Journal* #52, February 2014, <https://www.e-flux.com/journal/52/59920/the-labor-of-the-inhuman-part-i-human/> (accessed 21 May 2020),

differentiates humans from non-humans: namely, for Negarestani, the *distinction between sentience and sapience*.[146]

Similarly, Brassier defends the notion of Prometheanism, the idea of actively building the future of humanity as a continuation of the project of the Enlightenment, much deprecated by both reactionary and moderately progressive postmodern critiques: Prometheanism as 'the claim that there is no reason to assume a predetermined limit to what we can achieve or to the ways in which we can transform ourselves and our world.'[147] The Promethean enterprise includes an investment in political ideologies with large-scale ambitions, again in opposition to the tendency to create 'temporally fleeting enclaves of civil justice' which Brassier deems insufficient in the face of deeply-rooted systemic problems. For the Promethean thinker, to be rational is to be able to imagine what the future could look like and to take risks to move towards it, even though prescriptive principles will have to be established and revised along the way: Brassier defines rationality as 'the faculty of generating and being bound by rules', and admits that technological progress may still yield forms of violence and inequality along the way of achieving what he considers to be a positive forward trajectory.[148]

Both Negarestani and Brassier are therefore unimpressed with the vitalist/pan-psychist tendencies of certain NM and oppose the flat-ontological principle that sees human agency and cognition as equivalent to that of non-human entities. Brassier sees this position as unwittingly paralleling an insidious rhetoric of late capitalism:

> The personification of complex systems, whether corporations or markets, is among the most unfortunate consequences of the pseudo-materialist tendency to elide the distinction between rational agency and complex behavior. The result is neo-animism: the indiscriminate

---

[146] *Ibid*. The distinction and notion of 'sapience' as the cause of humanity's ability to think rationally and self-reflexively comes from American thinker Robert Brandom, whose philosophy of language and mind (of analytical descent) has exerted a strong influence on both Brassier and Negarestani. See Robert B. Brandom, *Making It Explicit. Reasoning, Representing, and Discursive Commitment* (Cambridge, MA: Harvard University Press, 1994). Cfr. R. Negarestani, *Intelligence and Spirit* (Falmouth: Urbanomic, 2018), pp. 56-52, and Peter Wolfendale, 'The Reformatting of Homo Sapiens', in *Angelaki*, vol. 24, no. 1 (February 2019), pp. 55-66.

[147] R. Brassier, 'Prometheanism and Its Critics', in A. Avanessian and R. Mackay (eds.), *#Accelerate: The Accelerationist Reader* (Falmouth: Urbanomic, 2014), p. 470. Cfr. Alberto Toscano, 'The Prejudice Against Prometheus', in *Stir* (Summer 2011), <https://stirtoaction.wordpress.com/2011/08/15/the-prejudice-against-prometheus/> (accessed 21 May 2020).

[148] *Ibid.*, p. 485. On the repercussions of this kind of 'epistemic acceleration' as the philosophical basis for the so-called accelerationist movements, see A. Avanessian and R. Mackay (eds.), *#Accelerate: The Accelerationist Reader* (2014). I will keep my distance from debates on the political ends of accelerationism, in both its Left and Right variants, as these are beyond the scope of this thesis, but see See Simon O'Sullivan, 'The Missing Subject of Accelerationism', in *Mute* (posted 12 September 2014), <https://www.metamute.org/editorial/articles/missing-subject-accelerationism> (last accessed 15 May 2020). In light of this debate, it is important to consider 'rational inhumanism' as distinct from the accelerationist project it has engendered.

> attribution of agency to anything and everything […]. This is theoretically and politically disastrous.[149]

Though still rejecting exceptionalisms predicated on baseless beliefs, Brassier has equated his appeals to reason to a justification of humanity's distinctive status, indeed to a polemical defence of logocentrism — in the sense of a return to sapient rationality as the driving force for philosophy (and from this point of view, I suspect Brassier and Negarestani would disapprove of their inclusion in this thesis, even as outliers).

Meanwhile, NM thinkers such as Rosi Braidotti have been quite vocal in lamenting how certain strands of SR, particularly OOO, seem too eager to dismiss or ignore the legacy of Deleuzian-Spinozan materialist feminisms, passing over the role of lived, affective material immanence — such as the Harawayan notion of situated knowledges — as a necessary condition for thought, rational or otherwise:

> The so-called speculative realists tend to be paradoxically dis-embedded and dis-embodied: they are really speaking from nowhere, though they try to hide it. They are unable to account for where they are speaking from. To me […] the politics of locations of the subject is something we cannot let go.[150]

On the other hand, NM feminist authors such as Braidotti and Haraway also offer ways to think with and through the technosciences, rather than against them, their political positions sometimes clashing with limits-to-growth environmentalism from a very different perspective from Negarestani's and Brassier's (incidentally, both sides are also united by their rejection of OOO, albeit again for radically different reasons).[151]

---

[149] Brassier, in 'Reason Is Inconsolable and Non-Conciliatory. Ray Brassier in Conversation with Suhail Malik', in Christoph Cox, Jenny Jaskey and Suhail Malik (eds.), *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015), p. 219.

[150] Braidotti in 'Borrowed Energy. Timotheus Vermeulen talks to philosopher Rosi Braidotti about the pitfalls of speculative realism', in *Frieze*, no.165, September 2014, pp.130-3; online on *Frieze.com*, published 12 August 2014, <https://frieze.com/article/borrowed-energy> (accessed 21 May 2020).

[151] See T. J. Demos, *Decolonising Nature*, p. 239.

A slippery assemblage: on trying to to define the expanded anti-anthropocentric field

These disputes are part of the reason why I have decided to adopt the hybrid descriptor 'new materialisms / new realisms' (NM/NR) when referring collectively to both 'subsets' of the expanded arena of recent anti-anthropocentric philosophical debates. This allows me to avoid mentioning SR unless strictly necessary or appropriate, and also to acknowledge the semantic difference and non-interchangeability between the notions of 'materialism' and 'realism', as figures often associated or discussed together can in fact have radically different viewpoints on these matters (consider Meillassoux's and Harman's takes on these terms for examples from within a subset as small as SR). In general, NM/NR seems to me to be a better descriptor, especially when I intend to refer to the *enlarged network* of post-continental thinkers who have been linked to this manifold debate — even if simply as occasional contributors, commentators or mere sources of influence.

If there is one overall feature justifying the 'superset' of NM/NR, I would claim it is the *opposition to anthropocentric thought as a justification for the ontological differentiation of nature from whatever other category* (mind, humanity, culture, a divine order…). As a paraphrase, I can tentatively borrow Olivier Surel's 'working definition of naturalism', as 'an *ontological* position according to which literally nothing is *super*-natural'.[152] Perhaps what I am trying to define is indeed a 21st century, explicitly anti-anthropocentric naturalist tendency that takes a variety of discursive forms.

In the anthology *The Nonhuman Turn*, Richard Grusin has also tried to define an enlarged field of NM/NR which includes '*Actor-network theory*, […] *Affect theory*, […] *Animal studies*, […] *assemblage theory* […], New *brain sciences* [, …] *new materialism* in feminism, philosophy, and Marxism [,] *New media theory*, [… v]arieties of *speculative realism* including object-oriented philosophy, neovitalism, […] panpsychism [and] *Systems theory*'.[153] 'Each of these approaches, and the nonhuman turn more generally,' Grusin reasons, 'is engaged in decentering the human in favor of a turn toward and concern for the nonhuman, understood variously in terms of animals, affectivity, bodies, organic and geophysical systems, materiality, or technologies.'[154] Personally, I still consider this grouping to be only a subset of what I am

---

[152] *Ibid.*, p. 142; italics in the original. Notably, Surel did *not* intend this definition as a description for what elsewhere in the interview is referred to as 'new materialism' (by Wolfe, rather than Surel); rather, this is a license I am taking.

[153] Richard Grusin, 'Introduction', in R. Grusin (ed.), *The Nonhuman Turn* (Minneapolis: University of Minnesota Press, 2015), pp. viii-ix. The volume does in fact include essays by Steven Shaviro, Ian Bogost, Timothy Morton, and a comparative essay on OOO and feminist NM by Rebekah Sheldon.

[154] R. Grusin, 'Introduction', in R. Grusin (ed.), *The Nonhuman Turn*, p. vii.

describing as NM/NR: I also address variants of non-anthropocentric thought that have no special interest in the nonhuman in the sense described by Grusin, and consider the decentring of humanity only as a consequence of rational thought processes not mediated or distorted by human subjective faculties. In other words, I am keen to keep the definition wide enough that it can account for both vitalist positions and 'moderate subjectalisms' (e.g. Latour's ANT and Haraway's 'situated knowledges'), for the panpsychistic positions of OOO as well as for Meillassoux's speculative materialism and for the 'rational inhumanism' of Brassier and Negarestani: *all positions where ontological humility is at play*, though it may take wildly different forms and lead to sometimes opposite conclusions about *what can be known* and about how this informs *what should be done*.

But what is the use then of such a loose definition? If these positions are really so heterogeneous and difficult to reconcile, why am I insisting on bringing them together and describing them as a philosophical assemblage nonetheless?

My argument is that there are valid (art) historical reasons to do so: from what I have observed, the way artistic and especially curatorial practices have been affected by these philosophical strands in recent decades spans the entirety of the NM/NR spectrum, often in the interest of offering differing yet interrelated viewpoints without settling on any specific one. And even though the popularity of certain philosophical trends or *Zeitgeist*-defining topics from cultural studies can in fact have the superficial investment of a flavour of the day when adopted as buzzwords in art-related debates, this is rarely without a reason worth investigating. And in the specific case of this thesis, I maintain that the exchanges between curatorial, new materialist and new realist modes of thought can produce genuinely innovative methodologies for thinking about knowledge production and transmission.

My contention is also that despite the internal collisions — indeed, possibly at least in part *because* of them — there remain interesting points of connection between different, even opposed strands, which can result in productive curatorial encounters. It is of course true that internal differences and irreconcilable commitments are harder to indicate with clarity when presented in contexts other than philosophical debates *sensu stricto*, and that subtler details can get lost in translation as ideas are paraphrased, diluted and generalised by and for non-specialists. I would argue however that this is just as true in the opposite direction: philosophers writing about art do not always have an *in-depth* grasp of the extent and subtleties of the practices they describe, of the related scholarship and especially of the practical knowledge resulting from embedded, hands-on experience of working in the field; yet, even though sweeping generalisations about art and curation abound in philosophical

texts, the resulting arguments can still be valid and helpful *as philosophy*. And most importantly, as I will argue in Chapter 7, *all knowledge transmission is informed by a curatorial intent*, so a philosophical essay and an exhibition can be judged together — indeed, *combined* — *qua* curatorial practices: what may appear to some as spurious claims or internal inconsistencies may take on different resonances if judged from a standpoint that is less methodologically rigid.

Chapter 2.
Worldly Alliances: the case of dOCUMENTA (13)[155]

Epistemological openness or 'neomaterialist hegemony'?

dOCUMENTA (13) — the 2012 edition of the contemporary art mega-exhibition taking place every five years in Kassel, Germany, henceforth shortened as d(13)— has been widely interpreted in the critical literature as an especially notable example of an exhibition symptomatic of the influence of NM/NR on the art world. Indeed, it was for many artists and curators the first point of exposure to the recent surge of interest in philosophical strands such as agential realism and object-oriented philosophy, as well as a true watershed moment for their influence on contemporary art discourse.

In many ways, d(13) was indeed the quintessential example of what Suhail Malik has called 'hegemonic neomaterialism', lamenting the tendency to confuse or minimise the differences between the genealogically distinct and often contrasting positions of NM and NR.[156] This inclusive stance was however framed precisely as such by Artistic Director Carolyn Christov-Bakargiev and the rest of d(13)'s curatorial team, as part of an avowed strategy to embrace epistemological openness and an approach to philosophical speculation defined in the exhibition catalogue as 'skepticism'.[157] Moreover, the specific role of OOO and SR in relation to the thinking behind d(13) overall has actually been vastly overstated, an effect of the skewed reception of the ultimately short-lived SR wave which in 2012 had just begun to hit the art world mainstream under perfect hype-storm conditions. Consider for example Daniel Birnbaum's review of d(13) for the October 2012 issue of *Artforum*, where d(13) is linked to

> […] a new, object-oriented philosophy that wants to liberate us once and for all from anthropocentrism and consider instead what the catalogue calls the 'inanimate makers of the

---

[155] The exhibition title of dOCUMENTA (13) is never italicised here, following the formatting style used in its catalogue. It is however italicised when included in a publication title. From here onward, I will shorten dOCUMENTA (13) as 'd(13)'.

[156] Suhail Malik, 'Dispossed and Watered-Down. Hegemonic Neomaterialism and its Limitations', published (German only) in *Springerin: Hefte für Gegennwartskunst*, n.22, January 2016, pp.48-50. Original English version available via Malik's account on Academia.edu: <https://www.academia.edu/25785358/Hegemonic_Neomaterialism_and_its_Limitations_2016_> [accessed 5 January 2020].

[157] Carolyn Christov-Bakargiev, '*The dance was very frenetic, lively, rattling, clanging, rolling, contorted, and lasted for a long time*', in in C. Christov-Bakargiev (ed.), *dOCUMENTA (13) catalog 1/3. The Book of Books* (Ostfildern: Hatje Cantz, 2012), p. 36.

> world.' In fact, [Artistic Director] Christov-Bakargiev's project is in many ways perfectly in tune with the approaches today discussed as 'speculative realism,' with its ambition to rid our thinking of the obsession with that historically overemphasized relationship between a perceiving subject and a known object.[158]

This assessment is not completely unfounded: after all, Graham Harman did contribute to d(13) by authoring one of the *100 Notes — 100 Thought* booklet series published in the lead-up the exhibition, and his 2010 book *Towards Speculative Realism: Essays and Lectures* appears on the reading list published in the catalogue ('Propaedeutics to Fundamental Research'), alongside Meillassoux's *After Finitude*.[159] Harman also gave a lecture as part of the events organised in Kassel during the 100 days of the exhibition. These direct connections are a matter of historical fact, and admittedly some of the artistic practices presented in the show make the most sense when their inclusion is interpreted (at least in part) through a Meillassouxian or OOO lens. Nevertheless, the theoretical and methodological premises of d(13) are such that to reduce the complexity of interrelated references and curatorial strategies to just, or even primarily, SR and OOO is simply wrong: a gross misunderstanding of the curatorial intent behind the exhibition (and of OOO, in the case of Birnbaum).

In this chapter I will thus focus more closely on d(13) as a key example of the influence of the *enlarged* network of philosophical approaches investigated in this thesis. In doing so, I will address the ways in which d(13) attempted to approach a number of *other* NM/NR viewpoints, putting a much stronger and more explicit emphasis on ecofeminist strands of NM which nevertheless received far less coverage in the coeval critical responses. At the same time, I will maintain that the exhibition's intent was precisely to conjure a variety of positions and modes of knowledge production irreducible to one another, in order to offer manifold *diffractive* readings, and to do so not in the name of a facile relativism but of a reasoned materialist and nuanced approach to the complexity of reality.

d(13) was of course not the first exhibition to make explicit reference to ecofeminist NM and anti-anthropocentric realisms: the network of its influences extends to many of the exhibitions I will discuss later in this thesis, including for example (and perhaps most notably) Bruno Latour's and Peter Weibel's exhibition *Making Things Public: Atmospheres of Democracy*

---

[158] Daniel Birnbaum, 'Documenta 13', *Artforum*, vol. 51, no. 2 (October 2012), pp. 254-5.

[159] Graham Harman, *The Third Table* (*100 Notes - 100 Thoughts* no.085), reprinted in *The Book of Books*, pp. 540-42; 'Keynote Double Lecture – Anton Zeilinger with Graham Harman', lecture, Kassel, 17 August 2012. I also witnessed a copy of Harman's book being offered as a reading resource inside Tue Greenfort's *The Worldly House*, in the Auepark section of d(13), discussed further in this text.

(ZKM, Karlsruhe, 2005). Another exhibition worth mentioning in this context is *Sensorium. Embodied Experience, Technology, and Contemporary Art*, curated by Bill Arning, Jane Farver, Yuko Hasegawa and Marjory Jacobson at the MIT List Visual Arts Center, Cambridge, MA (in two parts: part I 12 October - 31 December 2006 and part II 8 February - 8 April 2007): the influence of Donna Haraway on its curatorial premise is obvious from the very subtitle, and Haraway herself contributed to the catalogue (alongside Bruno Latour).[160] Nonetheless, given documenta's status as an exceptionally powerful exhibitionary apparatus, it was somehow inevitable that its legacy would dwarf that of previous examples. d(13) was for many the first point of exposure to a number of thinkers associated with the expanded network of NM/NR philosophies, and the first high profile exhibition explicitly connecting NM commitments with aspects of SR. It also happened to take place roughly at the same time as the publication of a key book for NM scholarship, Rick Dolphijn and Iris van der Tuin's *New Materialism: Interviews & Cartographies*.[161] While coincidental, this temporal nexus makes d(13) an even more compelling example of convergent cultural evolution as expressed through a curatorial platform, and a majorly influential one at that.

'No-concept concept'

The best way to start unpacking d(13)'s diffractive approach is probably to discuss its ostensible avoidance of specific themes. Besides the fact that the exhibition lacked an explicit subtitle or tagline, its curatorial team consistently eschewed easily summarisable leitmotifs, aiming instead for an openness to different modes of knowledge production, understood in the widest possible sense.

In many ways, however, documentas have traditionally steered clear of thematic titles, at least when compared to the ways in which Biennale-type exhibitions have largely been framed since the 1990s. Unlike other illustrious examples of periodic art gatherings like the Venice Biennale, which were modelled on nineteenth century World Fairs and other showcases for the growing international trade markets powered by the industrial age, documenta was borne out of the trauma of the Second World War, and of a genuine need to

---

[160] B. Latour, 'Air'; D. Haraway, 'Compoundings'; Caroline A. Jones and D. Haraway, 'Zoon'; in Caroline A. Jones (ed.), *Sensorium. Embodied Experience, Technology, and Contemporary Art* (Cambridge, MA/London: the MIT Press, 2006), pp. 104-7, 119-24, 241-5.

[161] Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Open Humanities Press, Ann Arbor (MI), 2012).

reappraise Art history in the face of a set of uniquely dire circumstances.[162] In this sense, documenta continues to cast a retrospective eye on the very conditions for the production and reception of art as they evolve over time: each edition is (or at least should be) invested with a specific sense of urgency, a drive to question its own social purpose and agency. This legacy, as well as the fact that documenta happens only twice a decade, puts even more pressure on its curatorial teams to channel the present cultural *Zeitgeist*. The temporal contringencies of each edition of documenta are therefore understood to be a kind of theme in themselves: each conceived as a historical snapshot doubling as a symptom checker, though always taken from a particular curatorial standpoint — whether or not this is explicitly acknowledged as such by the organisers. Recent documentas have turned this institutionalised 'themelessness' in itself into a meta-theme of sorts, a reflection on the intrinsic complexity and necessary partiality of large-scale periodic exhibitions.

d(13) however strived to put its own themelessness front and centre, framed as an experiment in collaborative, cumulative and process-orientated thinking. At the same time, d(13) recognised its historical situatedness by acknowledging the discourses that influenced the curatorial team at that time, including the writings of notable NM/NR thinkers. If there was an overarching theme to be recognised in d(13), it was the attempt to address this themeless multiplicity in a way that accordingly distanced itself from postmodern relativisms and the default social constructivist positions derived from the so-called 'linguistic turn': a post-continental, post-humanistic approach inspired by 'onto-epistemological' approaches such a Donna Haraway's.

American-born writer and curator Carolyn Christov-Bakargiev had been Senior Curator of Exhibitions at MoMA P.S.1 from 1999 to 2001 and was Chief Curator at the Castello di Rivoli in Turin at the time of her appointment as Artistic Director for d(13), just after serving as Artistic Director for the 16th Biennale of Sydney in 2008. In her catalogue essay for the 2008 Biennale of Sydney, Christov-Bakargiev had tackled the disingenuous nature of curatorial claims and attitudes in the age of the so-called 'biennale syndrome':

> Curatorial practice consists of creating models of experience through elements that stake out a position on the level of the language of presentation that coincides with with the basic tenets and positions of the art one is exhibiting. The *form* of the exhibition repeats and reiterates the position that the curator chooses to align and agree with – how we could construct or should construct knowledge – the politics of aesthetics we choose to agree with. Curating, therefore, is

[162] Anna Cestelli Guidi, *La "documenta" di Kassel. Percorsi dell'Arte Contemporanea* (Milano: Costa & Nolan, 1997), pp. 9-18.

> not a neutral endeavour. […] The question today is how *not* to be contemporary, how *not* to make a festival, how *not* to communicate, and yet somehow manage to deliver the event. For a curator today, to make a biennale means to learn from artists how to navigate this misunderstanding, how to create an exhibition as a decoy, and to do this with them.[163]

Approaching her mandate as Artistic Director of d(13) in a similar spirit would prove to be an even more Sisyphean effort, as Christov-Bakargiev was now officially holding one of the most powerful and highly scrutinised positions in the contemporary art world. Meanwhile, recent historical developments – particularly Wikileaks, the Occupy movements, the Arab Spring uprisings and the rise of social media – had made horizontal practices distributing agency across networked entities all the more relevant and timely, further motivating Christov-Bakargiev to try and relinquish at least some of her curatorial autonomy in response. To this end, she gathered an entourage of 'Agents' with the intention of sharing every step of the exhibition-making process with an enlarged group of peers and companions, constituting what she described as 'an unstable curatorial entity.'[164] This entity was sometimes extended to a larger group of Advisors from a variety of intra- and extra-artistic backgrounds, in order to exchange expertise and test ideas in a multi-directional feedback loop. This 'Honorary Advisory Committee' included Donna Haraway herself, anthropologist Michel Taussig and scientists Ali Brivanlou (Molecular Embryology), Alexander Tarakhovsky (Epigenetics) and Anton Zeilinger (Quantum Physics), who also each contributed to the *100 Notes — 100 Thoughts* publication series, and in some cases had a physical presence in the exhibition itself.[165]

At the same time, however, Christov-Bakargiev appeared rather comfortable retaining a position of *de facto* leadership, shared mostly with 'Head of Department' Chus Martínez, and some of her more visible choices certainly seemed to further contradict any claim to shared authorship and horizontality. For example, it was impossible not to notice that her name was ubiquitous, appearing almost signature-like at several points across the exhibition; it even featured on special apple juice bottles, produced with artist Jimmie Durham as a jointly

---

[163] C. Christov-Bakargiev, 'Revolutions forms that turn: the impulse to revolt', *2008 Biennale of Sydney: Revolutions – Forms That Turn*, exh. cat., Sydney / London: 2008, pp. 32-3.

[164] 'dOCUMENTA (13) announces curatorial team and process', press release, 29 October 2010, dOCUMENTA (13) website, <http://d13.documenta.de/#/press/news-archive/press-single-view/?tx_ttnews%5Btt_news%5D=75&cHash=bc6b812c82b2c6c9da56c83a4f8d867d> [accessed 16 April 2013].

[165] The effective application of this communal thought process transpires from the correspondence and documents collected in *The Logbook*, a surprisingly candid 'behind the scenes' publication also featuring post-opening installation shots and a number of interviews with key Agents. See C. Christov-Bakargiev (ed.), *dOCUMENTA (13) catalogue 2/3. The Logbook*, (Ostfildern: Hatje Cantz, 2012).

Fig. 1. dOCUMENTA (13)'s *100 Notes — 100 Thoughts* series of publications.

authored multiple and sold in d(13)'s many cafes and restaurants. Press images of Christov-Bakargiev were also hard to miss — particularly when accompanying the number one spot in *Art Review*'s 2012 list of 'Power 100' figures in the art world, a feat which inevitably overshadowed her moderate attempts to relinquish authorial primacy.[166]

Her strategy to resist reductive thematic labelling was in many ways much more effective. When forced to give the press something to announce in the run-up to d(13), Christov-Bakargiev declared: 'dOCUMENTA (13) does not follow a single, overall concept but engages in conducting, and choreographing manifold materials, methods, and knowledges.'[167] As Chus Martínez put it in her catalogue essay, titled 'How a Tadpole Becomes a Frog. Belated Aesthetics, Politics, and Animated Matter: Toward a Theory of Artistic Research', the refusal of

[166] '2012 Power 100', *ArtReview*, Issue 63, November 2012, p.97. On this contradiction, also see Julian Stallabrass, 'Radical Camouflage at dOCUMENTA 13', *New Left Review* 77, Sept.-Oct. 2012, pp. 123-33, esp. p. 130.

[167] C. Christov-Bakargiev in 'dOCUMENTA (13) announces curatorial team and process'.

crystallising the exhibition around a unifying theme was in itself a form of anti-concept – a 'no-concept concept'.[168]

In the introductory statements, such as the one printed on the exhibition map and the guidebook, Christov-Bakargiev and her Agents uncompromisingly kept their phrasing as nuanced and layered as possible, so that it could serve as an open question or proposition for its public to investigate, rather than as a shortcut to a set of pre-packaged meanings. Dense with NM-inspired lexical choices, this brief paragraph demanded attention and interpretive effort from even the most philosophically literate readers, especially at a time when the influence of NM was still relatively new to the art world. Christov-Bakargiev elsewhere explicitly defined this strategy as a slowing down of experience against the short attention spans and accelerated modes of consumption elicited by digital media. For example:

> dOCUMENTA (13) is dedicated to artistic research and forms of imagination that explore commitment, matter, things, embodiment, and active living in connection with, yet not subordinated to, theory.
>
> These are terrains where politics are inseparable from a sensual, energetic, and worldly alliance between current research in various scientific and artistic fields and other knowledges, both ancient and contemporary.
>
> dOCUMENTA (13) is driven by a holistic and non-logocentric vision that is skeptical of the persisting belief in economic growth.[169]

Skepticism is a key term in Christov-Bakargiev's texts, where it is defined as 'true philosophy' in its etymological sense as 'love of knowledge': a permanent mode of enquiry (the Greek word *σκέψις*, *skepsis*, meaning 'search') aspiring to a status of mental suspension (*ataraxia*) or undecidability, a mindframe according to which truth cannot, and should not, be ultimately resolved. Christov-Bakargiev invokes skepticism in opposition to relativism, here described as a sophistic and falsely critical mode of thought in which every opinion is considered equally valid, and dialectics resolved or avoided by appealing to self-contained truths. This particular interpretation of the notion of skepticism, presented as different from post-modern anti-realisms, is implicitly presented as a condition for a kind of neomaterialist approach to epistemology, 'a form of openness to the space of the propositional, of the

---

[168] Chus Martínez, 'How a Tadpole Becomes a Frog. Belated Aesthetics, Politics, and Animated Matter: Toward a Theory of Artistic Research', in C. Christov-Bakargiev (ed.), *dOCUMENTA (13) catalog 1/3. The Book of Books* (Ostfildern: Hatje Cantz, 2012), p.55.

[169] Christov-Bakargiev, *dOCUMENTA (13) catalogue 3/3. The Guidebook* (Ostfildern: Hatje Cantz, 2012), p.2.

possible *worlding* together. Skepticism is an optimistic position that doubts' — which is to say it *questions*, but does not outright *deny* — 'the validity of induction as a means to arrive at knowledge.'[170]

The curatorial team thus framed d(13) as an exhibition reflecting its own role as a dispositif for knowledge production, one attempting to problematise the interpretive ambiguity of 'contemporary' artistic practices and related curatorial methodologies, and to steer it towards neomaterialist, post-humanist commitments. The intent was to highlight the ways in which knowledges can be produced and exchanged in parallel and complementary ways by different fields, 'in connection with, yet not subordinated to, theory'. With its transdisciplinary premise, d(13) declared its curatorial remit to expand to virtually all disciplines and fields of knowledge, brought together in the format of an art exhibition in order to be experienced as different and equally partial modes of accessing and understanding the world. At the same time, its avowed 'holistic and non-logocentric vision' declared a will to avoid implicit anthropocentric biases and acknowledged forms of apprehending and understanding that are simply precluded to humans. Indeed, the final sentence of the wall-text version of the statement reads: 'This vision is shared with, and recognizes, the shapes and practices of knowing of all the animate and inanimate makers of the world, *including people*.'[171] Chus Martínez explained the methodological premise of d(13) in even more overtly neomaterialist terms:

> The whole project can be seen as a language that did not exist previous to the exhibition and is capable at the same time of emerging and elucidating many aspects and questions – the memory of matter, the relationship between historical and ahistorical time, the number of wisdoms that inform what we call knowledge, the many intelligences that constitute life and their intra-activity, the role of the disciplines that inhabit art, like art history or philosophy, the million forms of fiction and meaning emerging from it. The exhibition can produce a cognitive situation where to grasp these questions […] can make all these epistemic relationships turn, can set them in motion again.[172]

---

[170] Christov-Bakargiev, '*The dance was very frenetic, lively, rattling, clanging, rolling, contorted, and lasted for a long time*', in *The Book of Books*, p.36.

[171] Christov-Bakargiev, *The Guidebook*, p.2; emphasis mine.

[172] Martínez, 'How a Tadpole Becomes a Frog', in *The Book of Books*, pp.50-51.

Christov-Bakargiev's sceptical standpoint is rooted in this effort to question received methodologies, cognitive biases and entrenched beliefs, especially for the purpose of challenging the presumed exceptionalism of human *logos*:

> The attempt is to not put human thought hierarchically above the ability of other species and things to think or produce knowledge. This does not mean that we are always able to access these other knowledges, although scientists, and in particular quantum physicists, do attempt to learn them [,] but it gives a special perspective onto our own thinking. It makes us more humble, able to see the partiality of human agency, encouraging a point of view that is less anthropocentric.[173]

To enable this 'worldly alliance', Christov-Bakargiev invited participants from a variety of fields of activity alongside artists,

> to explore how different forms of knowledge lie at the heart of the active exercise of reimagining the world. What these participants do […] may or may not be art. However, their acts, gestures, thoughts, and knowledges produce and are produced by circumstances that are readable by art, aspects that art can cope with and absorb.[174]

The methodological premise behind this idea is that the contemporary art exhibition format not only allows, but actively encourages such oblique ways to produce knowledge, functioning as a temporary arrangement of networks of objects and ideas whose relationships are to be understood not linguistically but spatially, or infrastructurally. d(13) put an emphasis on the exhibition as an engine for knowledge production; not the organisation and communication of existing notions but knowledge materialised, situated, embodied, emerging, perceived and yet also always at least partly out of cognitive reach in many fundamental ways. And without naming any explicit 'concept' to serve as an excuse or end for thought, the relationship between object – artwork or other artefact/phenomenon – and subject – our perception and understanding thereof – takes centre stage: the experience of reality (including but not limited to art) as a relationship, a space between, an entanglement of matter and meaning.

In this sense, d(13)'s association with OOO and, by extension, the notion of anti-correlationism can only be understood as partial and dialogical, one filter among many: a way

---

[173] Christov-Bakargiev, '*The dance was very frenetic…*', p.31.

[174] *Ibid.*

of positing the speculative possibility of ontology without human access, and at the same time questioning whether such a separation is possible, useful and/or desirable in the face of our situated experiences. For every speculative escape to 'the great outdoors' of the scientific sublime, the exhibition offered a reminder of political urgency in the present; for every anti-humanist push there was a pull back to its human(ist) repercussions; every object pointed to a subject position and a set of relations complicating any semblance of ontological autonomy. d(13)'s 'holistic' vision implies precisely this refusal to separate the realms of epistemology and ontology. d(13) may have invited its more attentive publics to think through Harman and Meillassoux, but never intended their particular positions, or really any individual viewpoint, to be read in isolation.

Christov-Bakargiev herself later stated in no uncertain terms that she was not directly influenced by SR, of which at that time she claims to have had limited knowledge. At a talk at the Whitechapel Gallery, London on 23rd May 2014, Christov-Bakargiev (in conversation with Griselda Pollock and Iwona Blazwick) declared to 'have no relation whatsoever to Speculative Realism', and that in the period leading up to d(13) she was only really aware of Graham Harman's writings.[175] Harman was then proposed for one of the *100 Notes — 100 Thoughts* notebooks and as a speaker for an associated event during the run of d(13) in Kassel.[176] During this talk she also confessed that she only properly read Bruno Latour's writings on Actor-Network Theory *after* she worked on d(13), and that she now interpreted SR's anti-correlationist approach as a regression to pre-Kantian forms of realism, an approach to which she did not personally subscribe. On the other hand, she explicitly stated that Donna Haraway, Karen Barad and Isabelle Stengers' writings on Whitehead were rather her main sources of inspiration — all influences that clearly transpire in her own texts.[177] Presumably conversations with the Agents and Advisory Committee also played a role in expanding the exhibition's networks of references: that is probably how Meillassoux ended up being included in the catalogue's reading list. Either way, this statement should offer definitive proof that the influence of SR on d(13) has been exaggerated, and that Harman's involvement is to be understood as tangential at best.

---

[175] 'Griselda Pollock, Carolyn Christov-Bakargiev and Iwona.Blazwick in conversation', talk, Whitechapel Gallery, London, 23 May 2014.

[176] Graham Harman, *The Third Table* (*100 Notes - 100 Thoughts* no.085), reprinted in *The Book of Books*, pp. 540-42; 'Keynote Double Lecture – Anton Zeilinger with Graham Harman', lecture, Kassel, 17 August 2012.

[177] Jill Bennet also contributed to d(13) with notebook no.053, *Life in the Anthropocene* (reprinted in *The Book of Books*, pp.345-47).

Fig. 2. Goshka Macuga, *Of what is, that it is; of what is not, that it is not 2*, 2012, shown in Kabul as part of dOCUMENTA (13), 2012.

Problematic dislocations

d(13)'s openness to unknowability also manifested itself in the exhibition's expanded topology. With venues spread not just all over the city of Kassel, but over four continents, the exhibition was presented explicitly as an incomplete experience, impossible to access in its entirety:

> dOCUMENTA (13) takes a spatial or, rather, 'locational' turn, highlighting the significance of a physical place, but at the same time aiming for dislocation and for the creation of different and partial perspectives—an exploration of micro-histories on varying scales that link the local history and reality of a place with the world, and the worldly.[178]

Once again, it is possible to read the influence of Haraway's writings on 'situated knowledges' on these turns of phrases, as disingenuous ideas of universalism are replaced with an awareness of local specificities, inseparable from yet irreducible to their (causal, historical, ecological, economical) interconnectedness.

The aspects of dislocation and partial experience were accentuated in the framing of d(13) in a way that already appeared obvious by simply looking at the exhibition map: it would

[178] Christov-Bakargiev, '*The dance was very frenetic…*', in *The Book of Books*, p.35.

have taken an attentive visitor a total of about five days to visit all the exhibition venues just around Kassel. A sizeable chunk of this time was to be spent just trying to find the artworks scattered all over the Karlsaue Park: Christov-Bakargiev strategically located the various 'pavilions' and installations so that when standing in or outside one of these, none of the others were directly visible.[179] And besides Kassel, d(13) officially spread to Kabul and Bamiyan in Afghanistan, Alexandria and Cairo in Egypt and the Banff Centre for the Arts in Canada. These locations were described as proper visitable off-site venues, yet they were also presented as 'archival' scenarios, as places where parts of the thinking behind d(13) had effectively already happened in the past: in the period leading up to the exhibition, Christov-Bakargiev had organised expeditions and residencies for teams of d(13) Agents, and eventually chose to organise parallel activities in some of these physical locations, to represent aspects of those curatorial processes.

This expansionistic approach has been one of the most harshly criticised aspects of d(13), interpreted as a disingenuous move with colonialist echoes in the exporting of an established contemporary art exhibition (a 'brand' of sorts) to zones of conflict, in order to extract the cultural capital deriving from the display of 'politically engaged' postures (some of which took the form of exclusive initiatives 'by invitation only'), only to then project it back to the safety of Kassel for the benefit of privileged art tourists.[180]

Though I believe this geographical expansion to be problematic and its motivations too weak to hold up to scrutiny, I think it is still useful for my argument to bracket (not ignore!) this particular critique while considering the underlying curatorial schema reflected in these choices, which are part of a wider NM-inspired theoretical edifice extending to all the exhibition venues, including those within Kassel. In a passage in her catalogue essay, Christov-Bakargiev explicitly drew parallels between the quartet of international locations and four 'conditions', four interdependent modes of being, acting and thinking which seem to point at the historical and psychological variables affecting the production and reception of art and of ideas at large:

> **dOCUMENTA (13)** is located in an apparent simultaneity of places and times, and it is articulated through four main positions corresponding to conditions in which people, in

---

[179] Christov-Bakargiev in an interview published as 'In Conversation with Carolyn Christov-Bakargiev, Part 2' in *The Logbook*, p.290.

[180] For examples of such critiques, see Julian Stallabrass, 'Radical Camouflage at dOCUMENTA 13', *New Left Review* no. 77 (Sept.-Oct. 2012), pp. 123-33 and Francesca Recchia, 'Aftermaths?: dOCUMENTA (13) in Kabul', *Afterall: A Journal of Art, Context and Enquiry*, Issue 40 (Autumn/Winter 2015), pp. 66-75.

particular artists and thinkers, find themselves acting in the present. Far from being exhaustive of all the positions that a subject can take, they acquire their significance in their interrelation [...]:

– On **stage**. I am playing a role, I am a subject in the act of re-performing.
– Under **siege**. I am encircled by the other, besieged by others.
– In a state of **hope**, or optimism. I dream, I am the dreaming subject of anticipation.
– On **retreat**. I am withdrawn, I choose to leave the others, I sleep.[181]

It seems meaningful that all these positions are explicitly introduced as 'subject positions', and all of them as providing a limited, partial and therefore partially inaccessible, viewpoint on an 'outside' or 'other'. In the introduction to *The Guidebook*, Christov-Bakargiev gives her choice of distant locales a particular meaning, based precisely on their being unavailable to the average d(13) visitor:

> These four grounds of dOCUMENTA (13) constitute its topology, where the condition of something happening in places one only hears or reads about, poses a question to the visitor, a question that defines our relationship to many places today: What does it mean to know things that are not physically perceivable to us through our senses?[182]

The same question can apply to many fields of knowledge striving to describe phenomena outside common experience, particularly science, but more in general any attempt to understand or empathise with entities that are fundamentally *other* from the thinking subject. In other words, Christov-Bakargiev is drawing a parallel between aspects of reality that cannot be experienced directly, but can nevertheless be thought, whether imagined or theorised. In this optic, conflicts in distant countries and, say, quantum mechanics have something in common: both are real, and both can only be apprehended through various degrees of mediation from a particular subject position. I don't think this is to be interpreted as an invitation to read very different classes of phenomena on equal terms: rather, in my view this constitutes further proof that it is very much the *situated* subject position that is at the core of d(13). The relative *object* position of OOO, in this sense, is framed as a position of withdrawal and retreat, one among many which in the exhibition can only 'acquire their significance in their interrelation', through dialogues between a number of possible, different, more or less speculative material relationships.

---

[181] Christov-Bakargiev, '*The dance was very frenetic…*', in *The Book of Books*, p.35. Bold in the original text.

[182] Christov-Bakargiev, 'Introduction', in *The Guidebook*, p.7.

Fig. 3. Michael Rakowitz, *What Dust Will Rise?*, 2012, installation view at the Museum Fridericianum, dOCUMENTA (13), Kassel, 2012.

The connection to Afghanistan was especially strong in Kassel, manifested through artworks and objects which made explicit reference to the country's past and present, and at the same time foregrounded material conditions and properties of objects as well as the networks of their relationships to one another, to humans, to history, to the laws of physics, and so on. For example, Michael Rakowitz's *What Dust Will Rise?* was the result of a stone-carving and calligraphy workshop in Bamiyan where, with the help of master stone carvers from Afghanistan and Italy, the artist reproduced some of the books supposedly destroyed in the 1941 bombing of the Fridericianum, using local stone as a symbolically loaded medium, following the destruction of the colossal Buddhas of Bamiyan statues by the Taliban government in 2001. These stone books were then exhibited in glass cabinets in the Fridericianum, alongside a selection of objects including a Medieval manuscript damaged when explosions set the State Library on fire in that very building in 1941, and a Sumerian cuneiform tablet from ancient Iraq which, conversely, survived destruction. Like many of the works included in d(13), Rakowitz's *What Dust Will Rise?* offered a reflection on the loss — and partial recovery — of cultural heritage, intertwining separate moments in history marked

by destruction and trauma; indeed history itself was often evoked across the Fridericianum through traces or translations of material traumas.

Sticks and stones

Stone was a recurring subject matter in d(13), by turns addressed from a variety of viewpoints as manifold entanglement of properties, phenomenological tool, geological entity, cultural asset, inert mass and so on. Stone has proven to be as ubiquitous and crucial to the development of human civilisations as it is indifferent to them, a kind of intractable 'other' whose dynamics operate on a completely different time-scale from living organism. Various mineral aggregates punctuated the exhibition in the manner of a subtle narrative device, self-evident enough not to need to be highlighted as such, yet very effective in conveying a multiplicity of modes of thought and knowledge production: stones and rocks functioning as signifiers and metonymies for worldly realities with and without humans, and thus especially suited to conveying the concept of nature-culture as a continuum.

Fig. 4. Jimmie Durham, *THIS STONE IS FROM THE MOUNTAIN / THIS STONE IS FROM THE RED PALACE*, 1992, installation view at the Auepark, dOCUMENTA (13), Kassel, 2012.

For example, Jimmie Durham's *The History of Europe* (2011), shown in the Auepark, consists of a vitrine displaying a prehistoric stone tool ("Exhibit A") next to a bullet from the Second World War damaged by acid before it could be fired ("Exhibit B"). Alongside these two tools — materials shaped by humans in their continuing 'modern' war of independence from nature — is a brief text, describing Europe and its internal boundaries as political fictions made up by small groups of powerful people. Also pointing at the false dichotomy of nature and culture as a human construct was *THIS STONE IS FROM THE MOUNTAIN / THIS STONE IS FROM THE RED PALACE* (1992): two halves of a sandstone block, virtually interchangeable, simply visualising the arbitrariness of the meaning we assign to materials, reducing their very essence to a certain contingent use given to them in a human context.

Along a similar line, the video *Raptor's Rapture* by Allora and Calzadilla revolves around the oldest musical instrument ever found: a prehistoric flute, made an estimated 35,000 years ago from the wing bone of a griffon vulture. The video shows a paleomusicologist attempting to play the flute in the presence of a live griffon vulture, today a threatened species. The three entities belong to entirely different, mutually precluded worlds: the human being, however knowledgeable, can only make the damaged flute produce muffled or strident notes; the ancient instrument, at this point utterly dysfunctional both as a bone *and* as a flute,

Fig. 5. Jennifer Allora and Guillermo Calzadilla, *Raptor's Rapture*, 2012, installation view in the Weinberg Bunker, dOCUMENTA (13), Kassel, 2012.

embodies the obtusity of 'mere things'; for his part, the bird most likely has no idea why it is there in the first place — let alone that the object which is being blown into by a strange primate used to be an integral piece of one of its ancestors. Screened in a cavernous bunker, carved into a hillside in the 19th century for use as a cellar and repurposed as an air-raid shelter during WWII, the video as well as its container presented the visitor with a layering of experiences, knowledges and historical eras like geological strata on a rock face.

Meanwhile, on the terraces of that same hill, Adrian Villar Rojas' *Return the World* (2012) presented a landscape of future archaeological remains, where fragmentary architectures and human bodies (actually sculpted on site from cement and clay) appear to have been unearthed like the remains of a city and of its inhabitants, caught in the midst of various unexplained acts. Monumental and melancholic, Villar Rojas' sculptures could be read as an invitation to imagine the world we leave behind, and how it could appear to other intelligences (or otherwise interacted with by other prehending entities) after 'we' are long gone.

Fig. 6. Adrian Villar Rojas, *Return the World*, 2012, Weinberg Terraces, dOCUMENTA (13), Kassel, 2012.

None of the artworks mentioned above make sense unless their constitutive materials are understood as entanglements of situated human histories *and* chunks of minerals with constitutive physical properties that also exist independently of their manipulations by humans. Precisely as all artworks are necessarily, ontologically irreducible to their material nature alone, to stress this interconnectedness is a way to frame all cultural artefacts as *onto-epistemologically co-constituted* — whether considered as products of artistic practices or the fragments of reality to which those practices are meant to refer.

In the Rotunda of the Fridericianum, Christov-Bakargiev devised an exhibition-within-the-exhibition, 'The Brain', in her own words 'an associative space of research where a number of artworks, objects, and documents are brought together in lieu of a concept'.[183] The idea was to offer a concentrated space to think about possible dynamics between animate and inanimate things and their relative position with respect to humans, their histories and the rest of the universe, a test site gently introducing many of the themes recurring throughout the whole exhibition. Functioning as an introductory object-based essay, The Brain presented a

Fig. 7. Installation view of 'the Brain', showing works by Lawrence Weiner (on glass), Giuseppe Penone (floor), Giorgio Morandi (wall) and Judith Hopf (plinths), Museum Fridericianum, dOCUMENTA (13), Kassel, 2012.

[183] Christov-Bakargiev, *The Guidebook*, p.24.

wide range of small-scale items in a manner reminiscent of a historical/anthropological/archaeological museum or of an archival display. These included contemporary artworks shown side by side with things that are not contemporary, or are not art, or used to be artworks but have become something else, and all sorts of hybrids and in-between items.

Among these objects, the geological and petrological leitmotivs were particularly evident, perhaps to subliminally highlight their instrumental role across d(13): for example, in Giuseppe Penone's *Essere Fiume 6* (1998) a river stone is flanked by an exact replica carved out of Carrara marble. This material was also both the medium and the subject of Sam Durant's *Calcium Carbonate (ideas spring from deeds and not the other way around)*, a marble sculpture representing a bag of powdered stone, inscribed with the titular quote from the *Political Testament* of Italian revolutionary Carlo Pisacane. This work was part of the larger series *Propaganda of the Deed* (2011), linking the marble industry with figures and moments of 19th and 20th century Italian anarchism, in a particularly explicit connection between histories of labour, political ideas and material cultures: once again, in the majority of the works presented humanity may come in and out of focus, but is never fully cut out of the frame. This was especially true in The Brain, where connections (one could call them 'synaptic') and spaces-between were especially palpable even when left implicit.

Other mineral lumps on display only made sense as part of the network suggested by The Brain if considered as manifestations of human behaviours, and very much *not* as self-sufficient, autonomous 'objects in themselves'. For example, consider *Czechoslovak Radio 1968* (1969-2008) by Tamàs St. Turba: simple bricks with roughly painted marks, replicas of those used as pretend-radios by Czechoslovak people when the Soviet military banned portable radios in 1968, remade as an 'unlimited multiple' by St. Turba in order to keep their militant spirit alive as a Fluxus homage.

Elsewhere in the Brain one could find tiny stone figurines known as Bactrian Princesses, made in western Central Asia in the late third and early second millennia BC, their minute components simply juxtaposed without any joint or adhesive. Only around eighty of these have survived to the present day, which — together with their troubled geographic origins — served as a reminder of the fragility and precariousness 'of all bodies, including bodies of culture.'[184] Notions of 'conflict, trauma and destruction, collapse and recovery' were indeed also crucial to the Brain. Poignant in this sense were a pair of amorphous lumps whose captions described as a group of objects from the National Museum of Beirut, fused together by shell fire during the Lebanese Civil War (1975-90). Notes and sketches of the Aschrott

[184] Christov-Bakargiev, *The Guidebook*, p.40.

Fig. 8. 'Bactrian Princess', ca. 2500 -1500 BCE, and a fusion of artifacts from the National Museum in Beirut damaged by shell fire during the Lebanese civil war, included in 'the Brain', Museum Fridericianum, dOCUMENTA (13), Kassel, 2012.

Fountain by Horst Hoheisel – first built in 1908 and named after its Jewish donor, demolished by Nazi activists in 1939, and rebuilt in 1987 by Hoheisel as *Negative Form*, a reversed replica of the original plunging deep under street level – are displayed with remnants of one of its monthly cleaning sessions: a glimpse into the mundane lives of the artworks and, again, the labour behind them, which in this case is literally hidden underground. Nearby an early drawing by Gustav Metzger from ca.1954, damaged by decades of humidity and reduced to an illegible smudge of colour, was wryly presented as an unintentional application of the 'Manifesto of Auto-destructive Art' the artist wrote in 1959: art destroyed by a combination of careless storage and material entropy.

Those are but a fraction of the dense selection of objects gathered in this introductory show-within-the-show, which followed a criterion left intentionally open to interpretation precisely to offer a sample of the non-linear curation encountered in the rest of the exhibition. In an interview published in *The Logbook,* Christov-Bakargiev described this asystematic principle as guided by what she called measures of 'intensity' connected to each of the items, which 'motivated their making or their finding, or their keeping.'[185] For Christov-Bakargiev the metaphor of the brain represents not the organisation of thoughts but their mostly aleatory and associative emergence: 'I think the brain is very chaotic and full of contradictions.'[186] The Brain was meant to resemble the incomplete sketch of a mind map, as the connections

[185] Christov-Bakargiev, 'In Conversation with Carolyn Christov-Bakargiev, Part 2' in *The Logbook*, p.287.

[186] *Ibid*., p.288.

between ideas and elements begin to emerge, sometimes tentative, sometimes guided by poetic and playful juxtapositions before logic kicks in; sometimes, but not always, in contrast to the first train of thought, and in ways that can in themselves be deeply productive, kick-starting a new associative cycle through diffraction. I interpret this as a way to reflect on how thought works in ways that stress the role of the affective and pre-logical as a necessary step, no matter how rigorous the methodology used to arrive to a supposedly 'finished' formulation. In other words, The Brain offered a model to think about the mechanisms of cognition between *aestheta* and *noeta*, affects and interpretation, and about how they both shape and are shaped by our relationship with the material world.

d(13)'s most notable rock, not least for its absence, was probably a 37-tonnes meteorite fragment known as 'El Chaco', which artists Guillermo Faivovich and Nicolás Goldberg intended to borrow from Campo del Cielo in Argentina and display in front of the Fridericianum for the hundred days of the exhibition. However, this operation proved to be a great deal more complicated than they expected, and not simply because of the meteorite's cumbersome mass. This stray lump of extraterrestrial metal had become deeply intertwined with the folklore of the local Moqoit indigenous community, who did not unanimously consent to its temporary removal. To further complicate the issue, protests against this loan were promptly coopted by Argentinian political parties as a matter of contention they could exploit for public approval. With the backing of respectable scientists on the one hand, and representatives of the Moqoit community on the other, some public figures accused the artists of being culturally insensitive, and documenta as an institution of perpetrating the colonialist attitude of taking pieces of a country's heritage and parading them around Western publics like exotic curiosities. While these were certainly valid concerns in their own right, Faivovich and Goldberg's proposal was also described by its opponents in a deliberately misleading way, for instance by leading some interested parties to believe that documenta did not intend to return the meteorite to Campo del Cielo. The artists eventually withdrew their loan request, leaving an empty plinth (reminiscent of Manzoni's 1961 *Socle du Monde*, which turned the entire planet into a stray rock on a pedestal) to represent their artwork *in absentia* on the Fridericianum's front lawn: another opportunity for addressing the consequences of adopting a state of 'retreat'. If the original plan was for El Chaco to be displayed near Walter De Maria's 1977 *Vertical Earth Kilometer*, in order to establish a connection with earlier Land Art practices, the resulting gesture ironically ended up matching De Maria's invisible status as an artwork withdrawn from view.

One could not find a better example for the entanglements of people, objects and their contexts, or indeed for 'the relationship between historical and ahistorical time', than an extraterrestrial readymade tied to an arbitrary place by the Earth's gravitational pull, and invested *a posteriori* with conflicting cultural meanings. It even serves as an extraordinary cautionary tale for a particular kind of hubris that has become commonplace in the contemporary art world: a sense of entitlement to appropriate and 'recontextualise' at will. This is also where the question of non-human agency is most explicitly raised by Christov-Bakargiev in the catalogue essay, as she invites the readers to consider the meteorite's 'opinion' on the matter:

> And what if we asked ourselves […] what it was to see things from the position of the meteorite? […] Would it have wished to go on this further journey? Does it have any rights, and if so, how can they be exercised? Can it ask to be buried again, as some of the Moqoit argue, or would it have enjoyed a short trip to an art exhibition […]? What shift in its inner life would its being emplaced temporarily in Kassel have brought […]? What is this *dis*placed position, generated by the perception of a simultaneous being in different spaces […]?[187]

Though Christov-Bakargiev does express empathy and understanding for the concerns expressed by anthropologists and indigenous communities, the turns of phrases she chose in the catalogue essay seem to me to be symptomatic of that sense of entitlement, derived I suspect from a misunderstanding of the role of Artistic and curatorial practices, an overestimation by which 'exposure to objects' through direct sensorial experience (with their aura as 'the real thing' ultimately preserved in some more or less obvious form), accompanied by vague good intentions meant to pass as engagement (the 'togetherness' presumably generated by the sheer fact of sharing something at a distance with documenta visitors), supposedly justifies any means. In this sense, the insistence on the importance, relevance and agency of inanimate things — often the context in which OOO happens to be name-dropped with respect to Artistic practices — can ultimately be reduced to a strategy to justify a rather reactionary object fetishism. Here, it took the form of a demand from a group of privileged few to have unrestrained sensory access to everything, as if by right, in order to satisfy what often amounts to little more than passing curiosity. When is the physical presence of a given object *necessary* to the experience of an exhibition as an arena for heightened epistemological awareness? In some cases, the ethically responsible answer to this question should be easy:

---

[187] Christov-Bakargiev, '*The dance was very frenetic…*', in *The Book of Books*, p.30.

when the conditions for the display of said material aggregate do not negatively compensate for the advantages, both practical and semantic, of that curatorial choice. Sure, to see the meteorite in the flesh will never be *the exact same* as seeing an image of it or reading about it. But does that transformation, doest that specific kind of sensually-enhanced stimulation ultimately matter enough to warrant the shift in the object's status and meaning caused by its physical movement? Is this worth the administrative hassle, the consultation time with concerned parties, the transportation budget and the fuel consumption? Was there perhaps a better way to generate that knowledge and catalyse 'togetherness'?

In the case of d(13) and El Chaco, the absence of the object, its negative evocation as a matter of concern, became its own kind of ready-made, and — I would argue — a much more interesting one than a literal chunk of heavy space metal on a plinth. When an exhibition is trying to make a point of the cosmic, holistic repercussions of material entanglements, and notably of *including* indigenous voices and ancient knowledges as part of its discursive framework, for a German mega-exhibitionary dispositif to begrudgingly declare this outcome a draw, where a curatorial gesture is implicitly offered as just as valid as the political concerns of systematically dispossessed citizens, comes across as a very tone-deaf move. To then point out the fact that no one took into consideration the 'opinion' of the meteorite itself does nothing but weaken that position further, representing in fact a kind of anthropomorphic reading of the concept of 'object agency' often used to criticise NM's political credentials.

In her defence, when asked about her own perspective on panpsychism at the time, Christov-Bakargiev tended to connect her understanding of the 'senses' and 'agency' of inanimate matter in terms that ultimately return to physics, trying to speculatively integrate notions of intelligence and knowledge with (old and new) materialist notions of potentiality and causality:

> [*Interviewer*] When did you find out for yourself that inanimate objects could have senses?
> [*CCB*] You mean like the point of view of the cup in relation to the world? [W]hen you study physics, you study gravity. That an object would be able to imagine that it could fall, and that it would actually enact that, is an amazing expression of intelligence on the part of that object. […] After all, what does it mean to a child to fall and hurt herself? Or what does it mean when the pot breaks? It's a sort of very intelligent thing that the pot is doing, in order to ensure survival. I basically think that human consciousness is not the only way knowledge occurs. And we are very much determined by those other forms of knowledge, which are more difficult to grasp for us.[188]

[188] Christov-Bakargiev, 'In Conversation with Carolyn Christov-Bakargiev, Part 2' in *The Logbook*, p.288.

Here the notion of 'knowledge' seems to me to be interchangeable with Baradian ideas such as the inscription of reality, its co-constitution through matter's endless becoming, phenomena upon phenomena as causality dictates. The 'knowledge' of matter corresponds here to the (co-)constitution of each phenomena, prehension as a form of intelligence, causality as intra-action. In other words, Christov-Bakargiev's view seems to me to be ultimately more compatible with a Baradian materialist position than with Harman's object-oriented philosophy. After all, OOO would denounce the appeal to the laws of physics as a way of undermining the agency of 'objects themselves', as ontologically self-contained and withdrawn entities.

Return of the *logos*

Despite its moments of misdirected anthropomorphism, d(13) offered a variety of formulations on material relationships mixing perspectives from a variety of disciplinary and philosophical viewpoints, complicating easy interpretations of its own avowed anti-anthropocentric agenda. Once again, human access and its limits seem to be as central to the exhibition as any attempt to think before or beyond humanity, often precisely to the effect of bringing human and non-human forms of knowledge together, to make the latter surface by comparing and contrasting the two. With poetic texts, taxonomies and other scientific and philosophical interpretations of reality via language popping up time and time again, many works even seem to play very much against the curatorial team's alleged rejection of logocentrism, if precisely to offer reflections on the nature of linguistic expressions and their complex relationships to material reality.

For instance, Florian Hecker's sound piece *Chimerization* (2012) dealt with language at the limits of human cognition, by operating at the thresholds of one's aural and heuristic faculties. The track turned the sound of human voice into uncanny bits of information, barely recognisable as such yet eluding our ability to decipher and understand them. These were based on readings of a text especially composed by Reza Negarestani, recorded in an anechoic chamber and turned into sequences of distorted, dehumanised sounds: sonic chimeras that can be simultaneously perceived as asignifying noise and as attempts at communicating meaning.

Fig. 9. Anton Zeilinger, *Quanta Now*, 2012, installation view, Museum Fridericianum, dOCUMENTA (13), Kassel, 2012.

Some of the Artworks in d(13) attempted to locate the aesthetic experience below or beyond the threshold of logic and conscious perception. For instance, in one of the huts in the Auepark, devised by artist/curator Raimundas Malašauskas, Marcos Lutyens held one-to-one hypnosis sessions in an immersive environment with a mirrored floor and olfactory stimuli provided by 'smell artist' Sissel Tolaas (*Hypnotic Show in the Reflection Room*).

Taking advantage of its size and of the variety of formats and containers it was given licence to inhabit, d(13) allowed for the construction of an assortment of spaces where the mechanisms of *aisthesis* could be unfolded in as many directions as seemingly possible. The more of d(13) one experienced, the less it seemed possible to make sense of its heterogeneity: a practical demonstration of the 'no-concept concept' in action, in a way that puts the oversized proportions of a mega-exhibition to use in ways other than simply *accumulation* — of objects, participants, themes. If excess is an inherent curatorial feature of the medium of the mega-exhibition, then d(13) tried to make a methodological virtue of it, to take advantage of it in order to force the visitor to perform a seemingly endless programme of cognitive calisthenics. For every artwork or extra-artistic artefact addressing the systematisation of knowledge and the most rigorous and advanced forms of rationality of which our species is capable —

including quantum physics through the inclusion of table-top experiments devised by Anton Zeilinger (*Quanta Now*, 2012), the field of epigenetics illustrated through samples of machine-aided DNA replicas in a display by Alexander Tarakhovsky (*Epigenetic Reset*, 2012), and computer history as told in the Auepark venue of the Orangerie —, another artwork appeared that seemingly transported you in the opposite direction: irrationality, emotion, spiritual belief systems, pure sensuality, altered states of mind and so forth. As an exhibition-microcosm, d(13) committed to an idea of cosmic complexity through a maximalist approach to variety, demonstrating as many different ways to produce/attain/co-constitute knowledge as it was possible to fit within its venues and budget.

Symbiomes

One of the most representative lines of enquiry proposed by d(13) was an invitation to consider the entanglements of human and non-human agencies, a core subject emerging from NM/NR discourses. In the concise introductory statement to d(13), the curatorial team declared that its 'vision is shared with, and recognizes, the shapes and practices of knowing of all the animate and inanimate makers of the world, *including people*' (my emphasis).[189] I think it is especially significant that this inclusion of 'people' is at the very end of the statement, a place reserved for words meant to linger in the head. The last part of this statement is important not because it is meant to signal the obvious fact that people and human forms of intelligence are *also* included in the exhibition, but because it seems to be strategically placed so that visitors to d(13) never forget that they are also always part of this equation, no matter how many times they are reminded, through artworks and texts, that material relationships don't necessarily involve humans and that there are other ways of communicating and apprehending, which the text refers to as 'knowing'. In other words, this can be read as a rebuke to strong anti-correlationists that d(13) might indeed understand this relationship as one of sharing agency on an equal footing, but humanity and subject positions inevitably find their way back into the picture in a way that makes it practically impossible to fully set aside and ignore.

It it especially significative in this sense that Donna Haraway's writings on interspecies relationships were given special prominence in d(13). The Auepark section of the exhibition included *The Worldly House*, 'An Archive Inspired by Donna Haraway's Writings on Multi-

[189] Christov-Bakargiev, *dOCUMENTA (13) catalogue 3/3. The Guidebook* (Ostfildern: Hatje Cantz, 2012), p. 2.

Fig. 10. *The Worldly House*, 'An Archive Inspired by Donna Haraway's Writings on Multi-species Co-Evolution, Compiled and Presented by Tue Greenfort', 2012, installation view showing Marina Abramovic's video *Confession*, 2010; Auepark, dOCUMENTA (13), Kassel, 2012.

species Co-Evolution, Compiled and Presented by Tue Greenfort'. Greenfort, an artist whose works engage with ecological systems, often as demonstrations of their fragility and sensitivity to human encroachment, turned this former swan house on a murky pond into a specialist reading room and mediatheque, filled with books on a range of subjects including ecofeminism, evolutionary ecology, NM and speculative fiction, alongside screenings of films and video artworks featuring human-animal interactions, such as Louise Lawler's *Birdcalls* (1972-81) and Josef Beuys's famous coyote encounter from the performance *I Like America and America Likes Me* (1974).

The most iconic work from d(13) was probably Pierre Huyghe's *Untilled* (2011-12), an intervention which turned a particularly unkempt part of the park — a composting area — into a symbolically loaded ecosystem, an artwork entropically performed over months by the organisms and processes that inhabited it. Aromatic and psychotropic plants were planted and left to grow independently among the mud, accompanied by carefully placed sculptural elements which included a neoclassical reclining nude with a living beehive covering the statue's head and a dead tree which used to be one of Beuys' *7000 Oaks* (1982), one of the best

Fig. 11. Pierre Huyghe, *Untilled*, 2011-12, installation view, Auepark, dOCUMENTA (13), Kassel, 2012.

known works in the history of documenta as well as one with an enduring legacy, with its living oaks still lining the streets of Kassel nearly forty years later. *Untilled* was as preoccupied with animals as it was with semi-spontaneous vegetation: besides the swarms of insects and other occasional small park dwellers, visitors could encounter two dogs — the white one with a neon pink leg, called Human, proving especially memorable — and a keeper, less a performer than an integral component of this improvised choreography of symbiotic flora and fauna.

Contested ecologies: the paradoxes of an environmentally conscious mega-exhibition

Another especially notable aspect of d(13) overlapping with NM commitments was its attention to environmentalist concerns, often addressed in connection to intersecting social issues, with the privatisation of the commons and the expropriation of land from First Nations peoples being recurring themes. The Ottoneum and its immediate environs for example hosted

another exhibition-within-the exhibition, titled *When you step inside, you see it is filled with seeds*, a grouping of 'artworks and projects around the question of seeds and the making of earth, life, food, art, stories, intra-action, and worldliness.' Visitors to this building encountered *Soil-erg* by Claire Pentecost, a series of works proposing alternatives to the capitalist logic of agribusiness; nearby, Amar Kanwar's project *The Sovereign Forest* documented the ongoing exploitation of the land and people of the Odisha region in eastern India, while Maria Thereza Alves' installation *The Return of a Lake* described the complex social-natural history of Lake Chalco in Mexico City.

Meanwhile, in the Fridericianum a series of framed letters stood in for Amy Balkin's ongoing project *Public Smog* (2004-ongoing), a conceptual gesture aimed at preventing further air pollution by formally requesting that the sky over Los Angeles be included in the UNESCO World Heritage List. The premise sets up this artwork as a truly Sisyphean effort leading to a cascade of seemingly insurmountable bureaucratic obstacles, as if to demonstrate how paradigm shifts on climate action are systematically hindered by myopic political interests and deeply engrained cultural superstructures that need to change for any lasting impact to be felt on a planetary scale.

These projects represent different ways of mixing artistic, activist and documentary intents, resulting in exhibited artefacts whose status as artworks is inseparable from their extra-artistic functions and commitments. Despite the enormous variety of approaches offered throughout the exhibition, the more complexly discursive spaces foregrounding this type of eminently heteronomous artistic practices have nevertheless received less attention from the public and the press, overshadowed by other kinds of works, more 'spectacular' in form and size, with more overtly formal concerns and a more obvious illustrative function: for instance, works where ideas around ecology and its politics are physically expressed through literal arrangements of organic matter, especially 'greenery'.

In his book *Decolonizing Nature. Contemporary Art and the Politics of Ecology*, T.J. Demos has offered a pointed critique of d(13)'s approach to ecological matters, taking exception to what he perceives as a strong presence of artworks presenting or representing nature in formats with distinct anthropocentric hangups, or other signifiers of cultural hegemony: 'billed as a "sustainable exhibition" in publicity material,' Demos has argued, 'its cosmetic green practices largely contradicted its ecological claims.'[190] Demos subscribes to a strong critique of economic growth as peddled by capitalist hegemons, and the artistic

[190] T.J. Demos, *Decolonizing Nature. Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016), p.38. Also see J. Stallabrass, 'Radical Camouflage at dOCUMENTA 13', *New Left Review* 77, Sept.-Oct. 2012, pp. 123-33.

Fig. 12. Claire Pentecost, *Soil-erg*, 2012, installation view, Ottoneum, dOCUMENTA (13), Kassel, 2012.

practices he praises tend to embrace the methods of extra-artistic grassroots activism, or to be based on factual information such as scientific research and historical documents. The resulting artworks he positively discusses in the book mostly take the form of data visualisations (e.g. Lise Autogena and Joshua Portway), documentary displays (Subhankar Banerjee and other lens-based practices) and demonstrations or 'samples' of activist practices (Nils Norman, the Laboratory of Insurrectionary Imagination). In fact, Maria Thereza Alves' *The Return of a Lake*, Amar Kanwar's *The Sovereign Forest* and Amy Balkin's *Public Smog* all prominently appear in the book as case studies, praised by the author for their approaches as overall virtuous: examples of good artistic approaches to the politics of ecology.[191]

Nevertheless, the works Demos' considers to be most representative of the show were precisely *not* those flaunting their credentials as socially engaged practices:

> the director of this most ambitious of international exhibitions chose […] to respond to the state of crisis [mentioned in her main curatorial statement] with a marked prevalence of artist-rendered gardens. […] However, the show's implicit linkage of gardening and political

[191] T.J. Demos, *Decolonizing Nature*, pp. 106-12, 157-65, 185-96.

Fig. 13. Amar Kanwar, *The Sovereign Forest*, 2012, installation view, Ottoneum, dOCUMENTA (13), Kassel, 2012.

> emergency produced […] a series of challenges and unresolved contradictions, which, intentionally or not, demonstrated a state of crisis in terms of how ecology is addressed within the artistic realm.[192]

It is obviously true that the mega-exhibition format — with its resource-heavy implications, market-driven compromises and reliance on the international travel generated by cultural tourism — is by its very nature not a model of sustainable practices: any attempt to compensate for this inherent vice can only come across as apologetic, disingenuous, or both. While I generally agree with these aspects of Demos' critique, I would object to its implicit deprecation of artistic and especially curatorial practices that make concessions to other fundamental characteristics of art as a human activity, usually denounced as 'formal concerns' and retrenchments in modernist values just by virtue of operating differently and giving meaningful weight to sensual stimuli and affects.[193] If what Demos privileges in artistic practices are *exclusively* the markers of their heteronomy, while anything falling within the

---

[192] *Ibid*., p. 229.

[193] For a similar critique, see S. Malik, 'Reasons to Destroy Contemporary Art', *Spike* 37 (2013), pp. 130-33.

realm of *aisthesis* is reduced to a formalist concern, then the implication is that affects and sensual perception have no positive role to play in critical art, and indeed are framed as hindrances working counter to their more overtly politically and environmentally engaged sides. Conversely, part of this thesis' aim is precisely to formulate an NM-inflected redefinition of *aisthesis* and of its position in transformative knowledge production processes, stressing its role as a part of the material conditions for human cognition and complex thought. In Chapters 6 and 7 I explain in more detail how the framing of artistic practices can highlight the role of sensual stimuli and affects in relation to ethical concerns and political subject matter, allowing artistic strategies to operate discursively in the space between art and not-art through *aisthesis* rather than in spite of it.

There are many, many more artworks and interventions which would be worth discussing, and entire thematic strands which I cannot even begin to mention here; but as I pointed out from the outset, it is the format of the exhibition itself that defies finitude, and with it all attempts to formulate any exhaustive, or even summary, overview. d(13) was not intended as a finite container, but rather pointed at the possibilities of exhibitions to function as permeable interfaces, or perhaps as Klein bottles – continuous surfaces with no boundaries between 'inside' and 'outside'. In fact, one could interpret its non-concept as a meta-epistemological endeavour, one that managed to escape the self-referential tendencies of exhibitions emphasising curatorial introspection, and instead attempted to function as a truly generative device for thinking about the different ways in which art operates as part of processes of knowledge production.

Despite its limitations and contradictions, d(13) demonstrated an extraordinarily nuanced approach to curatorial versatility and an admirable commitment to complexity. I consider these to be very productive ways to demonstrate how art can function as an epistemological form on par with, and complementary to, more 'methodologically rigorous' academic disciplines. It set itself the task to present experiences enabled by artistic practices alongside other forms of knowledge production, and to do so while pointing at the importance of thinking through materiality. The curatorial team allowed themselves to present situations and ideas functioning on different planes, making a virtue of the kind of spatialised presentation the medium of the exhibition affords. The exhibition's addressees were offered countless opportunities to exercise different modes of knowledge production in parallel with and/or in function of sensual and affective stimuli, from pre-cognitive apprehension to the exercise of rational faculties, via memories, habits, sensations, heuristics, contradictions and

doubts: in other words, the way humans think and learn 'in real life', which is to say outside the prescribed boundaries of disciplinary remits.

Embracing complexity over clarity as a curatorial strategy comes at a price: a level of illegibility that can come across as wilful obfuscation. Overall, d(13) aimed at questioning epistemological certainties, which is to say it questioned complacency in the ways humans are accustomed to interpreting reality, yet did not imply that there are no objective, real, scientifically measurable facts: rather, its approach was an admission that to offer such certainties is not the role of an art-centric exhibition such as a documenta.

At the same time, d(13) did not avoid taking positions: in fact, it held perhaps too many positions at once. It did not pretend to offer single directions or solutions to address the targets of its multiple critiques, because its curators judged that not to be its role: instead, it presented a range of contemporary artistic practices, in relation to a wider cultural frame of reference crossing disciplinary boundaries, because that is what those practices do best. One could instead say that this was a honest take on the role of documenta as a large survey of art that is relevant to its present: not an illustration of a single curator's position on particular matters, but an opportunity to consider a multiplicity of approaches, to get a sense of what art has to offer, and to allow each artwork to operate in the way the artists intended, while producing diffractive readings that result in more than the sum of their parts.

Chapter 3.
A partial genealogy

In the next two chapters, I will discuss a number of other notable exhibitions exemplifying the influence of NM/NR on curatorial practices. This chapter in particular focuses on the curatorial endeavours of two philosophers who have not only exerted a strong influence on the NM/NR debates as outlined in Chapter 1, but also on transdisciplinary, philosophy- and technoscience-centric exhibition-making practices: Jean-François Lyotard and Bruno Latour. The first half of the chapter delves into *Les Immatériaux*, a revolutionary 1985 exhibition co-curated by Jean-François Lyotard at the Centre Georges Pompidou in Paris; the second half looks at a selection of exhibition projects prominently featuring Bruno Latour in a curatorial role, including *Laboratorium* (various venues across Antwerp, 1999), *Iconoclash* (ZKM, 2002) and *Making Things Public: Atmospheres of Democracy* (ZKM, 2005).

My aim here is to establish these curatorial projects as more than just notable precedents from a thematic perspective: in my view, these exhibitions demonstrated an approach to exhibition-making beyond disciplinary bounds which these days tends to be circumscribed to certain spaces dedicated to encounters between 'Art' and technology or scientific epistemologies as a sort of exhibitionary 'genre' (the ZKM still being very active as a venue for transdisciplinary experimentation to this day). Very rarely do exhibitions in Art-centric institutions, or featuring a majority of works of Art, allow themselves to construct their arguments with this level of methodological hybridity and commitment to function in parallel to, if not *as*, philosophical enquiry. I wish to propose that the examples to follow should be considered as models for approaching art as a mode of knowledge production among many, and complementary to other ways of processing the world, in order to take full advantage of the kind of cognitive plasticity afforded by the communication of ideas through artistic practices.

Towards the 'inhuman': *Les Immatériaux*, 1985

Held in 1985 at the Centre Georges Pompidou in Paris, the exhibition *Les Immatériaux* is considered a milestone in the evolution of curatorial practices in the late 20th century. It represented a phenomenon virtually unheard of at that time: an exhibition actively developed

by a philosopher, Jean-François Lyotard, with the explicit intent of deploying curatorial praxis *as* philosophical discourse. It also came into being at a momentous time in the history of philosophy, corresponding to the peak of Lyotard's own notoriety: a few years after the publication of his influential essay *The Postmodern Condition: a Report on Knowledge* in 1979, which stirred heated debates in France and beyond around the notions of 'postmodernity' and of 'the end of grand narratives'.[194]

Against this background, Lyotard framed *Les Immatériaux* as an extension of his thinking about the conditions of knowledge after the advent of modernity and the 'technoscientific' advancements catalysed by the Enlightenment. However, the exhibition was initially conceived without the philosopher's direct involvement, and overall it was collaboratively curated with design historian Thierry Chaput. The history of its development cannot therefore be reduced to Lyotard's lone authorial agency, and is made all the more interesting as a case of exhibition-as-philosophy (and philosophy-as-exhibition) because of this dynamic. *Les Immatériaux* can also be seen as a stimulant for Lyotard's later output, if not as a pivotal moment in his shift towards the post-humanist positions expressed in *The Inhuman*, a collection of essays published in 1988.[195] *The Inhuman* would go on to exert an undeniable influence on NM/NR philosophies, though this link has been downplayed in the literature on NM/NR, in the interest of a narrative that describes the latter as a reaction to continental post-structuralism. Lyotard's positions were however rather eccentric with respect to the post-structuralist lineage of 'the linguistic turn', especially from the publication of *The Postmodern Condition* onwards, rooted as they were in an interest in materialism and techno-scientific epistemologies that made them rather unique in French philosophy at that time.[196]

The status of *Les Immatériaux* in the developing 'canon of exhibition histories' has solidified over the years, from the inclusion of Lyotard's brief text on the show in the groundbreaking 1996 anthology *Thinking about Exhibitions* to the presence of a dedicated section in the second volume of Bruce Altshuler's 2013 survey *Exhibitions that Made Art History*.[197] *Les Immatériaux* was also featured as a key case study in the conference *Landmark*

---

[194] Jean-François Lyotard, *The Postmodern Condition: a Report on Knowledge* , trans. by Geoff Bennington and Brian Massumi (Manchester: Manchester University Press, 1984). Originally published in 1979 as *La condition postmoderne: rapport sur le savoir* (Paris: Editions de Minuit, 1979).

[195] J. F. Lyotard, *The Inhuman. Reflections on Time* (Cambridge: Polity Press, 1991; orig. 1988).

[196] This originality based in materialism is a trait that can be extended in different ways to aspects of Foucault's and Deleuze and Guattari's writings, though each expressing it through very distinct positions and concerns.

[197] Lyotard, '*Les Immatériaux*', in Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne (eds.), *Thinking about Exhibitions* (London: Routledge, 1996), pp.159-73; Bruce Altshuler, '*Les Immatériaux*, Paris, 1985', in *Biennials and Beyond. Exhibitions that Made Art History, Vol. 2: 1962-2002* (London: Phaidon, 2013), pp. 213-26.

Exhibitions: Contemporary Art Shows since 1968, held at Tate Modern in 2008, and was the subject of several conferences marking the exhibition's 20th and 30th anniversary, most notably the conference *30 Years after Les Immatériaux* at the Leuphana University of Lüneburg in May 2014, followed by the publication of the volume *30 Years after Les Immatériaux: Art, Science, and Theory*, edited by Yuk Hui and Andreas Broeckmann, in 2015.[198] In addition, the exhibition *"Les Immatériaux" for Instance*, held at Kunstverein für die Rheinlande und Westfalen, Düsseldorf, as part of the 2014 Quadriennale Düsseldorf (5 April - 10 August 2014), took *Les Immatériaux* as an example to discuss 'presentability in exhibitions', in a metacuratorial project following, by admission of curators Hans-Jürgen Hafner and Christian Kobald, 'the present-day trend among artists and curators to make historical exhibitions the subjects of exhibitions'.[199]

Considering this wealth of existing secondary literature around *Les Immatériaux*, my primary aim here is not to give a comprehensive analysis of the project but rather to look specifically at how this exhibition anticipated some of the concerns of NM/NR philosophies, and as such can be seen as a precursor to the more recent curatorial practices addressed later in this text. The publication of *30 Years after Les Immatériaux* is also particularly relevant in this sense, especially Robin Mackay's essay 'Immaterials, Exhibition, Acceleration', which discusses the exhibition as a 'pivotal moment in the convergence of philosophy, art and exhibition-making', alongside those aspects of Lyotard's philosophy which will become

---

198 Yuk Hui and Andreas Broeckmann (eds.), *30 Years after Les Immatériaux: Art, Science, and Theory* (Lüneburg: Meson Press, 2015). The conference *30 Years after Les Immatériaux* was held by the Centre for Digital Cultures of the Leuphana University of Lüneburg on 21–22 May 2014; see <https://www.leuphana.de/zentren/cdc/aktuell/ansicht/datum/2014/05/21/30-years-after-les-immateriaux-science-art-and-theory.html> [accessed 13 February 2018]. See also: *Les Immatériaux: towards the virtual with Jean-François Lyotard*, The Courtauld Institute of Art, 27-28 March 2015, <http://www.aicauk.org/2015/03/24/lyotard-les-immateriaux-conference-at-the-courtauld/> [accessed 13 February 2018]. For the papers related to Tate's *Landmark Exhibitions* conference, see *Tate Papers* 12, Autumn 2009, <http://www.tate.org.uk/research/publications/tate-papers/12> [accessed 13 February 2018]. Other essays and book chapters dedicated to *Les Immatériaux* include: Francesca Gallo, *Les Immatériaux: Un Percorso di Jean-François Lyotard nell'arte contemporanea* (Rome: Aracne, 2008; in Italian only); Antonia Wunderlich, *Der Philosoph im Museum: Die Ausstellung Les Immatériaux von Jean-François Lyotard* (Bielefeld: Transcript, 2008; in German only); Jean-Louis Déotte, '*Les Immatériaux* de Lyotard (1985): un programme figural', in *Appareil*, n. 10, special issue: 'Lyotard et la surface d'inscription numérique', 2012; Jérôme Glicenstein, '*Les Immatériaux*', in: Françoise Coblence and Michel Enaudeau (eds.), *Lyotard et les arts* (Paris: Klincksieck, 2014), pp. 102-114; Andreas Broeckmann, 'Revisiting the Network of L*es Immatériaux*', in Oliver Grau (ed.), *Museum and Archive on the Move. Changing Cultural Institutions in the Digital Era* (Berlin: De Gruyter, 2017), pp. 234-47; Daniel Birnbaum and Sven-Olov Wallenstein, *Spacing Philosophy: Lyotard and the Idea of the Exhibition* (Berlin: Sternberg Press, 2019).

199 See *"Les Immatériaux" for Instance,* the Kunstverein für die Rheinlande und Westfalen, Düsseldorf's website, <http://www.kunstverein-duesseldorf.de/en/exhibitions/archive.html> [accessed 13 February 2018].

reference points for 1990s 'cyberculture' and later for the new accelerationist wave of the 2010s.[200]

The project was the initiative of an organisation existing within the Pompidou, the 'Centre for Industrial Creation' (*Centre de Creation Industrielle* or CCI), dedicated to organising events and exhibitions on the history of design and architecture which in many ways anticipated the eclectic methodological approach redefined in the 1990s as 'visual culture'. The CCI was originally founded in 1969, and between 1977 and 1985 the programme of the Centre Pompidou included several exhibitions whose cross-disciplinary approach was groundbreaking at the time. Multidisciplinary exhibitions organised with the contribution of the CCI included the legendary inaugural series *Paris–New York* (1977), *Paris–Berlin* (1978), *Paris–Moscou* (1979) and *Paris–Paris* (1981), curated by then director Pontus Hultén, while the CCI had independently produced large exhibitions for the 5th floor gallery (such as *Le Temps des Gares* in 1979 and *Images et Imaginaires d'Architecture* in 1984). From 1975 the CCI also published *Traverses*, a quarterly journal edited by Jean Baudrillard, Michel de Certeau and Paul Virilio among others, further proof of the Centre's innovative approach to research via cross-disciplinary experimentation, with philosophy and the social sciences being given a platform and role to play within the institution. This was sadly not to last for long: *Les Immatériaux* was effectively the last large exhibition organised by the CCI before its eventual absorption within the restructured organisation of the Pompidou in 1992.

In 1981, Jacques Mullender, then director of the CCI, originated the idea of an exhibition on new industrial materials and technologies, given the working title *Création et matériaux nouveaux* ('Creation and new materials').[201] Chaput was in put in charge of its development, gathering research materials and making sketches and plans for the exhibition as early as 1982. According to Jean-Louis Boissier, an artist who contributed to the development and design of several aspects of the exhibition, already at this early stage the curatorial team's ambition was to extend the scope of this show to as many aspects of contemporary culture and industry as possible, including 'architecture, biology, design, literature.'[202] However, in spring

---

[200] Robin Mackay, 'Immaterials, Exhibition, Acceleration', in Yuk Hui and Andreas Broeckmann (eds.), *30 Years after Les Immatériaux: Art, Science, and Theory*, p.215. On Accelerationism, see Robin Mackay and Armin Avanessian, *#ACCELERATE: the Accelerationist Reader* (Falmouth: Urbanomic, 2015).

[201] See the document dated 14 April 1983, published under 'Titre provisoire' in *Les Immatériaux*, exh. cat., *Album* (Paris: Centre Pompidou, 1985), p.8. For the genesis of the idea with Mullender, see Boissier in conversation with Broeckmann, 'The Production of Les Immatériaux', *30 Years after Les Immatériaux*, p. 94.

[202] *Ibid.*, p. 95.

1983 the exhibition was almost cancelled, 'because the directors […] did not believe that it could be successfully realised. That's when they had the idea to call on an external curator.'[203]

This suggests that the Pompidou believed that attaching a renowned intellectual such as Lyotard to the project could attract enough public attention to justify the expenses such a complex exhibition would demand. Lyotard himself was well aware of his reputation as an author of complex texts that were largely inscrutable to the general public, and saw this as an opportunity to present his ideas in a different narrative format, to 'philosophise towards the general public' through a form of 'postmodern dramaturgy'.[204]

Despite this intention, Lyotard was not keen on compromising his intellectual rigour in the name of a populist idea of accessibility, nor was he going to let the Pompidou simply instrumentalise his name as a marketing ploy to sell lightweight cultural entertainment in the form of high-tech spectacle. His first move was in fact to question the very premise of the exhibition, beginning with the presence of the word 'creation' in its working title, a term with obvious theological connotations that puts an emphasis on the idea of mankind as a race destined to master nature and to impose its god-like will upon it. One of Lyotard's key concerns in his analysis of modernity, a term which he uses in his writings to refer to the western world after the Enlightenment, had been to point at the contradiction between this teleological outlook and the disruption brought forth by knowledges made possible by the same technoscientific instruments supposed to help humanity attain such omnipotence. As Lyotard put it in a presentation he gave in spring 1984 to colleagues at the Centre Pompidou (published in *30 Years after Les Immatériaux* as 'After Six Months of Work...'):

> […] when we speak of creation, creativity, the creative society [,] we interpret the technological mutation with which we are concerned […] as being still, and only, modern; that is to say that basically we think that […] man continues to aim at the mastery of the world – and of himself of course – and that […] he effectively approaches the ideal of the creator. […I]f we think the new technologies under the category of creation, if we continue to maintain this idea as if all the new technologies did was to fulfil this desire […], then I believe we miss something that is very important in this technological mutation […] – namely, I would say, the prospect of the end of anthropocentrism.[205]

---

[203] *Ibid.*, p. 95.

[204] J. F. Lyotard, '*Les Immatériaux*. Un entretien avec Jean-François Lyotard' (with Jacques Saur and Philippe Bidaine), *CNAC Magazine*, n.26, 1985, p. 13.

[205] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, p. 36.

This anti-anthropocentric call, which will become so explicit in *The Inhuman*, was indeed the thinker's key preoccupation during his involvement with the curation of *Les Immatériaux*. Lyotard's position towards technological and scientific innovation was an ambivalent one, and this ambivalence is at the core of his approach as the exhibition's co-curator. Although the 'technosciences', as he calls them, had proven to be fundamentally steeped in authoritarian dynamics, and consistently hijacked by capitalist and totalitarian power structures in order to enforce oppression, terror and exploitation of people and resources, Lyotard does not deny them a potentially positive role in a project of emancipation. Part of this role consists in the technosciences' ability to rid humanity of its delusions of grandeur and to demonstrate the very illusions of modernity's teleological narratives which had made them possible in the first place. Lyotard wanted *Les Immatériaux* to offer a disruptive experience of technology, one that could lead to an understanding of this paradox and an acceptance of the necessity to bring the modern paradigm to an end. This passage from 'After Six Months of Work…' clearly anticipates some key tenets of NM:

> [W]hat is striking in this completion of the modern project, […] which at the same time is a destabilisation of the modern project [, …] is that, on the technoscientific level, we see a sort of reinforcement […] of the intimacy between the mind and things. For example, the software that is coming into general use on all scales is mind incorporated into matter; […] biogenetic manipulations […] show that the mind itself, in its most intimate properties and characteristics, can be treated as matter, because it is matter. When modernity presupposes that everything speaks, this means that so long as we can connect to it, capture it, translate it and interpret it, there is no fundamental difference between data and a phrase; there is no fundamental difference between a phenomenon of displacement in an electromagnetic spectrum and a logical proposition, and given this fact, in this face-to-face relation to a universe that is his to dominate – a heroic relation, I would say – in order to make himself the master of it, man must become something else entirely: the human subject becomes no longer a subject but, I would say, one case among […] the many multiple interactions that constitute the universe.[206]

It is in this physicalist sense that Lyotard uses the term 'interaction' in his writings, rather than to refer to the interactivity of technological interfaces — and even less so to the various 'hands-on' elements the visitors could encounter as they walked through *Les Immatériaux*, despite the fact that both were distinctive features of the exhibition, with its

[206] J. F. Lyotard, 'After Six Months of Work... (1984)', pp.32-3.

computers, motion capture sensors and scent diffusers. Lyotard's usage is in fact closer in intent to Barad's notion of 'intra-action'. The passage continues by explaining this shift in the understanding of matter as a quintessentially 'postmodern' shift — a shift that was nevertheless made possible by modernity and therefore is absolutely intertwined with it:

> […] we have emphasised […] a kind of counter-figure that takes shape within the figure of modernity […]. One might call this figure postmodern, insofar as it has always been present in modernity, […] insofar as this counter-figure brings with it a sort of disappointment in regard to the project of domination […]. [W]hat this exhibition is interested in – probably the most important thing – is that we know very well that there was a metaphysics corresponding to the technoscience of domination, […] but that we are not sure what kind of metaphysics could be appropriate to the technoscience of interaction.[207]

His challenge as a co-curator was thus to articulate this sense of uncertainty, to convey the paradox of technology and the way it affects our relationship with matter, through a physical layout of spaces, objects and other sensual stimuli. Faced with the existing premise of an exhibition ostensibly 'about new materials and technologies', as sketched out by the CCI before his arrival, Lyotard begun by dissecting the term 'material' with the scalpel of etymology: 'Note, the sanskrit *mâtram*: matter and measure (root *mât*: to make by hand, to measure, to build)'.[208] The root *mât* becomes a sort of linguistic stratagem which allows Lyotard to play around with an expanded semantic field and map it onto existing schemata borrowed from communication theory, 'stretching the meaning of the word 'material', like a sort of fabric, in order to […] stretch it over the structure of communication'.[209] Thus, following Harold Lasswell's model of communication — 'Who (says) What (to) Whom (in) What Channel (with) What Effect?' — and Roman Jakobson's schema of language functions, the word *matériau* comes to mean 'support', 'medium' or 'channel', while *matière* becomes 'referent' or 'content' (as in the French for 'table of contents', *table des matières*), *matériel* is 'hardware' in the sense of 'receiver' ('what handles the acquisition, transfer and collection of the message'), *matrice* is 'matrix' or 'code', and the concept of 'sender' is associated with the word *maternité* ('maternity').[210]

---

[207] *Ibid.*, pp. 32-3.

[208] J. F. Lyotard, '*Les Immatériaux*', in *Thinking about Exhibitions*, p. 114.

[209] *Ibid.*, p. 31.

[210] *Ibid.*, pp. 116-8. Cfr. Harold Lasswell, 'The Structure and Function of Communication in Society', in Lyman Bryson (ed.), *The Communication of Ideas* (New York: Institute for Religious and Social Studies, 1948), pp. 37-51.

This strategy allows Lyotard to complicate an otherwise seemingly mundane term and give it depth: 'Tracing the common origin of these terms to the sense of the root *mât-*, which means both measurement and construction, we tried to rethink everything that the modern project, the project of the figure of the subject I just mentioned, tends to treat as a sort of passivity to be conquered, as data to be analysed'.[211] Importantly, the negation *im-* is not meant to negate 'materials' in the absolute sense of a privileging of literal incorporeality, but rather refers to a paradigm shift which applies to *all* aspects of matter; what is shifting is humanity's *relationship to* and *understanding of* matter. After all, Lyotard reminds us, as physics ultimately demonstrates 'there's no such thing as matter, and the only thing that exists is energy'.[212] All matter is also already *im*material by default. Rather, Lyotard associates the passivity/domination relationship built into the semantic field derived from the root '*mât-*' with modernity, a model of thought that the exhibition hopes to critique by proposing a 'counter-figure':

> the negation *im-* in 'immaterials' [*immatériaux*] indicates the situation of a face-to-face, a confrontation that opposes the subject, the subject of will, of spirit, of the gaze, to that which is not him, and which falls under the general denomination *mât*. This face-to-face situation […] is undermined not only, as I have said, by technoscience; it is undermined by […] history – that is to say, by a sort of *chagrin* which, in the twentieth century, has replaced the hope that had been opened up by modernity in the strict sense at the end of the eighteenth century […]. [B]y calling this exhibition *Les Immatériaux*, we mean, among other things, that it is a question of contributing to a sort of work of mourning for modernity.[213]

Lyotard therefore uses the structure of communication theory as a *negative* model, a way to represent the epistemological status quo of modernity as the starting point for his argument, from which the exhibition hopes to offer a critical distancing. Its diagrammatic nature had the added advantage of providing a conceptual layout that could be adapted into a spatial layout. In a 1985 interview with Bernard Blistène for *FlashArt*, Lyotard admits that this choice was somewhat arbitrary and ultimately motivated by curatorial necessity: 'None of that is in any way new, it's only a way of giving a structure to our work […]: we could deal with this

---

[211] J. F. Lyotard, 'After Six Months of Work... (1984)', p. 30.

[212] J. F. Lyotard in B. Blistène, 'A Conversation with Jean-François Lyotard', *Flash Art*, n.121, March 1985, p. 33.

[213] J. F. Lyotard, 'After Six Months of Work... (1984)', p. 32.

object or that object to the extent that it now poses a particular question: 'What is the maternity of the message today?', 'What has happened to their matter?' And so on'.[214]

The question of the mechanisms of communication was certainly very present in Lyotard's mind as he started working on *Les Immatériaux*. 1983 saw the publication of *The Differend: Phrases in Dispute*, his most explicitly language-centric book. Against the the background of telecommunication technologies evolving at vertiginous speed, and in dialogue with the 'linguistic turn' of philosophy after Wittgenstein, *The Differend* is an analysis of language as endless conflict between different 'phrase regimens' and 'genres of discourse' that cannot be fully translated into one another; these conflicts cannot be resolved, as language itself is an imperfect, insufficient instrument to express or translate the reality of the referent.[215] In *Les Immatériaux*, this viewpoint is reformulated through Lyotard's use of the term 'interaction', as flagged above:

> When I say interaction, what I am thinking of is rather a sort of ontology of the endless transmission of messages which are translated by each other, for better or worse, as much as possible, and where man himself is not the origin of messages, but sometimes the receiver, sometimes the referent, sometimes a code, sometimes a support for the message; and where sometimes he himself is the message. This plasticity of humans means that this structure of communication today seems like something upon which identities can no longer be fixed […].[216]

Visitors to the exhibition should therefore consider themselves to be materials among materials, or better still as *'immaterials' among 'immaterials'*, and to be able to understand their role not simply as that of receivers of messages; rather, through the understanding of technoscientific apparatuses as 'linguistic elements' via the filter of the communication model underlying the whole exhibition, reconsider their relationships with technology, and with reality at large, as endless exchanges, translated (not always successfully or intelligibly) from one 'regime' into another. However this does not mean that reality is to be seen as reducible to language. Like the structure of *Les Immatériaux*, the 'linguistic turn' is applied as *a* technique to process reality and knowledge among others.

The question of the limits of communicability and understanding is a key one across all of Lyotard's oeuvre. In his earlier essay *Discourse, Figure*, Lyotard had given the name 'figure' to

---

[214] B. Blistène, 'A Conversation with Jean-François Lyotard', p. 35.

[215] J. F. Lyotard, *The Differend*, p.xii.

[216] J. F. Lyotard, 'After Six Months of Work... (1984)', p. 32.

an idea of incommunicability that sits alongside language, or 'discourse', and actively resists its ability to represent.[217] 'Figure' does not necessarily correspond to a visual datum, as opposed to language as verbal communication, but rather to any event of semantic disruption, present within and alongside language, and at the same time working against it. As such it is comparable to the idea of 'differend', and also useful to grasp Lyotard's understanding of language when interpreting *Les Immatériaux* through the filter of communication theory that he chose to superimpose upon it.

Much more than the 'differend' and the 'figural', however, it is the concept of the 'inhuman' that best represents the key philosophical notion Lyotard wanted *Les Immatériaux* to convey: the understanding that the opposition of nature versus culture is not only arbitrary but ultimately dangerous and truly irrational, and that only by embracing what is inhuman about humanity can our species come to terms with its position in a complex cosmos of endless, aimless interactions that language alone will never be able to fully grasp.

> The word 'human', as substantive adjective, designates an ancient domain of knowledge and intervention which the technosciences now cut across and share; here they discover and elaborate 'immaterials' which are analogous (even if they are in general more complex) to those examined and detected in other fields. The human cortex is 'read' just like an electronic field; through the neurovegetative system human affectivity is 'acted' on like a complex chemical organisation composed of information transmitted by media and according to diverse codes connected by interfaces where 'translations' take place. […] The idea of a general interaction is strengthened.[218]

Another formulation of this idea can be found in 'Matter and Time', a paper Lyotard gave at a symposium held in April 1985 in connection with *Les Immatériaux* and later published in *The Inhuman*:

> micro-physics and cosmology inspire in today's philosopher more a materialism than any teleology. An immaterialist materialism, if it is true that matter is energy and mind is contained vibration.
> One of the implications of this current of thinking is that it ought to deal another blow to what I shall call human narcissism. […] Through contemporary techno-science, [man] learns that s/

---

[217] J. F. Lyotard, *Discourse, Figure*, trans. by Anthony Hudek and Mary Lydon (Minneapolis: University of Minnesota Press, 2011).

[218] J. F. Lyotard, '*Les Immatériaux*', in *Thinking about Exhibitions*, p. 116.

> he does not have the monopoly of mind, […] that his/her own science is in its turn a complexification of matter, in which, so to speak, energy itself comes to be reflected, without humans necessarily getting any benefit from this. And that thus s/he must not consider him/herself as an origin or as a result, but as a transformer ensuring, through techno-science, arts, economic development, cultures and the new memorization they involve, a supplement of complexity in the universe.[219]

If technoscience, a quintessential product of human sapience, is what can help us reveal this fundamental inhumanity and demonstrate the cosmic aimlessness of general interaction, then an exhibition about technological, 'synthetic', logically processed products could give Lyotard an opportunity to express these concepts, to exhibit them through curatorial statements materialising as a spatio-temporal arrangement: an *exposition*.

When Lyotard started working on *Les Immatériaux*, the exhibition's layout began to coalesce spatially and conceptually around Lasswell's and Jakobson's communication models, with their five-fold structure of medium / *matériau*, referent / *matière*, hardware / *matériel*, code / *matrice* and sender / *maternité* becoming five loose 'strands' along which Lyotard and Chaput could remap existing and new ideas; Lyotard presented this thematic outline to the CCI as early as August 1983, under what will become its final title.[220] According to Boissier,

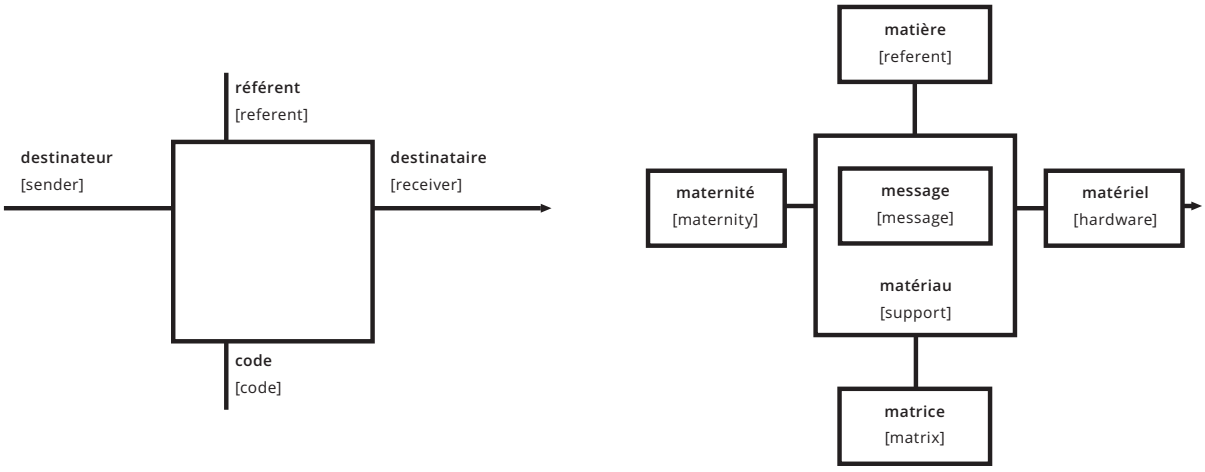

Fig. 14. Lyotard's adapted version of Lasswell's and Jakobson's communication models, showing the five-fold structure underpinning *Les Immatériaux*.

---

[219] J. F. Lyotard, 'Matter and Time', *The Inhuman*, p.45.

[220] Antony Hudek, 'From Over- to Sub-Exposure', in *30 Years after Les Immatériaux*, p.72, n.7. The note mentions the source as '*Esquisse*', 10 August 1983, Centre Georges Pompidou archives, box 94033 (no item number given).

Lyotard 'was not there as a curator who would select things, but rather as the intellectual who would connect and line up the things that were already there', and although he did propose a number of objects for inclusion it was mostly Chaput and the rest of the team at the CCI that fulfilled that particular curator-as-selector role.[221] Bernard Blistène, then a curator at the MNAM, also helped Lyotard and Chaput identify a number of modern and contemporary artworks for inclusion, while architect Philippe Délis had the key role of designing the exhibition's *mise en scéne* and actively contributed to the decision-making process.[222]

Lyotard embraced Délis' idea of using mesh panels as tools to experiment with the spatial layout of the exhibition, leading as far away as possible from the traditional sequence of distinct, pseudo-domestic rooms of the modern gallery, so representative of the linear narrative of progress that he wanted to question through *Les Immatériaux*. Using these floating curtains the exhibition could be laid out as a constellation of 'sites', self-contained but interconnected areas bracketing groupings of artworks and other objects. No rooms, no walls,

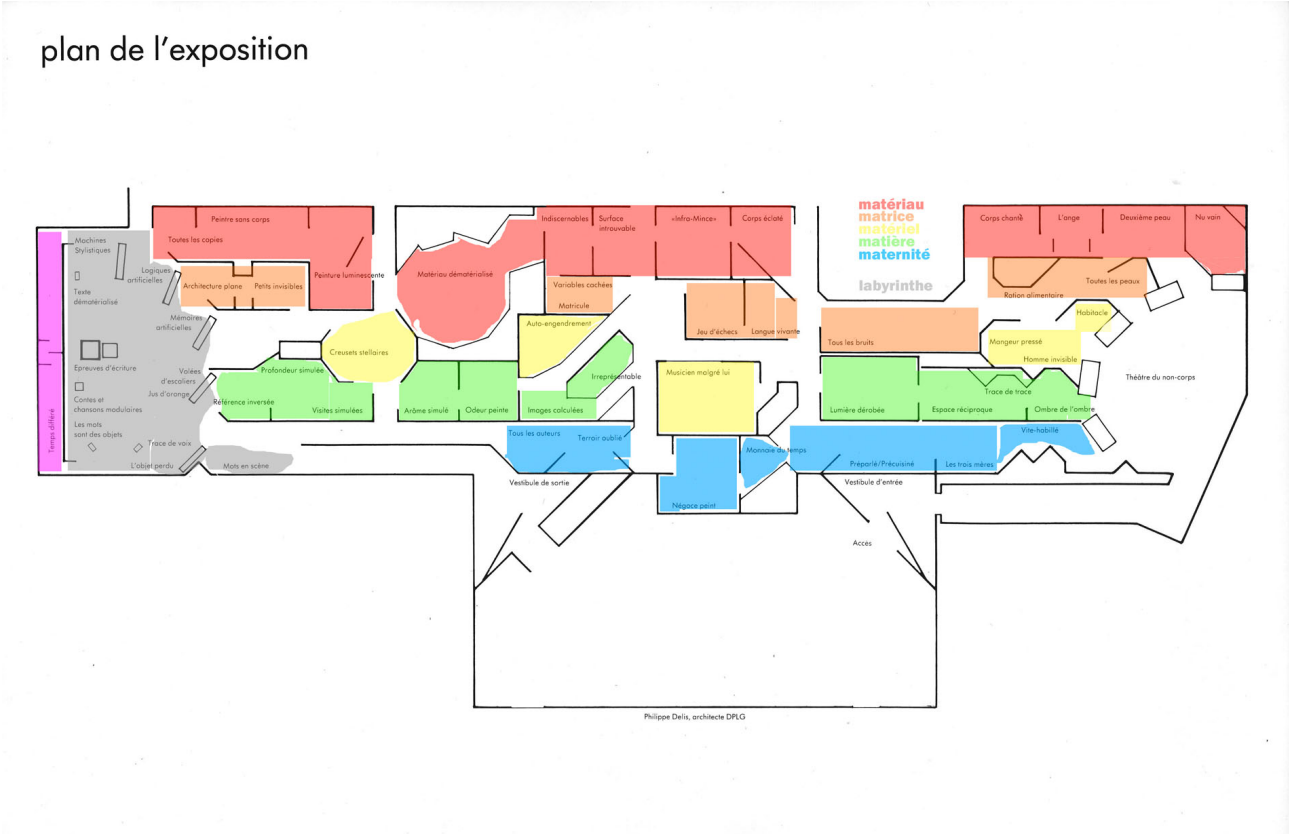

Fig. 15. The floorplan for *Les Immatériaux* as published on the exhibition catalogue, *Album et Inventaire* volume, n. p., and colour-coded to show the five thematic strands (plus the 'Labyrinth of Language').

[221] J. L. Boissier in conversation with A. Broeckmann, 'The Production of Les Immatériaux', *30 Years after Les Immatériaux*, p.99.

[222] *Ibid*. and A. Hudek, 'From Over- to Sub-Exposure', in *30 Years after Les Immatériaux*, p.74, n.14.

Fig. 16. *Les Immatériaux*, installation shot, Centre Georges Pompidou, Paris, 1985.

but a sprawling network of sixty spaces, connected in a way that gave visitors the choice to pick their own direction and narrative sequence through a myriad intersections and forking paths. This layout was influenced by the spatial metaphors of Jorge Luis Borges, who appeared more than once in *Les Immatériaux*: for example, one large section of the exhibition, entitled '*Labyrinthe du langage*', was explicitly dedicated to the Argentine author.

The mesh material also allowed for different degrees of transparency, modulated through a strategic use of the lighting, thus visually connecting certain neighbouring sites while keeping others hidden, contributing to the theme of immateriality by giving the exhibition a diaphanous, layered appearance. To further complexify this layering (while allowing for some breathing spaces), some areas were left intentionally empty, as if to mimic pauses and gaps in communication. Although Lyotard describes these as "desert', neutralised regions', these gaps were not completely *meaningless*; after all, Lyotard had described silences as fully-fledged phrases in *The Differend*: 'There is no non-phrase. Silence is a phrase'.[223]

The whole infrastructure of the exhibition was therefore designed to function as an apparatus exemplifying aspects of the postmodern experience in a concentrated form, for

[223] J. F. Lyotard, '*Les Immatériaux*', in *Thinking about Exhibitions*, p.121; *The Differend*, p.xii.

example by playing with the perception of time and space, confounding referents with their representations, and turning *sur*faces into *inter*faces. In 'After Six Months of Work…', Lyotard mentions two very different sources of inspiration: one is Diderot's description of Vernet's painting in *The Salon of 1767*, a sort of fictionalised *ekphrasis* where the scenes depicted are presented as *real* sites, encountered not as pictures in a gallery but as vivid experiences of nature, ironically described as too rich in minute and elusive details to be properly representable through the medium of painting; in other words, as virtual realities *avant la lettre*.[224] Lyotard also declared his indebtedness to very recent writings by Paul Virilio and Giairo Daghini, published in *Change International* in December 1983, on the post-industrial metropolis as a sprawling network, exemplary of the space-time compression of contemporary experience: landscapes juxtaposing reality with images and reflections, speeding past one's eyes from the windows of sleek vehicles, zooming from one spot to the next and losing the sense of what lays in between.[225] Lyotard took further inspiration from the title of Virilio's essay, 'The Overexposed City' ('*Une ville surexposée*'), where the architecture of the new metropolis is described as a montage of transparent and luminous surfaces, like glass and perspex, replacing traditional building materials at the same time as the electronic screen was replacing the traditional 'surfaces of inscription' of written communication.[226] For Lyotard *Les Immatériaux* was to be experienced not as an exhibition but 'a surexhibition [*surexposition*]', where surfaces are replaced with interfaces: 'screens' dominate, both as floating perforated metal sheets and as a multitude of computer monitors and other permeable boundaries between media and materials.

This sense of fluidity was also reflected in the way text was deployed throughout the exhibition, a key aspect of *Les Immatériaux* which was arguably Lyotard's most direct curatorial contribution. As we have seen, steering the conceptual edifice of the exhibition in the direction of language theory was for Lyotard but a starting point, a way of introducing a deceivingly simple structure only to unfold and distort it, in order to demonstrate the breakdowns in communication and knowledge which had been at the core of most of his writings from *Discourse, Figure* onwards. An obvious way to complicate communication in the context of the exhibition was to intervene on its interpretation materials and associated publications: it was Lyotard's idea to replace all text panels with a shifting soundtrack,

---

224 J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, pp.49-53.

225 Paul Virilio, 'Une ville surexposée', and Giairo Daghini, 'Babel-Métropole', *Change International*, n.1 (December 1983).

226 P. Virilio, 'Une ville surexposée', *Change International*, n.1 (December 1983), pp.19–22; 'The Overexposed City', trans. Astrid Hustvedt, in *Zone 1–2* (New York: Urzone, 1986), pp.540–550.

Fig. 17. *Les Immatériaux*, installation shot showing a visitor wearing the wireless headset and prehending the scents presented in the 'Simulated Aroma' site. Photo by Jean-Claude Planchet.

administered to the visitors via wireless headphones in the form of a non-linear audioguide, with voices reading excerpts of texts by philosophers, artists and literary figures such as Marcel Proust, Stéphane Mallarmé, Samuel Beckett, Jorge Luis Borges, Yves Klein, Henri Michaux, Gaston Bachelard, Jean Baudrillard and Paul Virilio, alongside a selection of music and sound effects.

The soundtrack did not explicitly describe the exhibits in any way, nor did it provide any explanation for how the texts were connected to the objects on display. Moreover, moving through the space caused the infrared headphones to pick up different signals corresponding to distinct sites or areas of the exhibition, so that the visitors would find themselves literally meandering from text to text, from soundscape to soundscape, with sudden interruptions and jarring juxtapositions. Returning to the idea of the drive-through metropolis, Lyotard described the experience of the soundtrack as listening to the radio in a car while driving across a border, causing it to switch between frequencies: another example of a permeable boundary.[227] Wearing headphones also isolated each visitor, effectively forcing them to

[227] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, p.65.

experience the exhibition as alienated individuals even at the busiest of times.[228] This was one of the most memorable and controversial aspects of the exhibition, much discussed in contemporary reviews and commented upon by visitors, not least because the headsets and wireless broadcast system were prone to malfunctioning. Lyotard however defended *Les Immatériaux*'s assault to the senses via technology as intentionally flawed, to the point of reclaiming the technical mishaps as cases in point in his denial of the comforting promises of technoscientific positivism.[229]

Another reason for Lyotard to privilege spoken word and sound over written texts was to highlight their temporal dimension: 'the signifier in this second modality is organised in a chain all of whose elements are not actualisable at once — in the blink of an eye, as we say — as is the case for an image, but only successively — or, as linguists say, diachronically'.[230] Lyotard considered written text to be closer to images than to spoken sound, although in his view digital interfaces were in the process of changing the reception of written language as well ('The screen pages themselves scroll').[231] Time is described by Lyotard as a key factor in a postmodern understanding of reality as shaped by 'immateriality':

> Contemporary technologies and the contemporary way of life aim to exert man's mastery over time in the same way that the modern project aimed, and still aims, to exert man's mastery over space. I would associate the immaterial with the immediate, in the sense that mastery over time implies the abolition of any delay, and the capacity to intervene here and now. [M]an encounters probably more than ever his incapacity to dominate time precisely insofar as time is not a material. [I]n this sense, time is the form […] *par excellence* – or the medium, if you prefer – of immateriality.[232]

The many interactive exhibits (and here I use the word 'interactive' in the more literal sense) included in *Les Immatériaux* allowed the public to modify their sensorial environment in real time. For example, the site 'Musician despite himself' ('*Musicien malgré lui*') was a room designed by Rolf Gehlhaar where motion sensors captured the visitors' movements and turned them into a live soundscape, fed back to the visitors through their headsets; another

---

[228] A. Hudek, 'From Over- to Sub-Exposure', in *30 Years after Les Immatériaux*, p.78.

[229] J. F. Lyotard, 'Qui a peur des 'Immatériaux'?', *Le Monde*, 3 May 1985, p.3; quoted in A. Hudek, 'From Over- to Sub-Exposure', in *30 Years after Les Immatériaux*, pp.79-80.

[230] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, p.41.

[231] *Ibid*.

[232] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, p.37.

area, devised by Catherine Ikam and titled 'Deferred time' ('*Temps différé*'), featured a delayed video feedback system which was intended to show time as a spatialised and non-linear phenomenon. There were examples of interactive texts too, displayed in the section titled 'Labyrinth of language' on computer screens and therefore as scrollable and time-dependant, featuring 'modular literature', generative poetry and text-based adventure games.

At that time the French public was already being exposed to an early form of networked computing thanks to the introduction from 1978 of the 'Minitel' technology, text-based terminals connected using telephone lines which could be used to retrieve information and send messages, often described as a precursor of the Internet. These newfangled telecommunication tools were not only featured in the exhibition as exhibits, but integral to the production of a whole section of *Les Immatériaux*, one that was entirely spearheaded by Lyotard himself: the *Epreuves d'Ecriture* ('Writing tests') project, an exercise in collective writing whereby a team of 26 writers, philosophers, scientists and artists summoned by Lyotard shared a database of 50 keywords, which they could access and contribute to via a private network of computers equipped with a word processor, lent to them specifically for this purpose. The resulting texts were then displayed on a computer in the 'Labyrinth of language'

Fig. 18. *Les Immatériaux*, installation shot showing the interactive Minitel computers and, in the background, one of the many white mannequins punctuating the exhibition.

section and published in a dedicated volume of the exhibition catalogue.[233] Contributors included Jacques Derrida, Nanni Balestrini, Daniel Buren, François Chatelet, Christine Buci-Glucksmann and Philippe Lacoue-Labarthe, as well as — of special interest for this thesis — philosophers and sociologists of science Bruno Latour and Isabelle Stengers.[234] Lyotard was especially proud of this volume, which he considered to be a valuable experiment in thinking together and responsively, not just a conversation but an expansive collection of dissenting opinions, commentaries and reactions in a variety of different tones and registers (authors could post responses to previous submissions, effectively anticipating the format of e-mail or online forum threads).[235]

Of course, the curatorial team also strove to express the concept of the exhibition through the overall form of the catalogue. The main volume consisted of a double folder containing the *Inventaire* ('Inventory'), a stack of loose pages each representing one of the sites, where the potential to reorder the sheets at will echoed the free perambulatory experience of an exhibition without fixed pathways, and the *Album*, a 'notepad' reproducing notes, diagrams, minutes and letters documenting the evolution of the exhibition from Lyotard's appointment to the install, represented on the last page by a single snapshot of the empty gallery with the mesh panels being installed, providing just a hint of the dramatic scenography encountered by visitors in the space.

Not only was the exhibition design, made of curtains and spotlights, reminiscent of a theatrical setup, but the first major 'site' of the exhibition (located just after the long, dark corridor of the '*Vestibule d'entrée*') was titled 'Theatre of the Non-Body' ('*Théâtre du non-corps*'), and featured five dioramas representing five types of 'resistances', five ways of signalling the disappearance, or dematerialisation, of the body — 'no body', 'no word', 'no other', 'no history', 'no me'.[236] Each of these also marked the beginning of one of the five general strands of the exhibition, corresponding respectively to *matériau*, *matrice*, *matériel*, *matière* and *maternité*. This dramatic atmosphere continues throughout the exhibition, enhanced by the alternation of harsh lights and zones of darkness accompanied by the dark backdrop of the metal mesh curtains; in Chaput's own words: 'Decked in demanding grey, illuminated by

---

[233] J. F. Lyotard and T. Chaput (eds.), *Les Immatériaux*, exh. cat. (Paris: Centre Georges Pompidou, 1985), *Epreuves d'Ecriture* volume.

[234] It is interesting to note that, despite — or perhaps *because of* — this collaboration, Latour will soon include harshly critical words regarding Lyotard's view on the 'inhumanity' of science in his book *We Have Never Been Modern*, first published in French only a few years later in 1991. See B. Latour, *We Have Never Been Modern*, pp. 61-2.

[235] A. Hudek, 'From Over- to Sub-Exposure', in *30 Years after Les Immatériaux*, pp.76-7 and n.23.

[236] J. F. Lyotard and T. Chaput (eds.), *Les Immatériaux*, exh. cat., *Inventaire*, 'Théâtre du non-corps', n.p.

improbable lighting'.[237] This sombre tone was a subliminal way for Lyotard to convey the sense of sorrow ('*chagrin*') accompanying what he had described (in a passage quoted above) as the 'work of mourning for modernity'.[238]

To this effect, even the most mundane of objects and materials were presented in a disquieting light, or magnified, in order to enhance or reveal a strangeness which is either invisible to the naked eye or hidden in plain sight. Several sites revolved around the ghostly and uncanny 'inhhuman' presence of white mannequins, sometimes multiplied by mirror effects. For example, the *Nu vain* ('Vain Nude') featured 'twelve asexual mannequins'; *L'ange* ('The angel'), a site about 'transsexuality' and shifting gender identities, included gendered heads divided by mirrors and semitransparent glass panes; the sites *Indiscernables* ('Indiscernible') and *Tous les peaux* ('All the skins') displayed mannequins in various uniforms and attires. Daily routines and familiar interiors were not spared the treatment: a 'magic mirror' allowed visitors to try on virtual clothes in the site *Vite-habillé* ('Speed-dressed'); the site *Habitacle* ('Dwelling') had a full-scale Japanese sleeping cell of the kind made available in special 'beehive' hotels for busy workers on the go; *Ration alimentaire* ('Food ration') and *Mangeur pressé (*'Hurried eater*')* dealt with shifting habits in food consumption using kitchen furniture as display units.

In many sites, technology was explicitly presented as an instrument for the extension of human abilities, demonstrating for example how vision had been enhanced thanks to microscopes and telescopes, with images of the interior of a cell, the microstructures of DNA and new industrial materials as types of 'building blocks' (sites *Corps éclaté*, 'Exploded body'; *Langue vivante*, 'Living language'; *Matériau dematérialisé*, 'Dematerialised material'; *Surface introuvable*, 'Undiscoverable surface'), pictures captured with instruments recording light beyond the visible spectrum (site *Petits invisibles*, 'Small invisibles') and a video on the life and death of stars projected on a huge circular screen (site *Creusets stellaires*, 'Star crucibles'). Skin grafts and synthetic dermal implants were presented alongside clothes as interchangeable examples of prosthetic external layers (site *Deuxième peau*, 'Second skin', in proximity to the aforementioned 'All the skins' site); elsewhere, a robot arm was seen carving a life-size car prototype out of polystyrene blocks from a computer model (site *Auto-engendrement*, 'Self-perpetuation').

Framing and enriching this montage of the mundane and the technological, artworks often appeared strategically within the same field of vision by peeking in the background or

---

[237] Thierry Chaput, 'Entrée en matière', in *Les Immatériaux* exh. cat., *Album et Inventaire* volume, *Album*, p.6.

[238] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, p.32.

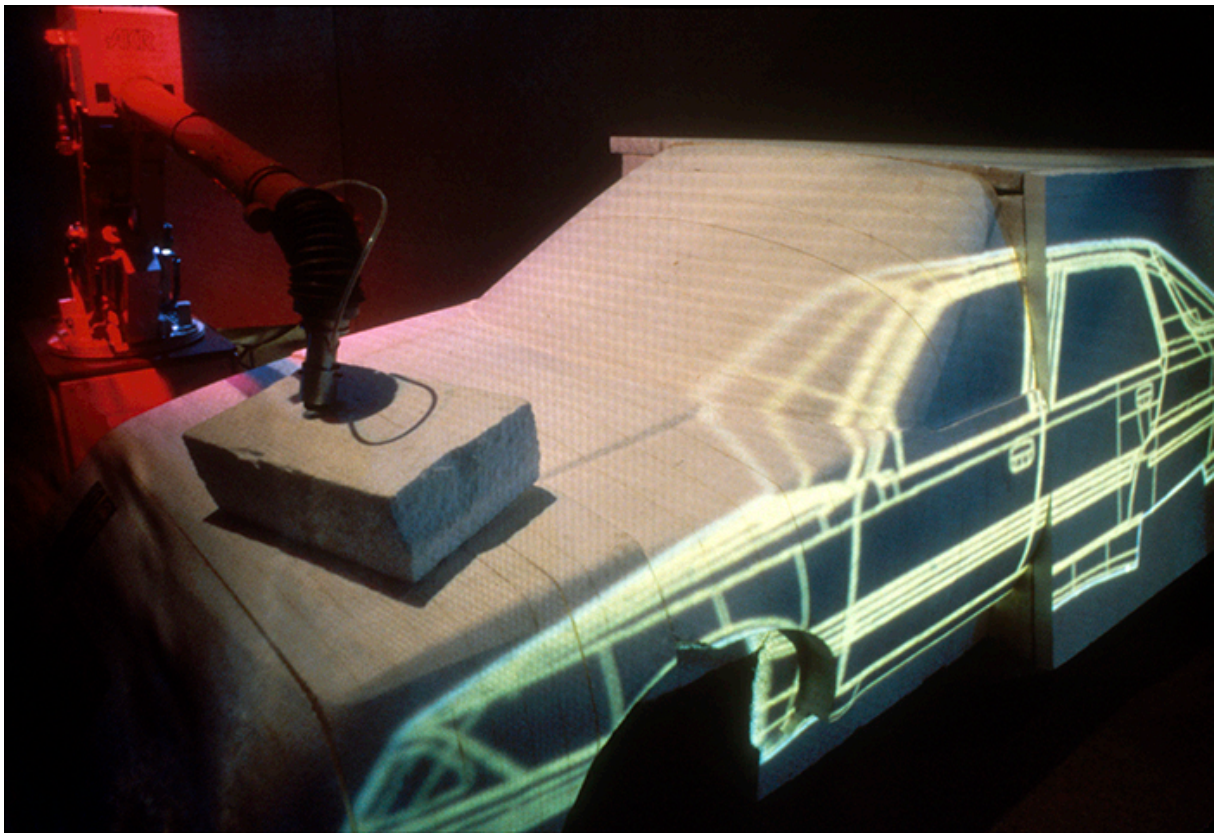

Fig. 19. *Les Immatériaux*, installation shot showing the computer-aided car prototyping in the 'Self-perpetuation' site.

showing through the semi-transparent mesh panels. Though not presented as the protagonists of the show, artistic practices still played a key role and often took over entire sites: one such site was titled '*Infra-mince*' ('Infra-thin'), after the inherently undefinable notion developed by Marcel Duchamp in his notes around the *Large Glass*, and contained some related documents and photographs by Duchamp alongside works by Yves Klein, Giovanni Anselmo and Thierry Kuntzel. Lyotard had written and spoken on multiple occasions on the work of Duchamp, so it is plausible that the inclusion of the notion of *infra-mince* was the initiative of the philosopher, who saw it as a shorthand for all things immaterial, imperceptible and undescribable in art: 'A secret appearance under the appearance. The artist tracks the event in its elusive character. The visual work is witness to the invisible in the visible'.[239] As such, the concept of *infra-mince* can apply by extension to the whole exhibition — especially considering how Lyotard saw *Les Immatériaux* as a sort of 'total work of art', according to an observation included in his interview with Bernard Blistène.[240]

---

[239] *Les Immatériaux* exh. cat., *Album et Inventaire* volume, *Inventaire*, 'Infra-mince', n.p.

[240] B. Blistène, 'A Conversation with Jean-François Lyotard', *Flash Art*, n. 121, March 1985, p. 35.

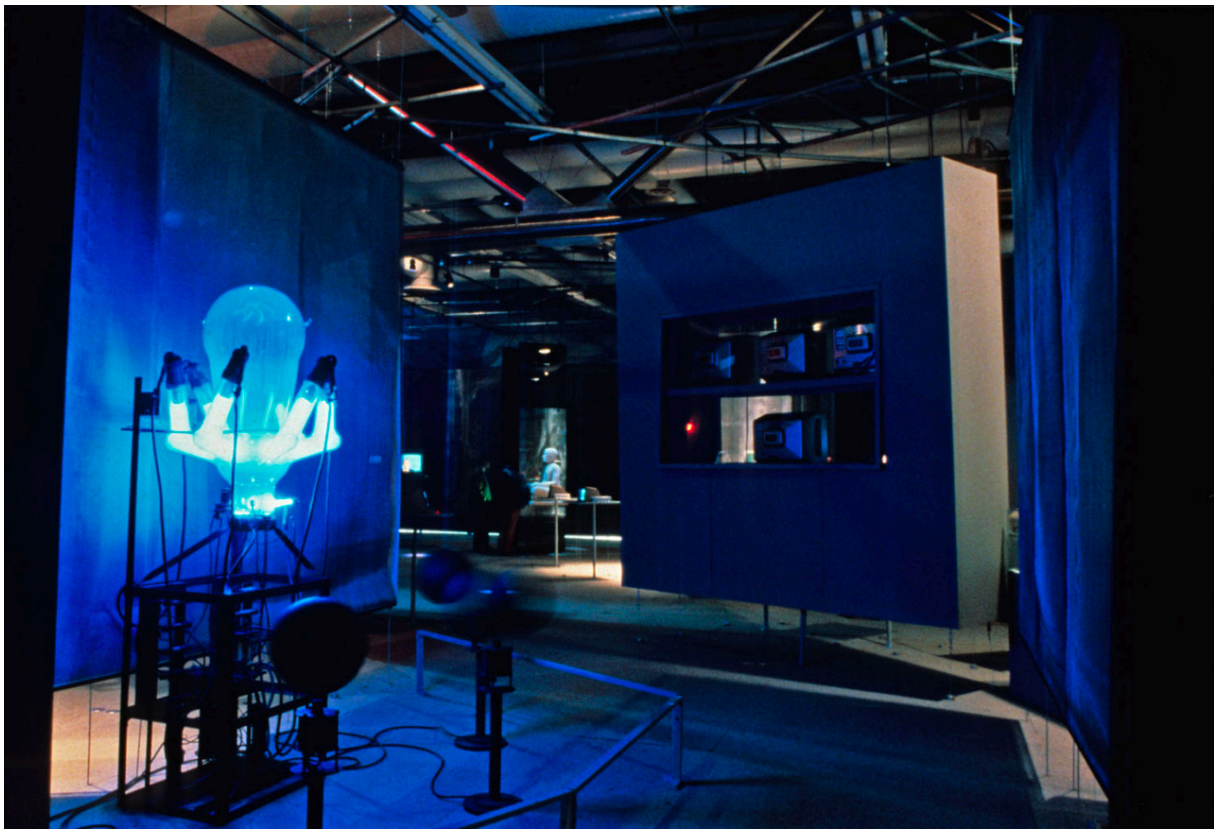

Fig. 20. *Les Immatériaux*, installation shot showing a *Télélumière* and electromagnetic spheres by Takis (left).

Yet despite their prominence, the overall choice of artworks — or at least the objects explicitly contextualised as such — presented a narrative of dematerialisation in (western) 20th century Art which was by then already well established, to the point of coming across as conservative: from Malevich's Suprematism to the mechanical abstractions of Moholy-Nagy, with a detour via Duchamp and his quest for the *Infra-mince*, to Fontana's black light 'environments' and Klein's *Zone of immaterial pictorial sensibility*, touching on the mathematical patterns of François Morellet, the minimalism of Larry Bell and Robert Ryman, the conceptual tautologies of Joseph Kosuth and Dan Graham's video feedback. Two sites (*Lumière dérobée*, 'Stolen light' and *Peinture luminescente*, 'Luminescent painting') presented attempts to represent light in painting and to make painting with light respectively, from the vibrant dissected colours of post-impressionism to the electromagnetic experiments of Takis and Dan Flavin's mass-produced neon tubes. This was also well-trodden ground, particularly given the emphasis put on painting, however expanded this notion.

Lyotard explicitly distanced himself from a certain return to figuration (neo-expressionism, *transavanguardia*) which was described by many at the time as a 'postmodern'

turn in painting: Lyotard considered these to be as 'an enormous involution'.[241] Yet, surprisingly, not much was presented as an alternative in terms of then-current artistic production from the 1980s. By 1985, a rich history of artists working with mass media technologies, cybernetics and communication theory existed which could easily have found their place in *Les Immatériaux* — not to mention younger artists experimenting with video and early CGI. However, the more technologically advanced contemporary artworks included in the show (from the point of view of their media, at least) were limited to some holographic works, while other multimedia projects taking the form of especially commissioned installations were not presented as artworks in their own right but rather as technological experiments and architectural interventions, and credited as such in the catalogue. For example, a 'side project' by Liliane Terrier offered visitors photocopies of everyday objects that could be hung nearby in ever-changing montages, in the site *Toutes les copies* ('All the copies'): for that time, possibly one of the more interesting installations the exhibition had to offer — despite its treatment as 'not-art'.

In many ways, *Les Immatériaux* was more preoccupied with experimenting with the exhibition format, with ways of telling a multitude of stories relevant to the present moment, through an assemblage of environments and experiences, and much less with sampling a *Zeitgeist* through a selection of contemporary practices. This transhistorical aspect was highlighted by the inclusion of an Egyptian bas-relief (literally the first object in the exhibition, as it welcomed visitors in the entrance corridor), paintings by old masters (Simone Martini, Quentin Metsys, Simon Vouet, Jean-Siméon Chardin) and examples of early 20th century avant-gardes (Futurism, Suprematism, Dada) alongside holograms and videoclips, which created a sense of temporal dislocation and friction while at the same time pointing at the availability and ubiquity of images in the mass-mediated present.

As many reviewers observed, and Lyotard himself was well aware, the ideas behind the exhibition were not easy for the casual visitor to grasp, and not only because of the combination of a tangled, darkened layout, lack of clear explanations and general sensorial overstimulation. Lyotard's inherently ambivalent position towards technoscientific innovation was not an easy concept to convey in exhibition form, and even less so while intentionally resisting and even obfuscating interpretation.[242] Lyotard and Chaput wanted the exhibition to embody the paradoxical core of postmodernity: both the end of modernity as an established set of paradigms, and the disruption of these paradigms by new technologies which are a

---

[241] J. F. Lyotard in B. Blistène, 'A Conversation with Jean-François Lyotard', *Flash Art*, n.121, March 1985, p. 35.

[242] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, p. 59.

product of the trajectory of modernity; both 'the chagrin that surrounds the end of the modern age as well as the feeling of jubilation that's connected with the appearance of something new'.[243] This meant juxtaposing images exemplifying the modern paradigm (for example through the images of the body being measured and classified in the '*Nu vain*' site) with those moving away from or beyond it, without necessarily explaining this shift but rather implying it and relying on the public to be able to make this distinction.

For Lyotard there were also different ways to interpret the epistemological and political potential of the technosciences, corresponding to the two definitions of 'inhumanity' that the philosopher would soon tackle in his introduction to *The Inhuman*: one a destructive tendency towards the total domination of nature, the other an understanding of the limits of humanity and of its ontological identity with all other forms of cosmic interactions. Embracing this manifold ambivalence while withdrawing explanation made the experience of *Les Immatériaux* a rather demanding one, bound to frustrate and confuse those ill-equipped to grasp the subtler hints provided in the soundtrack and in the exhibition design in order to extrapolate Lyotard's and Chaput's curatorial intentions. It was also purposefully not an uplifting or even pleasant experience: Lyotard himself warned the Pompidou that *Les Immatériaux* was going to be a risky endeavour, as it was 'not […] made to teach, nor even to show something […], and [it] is also not about marvels, in the sense that one might marvel at new technologies', but rather an exhibition 'whose aim […] is to question, and I would even say to disquiet, the idea of the will and intelligence of an all-powerful subject, in order to produce instead a sort of effect of modesty in the anthropological atmosphere in which we live'.[244]

Les Immatériaux can be interpreted at the same time as a one-of-a-kind philosophical essay/exhibition and as exemplary of the trans-disciplinary curatorial model pioneered by the Centre Pompidou in its early years, before its return to a more traditional role as a modern art museum (and here I use 'modern' both in the art historical and in Lyotard's sense). Like other exhibitions developed by or in collaboration with the CCI, *Les Immatériaux* brought together visual arts and a multitude of disciplines and cultural phenomena, without compartmentalising them but rather in a way that effectively forced them into an uneasy dialogue. It presented an argument in progress in a way that defied classification and even a clear chronological definition, unapologetically jumping from Egyptian bas-reliefs to computer graphics and state-of-the-art industrial technologies, and trusting the observer to be able to experience and extrapolate in their own time.

---

[243] J. F. Lyotard in B. Blistène, 'A Conversation with Jean-François Lyotard', *Flash Art*, n.121, March 1985, p. 35.

[244] J. F. Lyotard, 'After Six Months of Work... (1984)', in *30 Years after Les Immatériaux*, pp. 59-60.

However, in an exhibition this theatrical, it becomes difficult to give each object the attention it is due in order to learn from it and its diffractive juxtapositions, and the meaningful differences between distinct practices and types of knowledge production — in the realm of science, art, industry and so forth — can as a result become flattened, overshadowed by heavy-handed narrative devices. The case of *Les Immatériaux*, where the very structure of the exhibition was intentionally puzzling, must be understood as a dysfunctional model for transdisciplinary pedagogy, one where the exhibition-form is ultimately pushed to certain extremes in a way that privileges affects over contents. At that stage, one might legitimately question whether a museum-style exhibition *of such a scale* is really the best format to convey that message, if most objects on display end up being ignored or forgotten, eventually disappearing into the background to function as little more than props in a theatre of excesses.

Nevertheless, as an expression of Lyotard's version of post-humanist materialism, at once relying upon and warning against the excesses and distortions of technoscientific reason, *Les Immatériaux* can be seen as a precursor to 'NM exhibitions' where art and science are brought together and discussed as equivalent modes of knowledge production, parallel and partially overlapping ways to reframe humanity itself with respect to the rest of nature. Many parallels can be found in particular with *dOCUMENTA (13)*: from the juxtaposition of art with physics, astronomy and biology, to certain ways of staging philosophical arguments and generating affects through curatorial forms, down to the documentation of the exhibition's own development process by including behind-the-scenes documents in a section of the catalogue.

Also noteworthy is Robin Mackay's interest in Lyotard and *Les Immatériaux*, suggesting a direct link with his style of applied philosophy, particularly in thinking about metaphysics and epistemology through, and not against or in opposition to, the products of the technosciences. It is reasonable to assume that this influence has seeped into Mackay's own curatorial projects, as I will address later in the text (see Chapter 4).[245]

Les Immatériaux has also been widely credited with influencing the trend of artist-curated exhibitions which was to grow exponentially in the 1990s; Philippe Parreno in particular has been especially vocal in expressing his indebtedness (he is reportedly working on a spiritual 'sequel' to *Les Immatériaux*, an exhibition entitled *Résistances* curated with Daniel Birnbaum and Hans-Ulrich Obrist).[246] In this sense, parallels can be drawn with

---

[245] Robin Mackay, 'Immaterials, Exhibition, Acceleration', in *30 Years after Les Immatériaux*, p. 215-42, and see my pp. XX.

[246] See Daniel Birnbaum and Sven-Olov Wallenstein, 'From Immaterials to Resistance: The Other Side of *Les Immatériaux*', in *30 Years after Les Immatériaux*, esp. pp. 245-6 and nn. 2-3.

exhibitions such as Mike Kelley's *The Uncanny* (1993 / 2004) and Mark Leckey's *The Universal Addressability of Dumb Things* (2013). But the most obvious comparison, and one which is most immediately relevant for this chapter, is with other exhibitions curated by or with 'professional' philosophers.

Although Antony Hudek defines *Les Immatériaux* in *30 Years after Les Immatériaux* as 'the first exhibition in which a philosopher played a leading role', this statement can easily be demonstrated as factually incorrect; remaining in Europe and within the Western tradition of philosophy, one can think of Max Bense, a philosopher writing on information aesthetics and cybernetics who also organised several exhibitions in Stuttgart, primarily around the New Tendencies movement and concrete poetry in the 1960s and 1970s.[247] Extending the definition of curatorial practices to encompass platforms other that the exhibition *sensu stricto*, one could also credit, for example, Georges Bataille's work as editor of the surrealist magazine *Documents*. But it is generally true that *Les Immatériaux* ushered in an era when art institutions trusted and indeed actively sought the collaboration of high-profile philosophers to develop projects that could push the boundaries of the thematic exhibition and experiment with curatorial formats; Hudek lists as notable examples Bernard Stiegler's *Mémoires du futur* (Paris: Bibliothèque publique d'information, 1987), Jacques Derrida's *Mémoires d'aveugle* (Paris: Musée du Louvre, 1990), Julia Kristeva's *Visions capitales* (Paris: Musée du Louvre, 1998), Paul Virilio's *Ce qui arrive* (Paris: Fondation Cartier, 2002), and Jean-Luc Nancy's *Le Plaisir au dessin* (Lyon: Musée des Beaux-Arts, 2007).

One philosopher in particular helps me establish a direct bridge between *Les Immatériaux* and the influence of new materialisms on curatorial practices, via a handful of exhibitions which will be subject of the next section of this chapter: Bruno Latour, who as I have mentioned was involved by Lyotard in the *Epreuves d'Ecriture* project within *Les Immatériaux*, and will return to the field of exhibition-making from the early 2000s, with a series of large thematic exhibitions held at Karsruhe's ZKM.

---

[247] A. Hudek, 'From Over- to Sub-Exposure', in *30 Years after Les Immatériaux*, p.71; Margit Rosen, *A Little-Known Story about a Movement, a Magazine, and the Computer's Arrival in Art. New Tendencies and Bit International, 1961–1973*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2011); Valentina Ravaglia, 'On Cybernetic Serendipity, Nove Tendencije and the Myth of Computer Art', in V. Catricalà (ed.), *Media Art. Towards a New Definition of Arts in the Age of Technology* (Pistoia: Gli Ori, 2015), p. 108.

Bruno Latour as a curator

> A museum exhibition is deeply unrealistic: it is a highly artificial assemblage of objects, installations, people and arguments, which could not reasonably be gathered anywhere else. In an exhibition the usual constraints of time, space, and realism are suspended. This means that it is an ideal medium for experimentation; and especially for addressing the current crises of representation […].[248]

This statement opens an essay by Bruno Latour and Peter Weibel (artist, curator and Director of ZKM, Karlsruhe's Centre for Art and Media) on the exhibitions *Iconoclash* (2002) and *Making Things Public* (2005), which they curated together at ZKM.[249] Considering Latour's involvement with *Les Immatériaux*, this statement immediately brings to mind the excesses of Lyotard's and Chaput's *mise en scène*, an exhibition designed to enhance its underlying unrealistic nature as a contrived display of objects and ideas. As a metaphor for the mediating role of human cognition, the exhibition format lends itself especially well to thinking about the distortions operated by human perception and heuristic understanding the world. Grounded in this realisation, the exhibitions *Iconoclash* and *Making Things Public* were daring transdisciplinary exercises in representing the very subject of representation.

Though Latour began publishing in the fields of anthropology and sociology of science in the mid-1980s, these earlier texts can be understood as steps towards his highly original contribution to philosophy at large, gradually transcending disciplinary divides and branching into matters of epistemology and metaphysics, as seen particularly in *We Have Never Been Modern*, 1991, and more recently in *An Enquiry into Modes of Existence: an Anthropology of the Moderns*, 2013.[250]

As I have mentioned in Chapter 1, Latour's earlier analysis of laboratory practice in science led him to the formulation of Actor-Network Theory, an 'object-oriented' approach (in a sense that precedes Graham Harman's) born in the academic milieu of sociology, in which issues of representation play a central role with all their facets and possible meanings: in politics, science, religion, art, etc. In his holistic vision of all things functioning as 'actants', whose interactions form infinite amounts of tangled networks, separating each sphere of

---

[248] Peter Weibel and Bruno Latour, 'Experimenting with Representation: Iconoclash and Making Things Public' in Sharon Macdonald and Paul Basu (eds.), *Exhibition Experiments* (London: Blackwell, 2007), p. 94.

[249] *Ibid*., pp. 93-108.

[250] B. Latour, *An Enquiry into Modes of Existence: an Anthropology of the Moderns* (Harvard University Press, 2013). For an argument in favour of the considering Latour as a key philosopher beyond disciplinary distinctions, see Graham Harman, *Prince of Network. Bruno Latour and Metaphysics* (Melbourne: re.press, 2009).

knowledge is ultimately pointless, all being aspects of the same cultural/historical continuum seen as a network of networks, and only artificially codified as established academic taxonomies by practical constraints.[251]

Indeed, exhibitions (and other comparable public-facing events) are for Latour privileged spaces in which the premises of representation can be put to the test: they are gatherings of things, assemblies of assemblies, put together by a number of stakeholders in a set of historical and practical circumstances, and presented to a public for the purpose of improving their awareness of a given subject. Things don't speak for themselves, so curators, like politicians and scientists (and artists, teachers, philosophers, theologists...) take upon themselves the delicate role of re-presenting them, in order for them to become tools for the exchange of knowledge. All these elements — objects, places, people, data — are *actants* weaving a multilayered network, each experience contributing its own strand or node in ever-shifting relationships between actors.

This is highlighted by Latour and Weibel in the pluralistic approach to the selection process of objects to be exhibited, and to decision-making in general; for example, Latour worked closely on each exhibition with larger teams of curators, explicitly allowing for the coexistence of multiple points of view on a shared theme. In this sense Latour's exhibitions reflect on their function as complex machines for cultural mediation, stressing the role and presence of a vast curatorial infrastructure instead of trying to dissimulate it.

In the following examples of Latour's forays into curating, the microcosmos of an exhibition becomes a prime example of the operations of mediation constantly at play in the circulation of knowledge. Exhibition-making is here an opportunity to try and demonstrate how Actor-Network Theory works in practice as applied to a set of parameters (the spatial context, the chosen theme, the possible responses of the public itself, performative elements, etc.). Indeed, each of the curatorial projects in which Latour was involved first-hand was set up as an experiment in which a theoretical premise is put to test and the outcome is not predetermined. These three exhibitions all have at their core a bundle of open questions; if the the initial premise is disproved by the final outcome, that is because an experiment is always a transformative process, for both its human and non-human actors.[252] Mediation occurs,

---

[251] See in particular B. Latour, *We Have Never Been Modern*, trans. C. Porter (Cambridge, MA: Harvard University Press, 1993; orig. 1991) and *Reassembling the Social. An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005).

[252] See B. Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999).

Fig. 21. Bruno Latour during one of the talks/demostrations of *The Theater of Proof*, *Laboratorium*, Antwerp, 1999.

knowledge is produced, representation is dissected and reappraised; by the end of these experiences, no actant is the same.

Laboratorium, or what is an experiment? *The Theater of Proof*, 1999

In 1999, Bruno Latour was invited by curators Hans-Ulrich Obrist and Barbara Vanderlinden to contribute to *Laboratorium*, an interdisciplinary project aimed at exploring the parallels between the artist's studio and the scientist's lab as circumscribed sites for experimental practices, with a programme of exhibits and events taking over a number of venues across the Belgian city of Antwerp. At that date, Latour was already internationally known as an anthropologist and philosopher of science; his early studies explicitly focussed on laboratory practices and the social interconnectedness of scientific discourses (*Laboratory Life: the Social Construction of Scientific Facts*, with Steve Woolgar, 1979; *The Pasteurization of France*, first published in French in 1984; *Science In Action: How to Follow Scientists and*

Engineers Through Society, 1987). During the 1990s Latour had also contributed to debates on aesthetics and the then rising field of visual culture with writings on iconoclasm in science as well as modernism in the arts, expanded his field of action by writing about figures as diverse as Piaget and Whitehead, and started his groundbreaking work on Actor-Network Theory.

It is not difficult to imagine why Obrist, whose curatorial projects had often been driven by an interest in figures and practices blurring the boundaries of established disciplines, chose Latour to curate the opening event series in this expanded exhibition. Titled *The Theater of Proof*, this programme of lectures took the form of a public staging of scientific and pseudo-scientific laboratory tests, focussing on experiments themselves as mechanisms of knowledge production, rather than on illustrating their end results to a general audience. *Laboratorium* in general set itself the task of 'search[ing] the limits and possibilities of the places where knowledge and culture are made.'[253] Latour interpreted this brief in a literal sense, re-presenting the process of experimentation in order to draw the public's attention to what actually happens in those physical spaces defined by their use as laboratories: 'The etymology of the word 'laboratory' is a useful clue; when we deal with laboratories, we deal with labour, and with the local setting in which this labour takes place. We are not so much interested in the result as in the modus operandi.'[254] And in this sense, such an operation is as revelatory of scientific procedures as it is of artistic practices:

> The very idea of an avant-garde, autonomous, esoteric artist, free to raise his or her own technical puzzles, unfettered by social demands and the opposition of the philistines depends to some extent on the model of the scientist. Both dream of total autonomy and mastery of technique, the absolute right to be esoteric, referring to peer judgment rather than that of the public; they have this much in common, no matter that one is working in a lab and the other in a studio.[255]

As Latour had explained in *We Have Never Been Modern*, experimental practice changed the way scientific hypotheses are presented by creating an artificial, self-contained space in which it is possible to observe phenomena in the purest form allowed by technology available at that time, and to record them as quantifiable, comparable data. In this sense, the

---

[253] Hans-Ulrich Obrist and Barbara Vanderlinden (eds.), *Laboratorium*, 2001; reprinted in H.U. Obrist and Olafur Eliasson (eds.), *Experiment Marathon*, 2009, p. 187.

[254] B. Latour, 'The Theater of Proof: A Series of Demonstrations' (1999), in H.U. Obrist and B. Vanderlinden (eds.), *Laboratorium*, 2001; reprinted in H.U. Obrist and O. Eliasson (eds.), *Experiment Marathon*, 2009, p. 198.

[255] *Ibid*.

laboratory has the function of a necessary mediator, since phenomena as encountered in the contingencies of day-to-day life can only be objects of speculation, until they are satisfactorily reduced to a repeatable set of rules. Unlike previous theories produced in the private sphere of an individual's empirical experience, laboratory experiments are witnessed by a group of peers, guaranteeing a form of pluralistic consensus which is as close to an ideal of objectivity as a measurable phenomenon can ever get. Latour uses the extended example of Robert Boyle's experiments to understand nature through the mediation of a non-human tool (the air pump), contrasted with Thomas Hobbes' vision of a social contract in the *Body Politik* of the *Leviathan*, trying to dispense with any form of transcendence which may complicate the issues at stake in the government of a community of people – first of all God, but also the idea of an absolutely objective Nature that is beyond, or before, the Social Contract.[256]

Representation thus assumes this double meaning – the depiction and description of facts vs. the delegation of political power to an Actor speaking for a cacophonic multitude of voices; but this separation of meanings is for Latour nonsensical: as I have already pointed out, all entities, human and non-human, are Actants, each functioning as mediators in a network of relationships allowing their interaction and mutual influence.

The experiments recreated in *The Theatre of Proof* were intentionally varied and their ends ambiguous. They were performed by artists and philosophers as well as by scientists: Latour himself took part in the programme of events by reading Louis Pasteur's address to the Royal Academy, in which he famously disproved the traditionally accepted theory of spontaneous generation as defended by his opponent Félix-Archimède Pouchet. Some participants showed cultural bias as a problem (such as H. Otto Sibum restaging an experiment by James Joule, 'knowing full well that it can only fail' in light of the local environmental circumstances, or psychologist Vinciane Despret reproducing the Valins experiment on the emotional states of its participants); others embraced it as a source of productive possibilities (like the debate sparked when sociologist Harry M. Collins performed the Turing test on a live audience, or choreographer Xavier Le Roy's autobiographical take on the influence between his scientific background and his approach to body awareness, which took the form of a performance-lecture/dance piece).

After this experience, Latour was ready to take his cross-disciplinary methods out of the lab.

---

[256] B. Latour, *We Have Never Been Modern*, pp. 13-48.

Fig. 22. Installation view of *Laboratorium*'s main venue, Antwerp, 1999.

'What if we had misunderstood the second commandment?' *Iconoclash*, 2002[257]

The 2002 exhibition *Iconoclash. Beyond the Image Wars in Science, Religion, and Art* (ZKM) was Latour's first major co-curatorial effort: an exhibition reflection on representation in the many different senses of the word. Karlsruhe's Centre for Art and Media, of which Weibel is the director, is an early case of a truly transdisciplinary institution, whose mission is to explore the points of intersection between art and technology; it does this not simply by staging ambitious exhibitions including artefacts spanning different media and epistemological associations, but by promoting joint research and offering facilities and support to practitioners in a variety of fields. Its inherently experimental approach to cultural production makes it a particularly receptive setting for an exhibition like *Iconoclash*, setting itself the daunting task of reflecting critically on the ambiguous relationship humans have had over the ages with image-making and, on the other hand, their parallel distrust for representation: 'If

[257] B. Latour, 'What is Iconoclash? Or is There a World Beyond the Image Wars?', in B. Latour and P. Weibel (eds.), *Iconoclash*, 2001, p. 25.

images are so dangerous, why do we have so many of them? If they are innocent, why do they trigger so many and such enduring passions?'[258]

As Latour repeatedly remarked in his catalogue essay, this was not an exhibition about iconoclasm, nor an iconoclastic exercise in itself. It rather takes this seemingly destructive practice as a very tangible example of the way the critical method works, in order to reflect on the mechanisms of doubt and on how they sometimes end up being applied to cultural phenomena on the shaky bases of misunderstandings and misconstruals: '[…] this exhibit is also a revision of the critical spirit, a pause in the critique, a meditation on the urge for debunking, for the too quick attribution of the naive belief in others […]. It is not that critique is no longer needed, but rather that it has, of late, become too cheap'.[259] The neologism of 'iconoclash', coined specifically for this exhibition, is intended to stress specifically the aporias of critique: 'iconoclash […] is when one does not know, one hesitates, one is troubled by an action for which there is no way to know, without further enquiry, whether it is destructive or constructive'.[260]

The target of Latour's reappraisal was what he called 'the modern Constitution', the root of the false opposition of facts/nature vs. representation/culture.[261] 'The only way to defend science against the accusation of fabrication, to avoid the label of 'socially constructed', is apparently to insist that no human hand has ever touched the image it has produced […]. So, in the two cases of religion and science, when the hand is shown at work, it is always a hand with a hammer or with a torch: always a critical, a destructive hand'.[262] But at the same time, 'If westerners had really believed they had to choose between construction and reality (if they had been consistently modern), they would never have had religion, art, science, and politics. Mediations are necessary everywhere.'[263]

With *Iconoclash*, Latour and Weibel endeavoured to put critique under the microscope, to turn it into the subject of experimental enquiry. The ambivalent relationship humans have with images was but a starting point to reflect on representation as mediation; it offered an opportunity to present the public with a number of artefacts, in front of which questions could be posed about their identity as objects and their role as carriers of meaning. Original or

---

[258] *Ibid*., p. 20.

[259] *Ibid*., p. 25.

[260] *Ibid*., p. 16.

[261] B. Latour, *We Have Never Been Modern*, pp. 13-48.

[262] B. Latour, 'What is Iconoclash? Or is There a World Beyond the Image Wars?', in B. Latour and P. Weibel (eds.), *Iconoclash*, 2001, p. 18.

[263] *Ibid*., p. 25.

Fig. 23. *Iconoclash. Beyond the Image Wars in Science, Religion, and Art*, ZKM, Karlsruhe, 2002, installation view showing artworks by Marcel Duchamp, Kasimir Malevich and Elaine Sturtevant.

replica? Meaningless fragment or relic imbued with history? Proof of fact or springboard for fiction? Evidence for which side of an argument — victims or victors?

Object on display included Elain Sturtevant's replica of Duchamp's bicycle wheel (itself only known in photographic reproductions or from 'authenticated' replicas) and Malevich's *Black Square,* accompanied by the Eastern European religious icons that inspired aspects of his Suprematism. A crippled medieval *Pietà* was discussed in the catalogue next to an image of Galileo's middle finger, enshrined like a saint's bone in a reliquary in the Museo della Scienza in Florence. Bringing together an intentionally jarring variety of sources, examples, specimens, Latour and a team of seven collaborators aimed to generate a 'pattern of interferences', thematising the complexities of representations — and of representing representation in an exhibition format.

Fig. 24. *Making Things Public. Atmospheres of Democracy,* ZKM, Karlsruhe, 2005, installation view.

'What would an *object-oriented* democracy look like?': *Making Things Public*, 2005[264]

Latour's sophomore exhibition *Making Things Public. Atmospheres of Democracy*, also co-curated with Peter Weibel and taking place at ZKM between the 20th March and the 3rd October 2005, was even more ambitious, both in scope and in its aims. Here Latour tackled a particular meaning of representation according to the modern paradigm (or Constitution): *political* representation. With an emphasis on the present interpretation of parliamentary democracy, Latour devised *Making Things Public* as nothing less than a vast, walk-through reassessment of the function of politics as a whole, in order to redefine its meaning as a gathering around shared 'matters of concern'.[265] Including more than 1000 exhibits spread over a surface of 3000 square meters, the exhibition was conceived of as a 'gathering of gatherings', a way of spatially visualising the material and relational networks in which we are entangled, human and non-human actants bound together in a myriad intra-actions: a literal 'Parliament of Things'.[266]

---

264 B. Latour, 'From *Realpolitik* to *Dingpolitik*', in B. Latour and P. Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, 2005, p. 4.

265 *Ibid*.

266 B. Latour, *We Have Never Been Modern*, p. 144; see my pp. 32-3 and n. 45.

One of Latour's premises for this to happen is a switch in the way 'things' as well as the so-called 'matters-of-fact' of *Realpolitik* are defined in the political arena: not as a set of external circumstances that society has to negotiate in order to enable human concerns, but as active constituents of an object-oriented democratic process seen as a relational network in which every*thing* is equally at stake as a 'matter-of-concern'. In order to elaborate on this point, Latour takes advantage of the rich etymology of the word 'thing' and its counterparts in other European languages, remarking on their connection to places of gathering for political discussions in various forms of 'representative democracy' from different historical moments:

> Norwegian congressmen assemble in the *Storting*; Icelandic deputies called the equivalent of 'thingmen' gather in the *Althing*; Isle of Man seniors used to gather around the *Ting*; the German landscape is dotted with *Thingstätten* and you can see in many places the circles of stones where the *Thing* used to stand. Thus, long before designating an object thrown out of the political sphere and standing there objectively and independently, the *Ding* or Thing has for many centuries meant the issue that brings people together *because* it divides them. The same etymology lies dormant in the Latin *res*, the Greek *aitia* and the French or Italian *cause*. Even the Russian *soviet* still dreams of bridges and churches.[267]

In his introductory catalogue essay, 'From *Realpolitik* to *Dingpolitik*, or How to Make Things Public', Latour only discusses one of the works in the exhibition in some detail: a multimedia site-specific installation by artists Michel Jaffrennou and Thierry Coduys titled *The Phantom Public* (2005).[268] This work acts within the exhibition as a stand-in for a theme that Latour deems particularly important, especially in order to grasp the curatorial narrative he tries to convey through *Making Things Public;* its obvious inspiration is Walter Lippmann's essay *Phantom Public* (1925). The work consists of a series of sound, video, kinetic and light effects scattered across the exhibition space with a potentially disruptive effect on the visitors' experience, triggered by members of the public as their movements are captured by responsive cells, processed through a software and fed back into the space. This feedback system, however, is not meant to function as a user-friendly, fun interactive artwork: it is at first encountered as a series of random accidents, like a screen or a spotlight being switched on or off, and only after a while do the visitors become aware that these phenomena are somehow being caused by environmental changes. Even so, they will have no control over their outcome, as the

---

[267] B. Latour, 'From *Realpolitik* to *Dingpolitik*', in *Making Things Public*, p. 23.

[268] See M. Jaffrenou and T. Coduys, 'Mission Impossible. Giving Flesh to the Phantom Public', in *Making Things Public*, pp. 218-223.

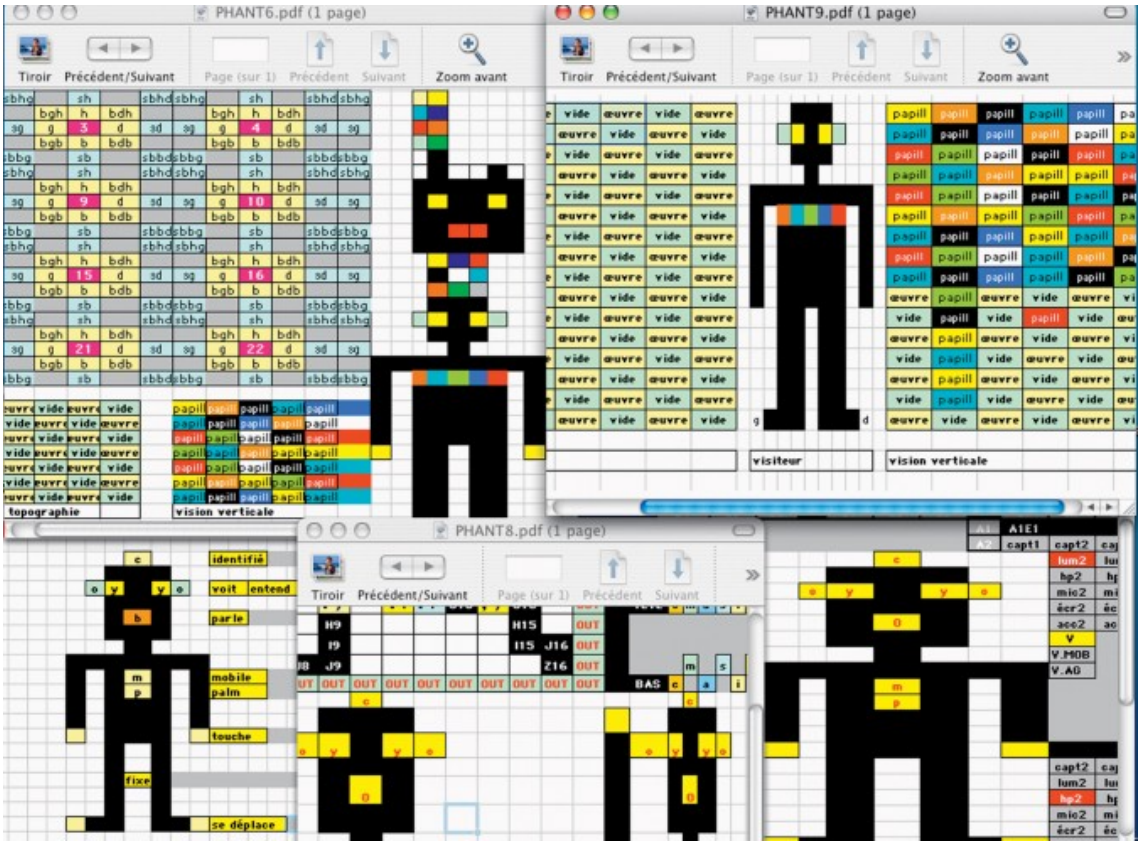

Fig. 25. Michel Jaffrennou and Thierry Coduys, *The Phantom Public*, 2005.

algorithm behind *The Phantom Public* is designed to use a variety of sources at once, some completely beyond the visitors' grasp or control: variations in temperature, number and position of people in the building, online traffic on the exhibition's website, etc.

> The idea was to give visitors a vague and uneasy feeling that 'something happens' for which they were at least sometimes responsible […], just as politics passes through people as a rather mysterious flow. In this way, not only did visitors shape the exhibition that they visited […] — they were also the screen onto which the workings of the Phantom were projected. [… H]ere the public is not represented but is itself part of the system that it observes. […] The visitors act as representatives of the public sphere and they construct the public sphere.[269]

In a possible call-back to *Les Immatériaux*, the open-plan space of ZKM's main exhibition floor was articulated through modular walls, made of a semi-transparent material that revealed the usually well-hidden metal frame supporting them. Just like the mesh curtains

[269] P. Weibel and B. Latour, 'Experimenting with Representation', in S. Macdonald and P. Basu (eds.), *Exhibition Experiments*, pp. 103-4.

of the Pompidou show, the result functioned as a metaphor on transparency vs. opacity in infrastructures, whilst at the same time effectively allowing for flexibility and plurality of function (they could be lit from within, used as projection screens, support exhibits, bear wall-based signage, etc.). As variations on the theme of the 'temporary wall', this architectural solution was also a marker of the exhibition's emphasis on exhibitionary self-reflexivity. Enhancing the 'busy' look of this sprawling exhibition, rather than trying to minimise it, might have also functioned as a statement about spatial politics and the complexities of negotiating coexistence and visibility in a shared environment — a shared sensorium, to use Jacques Ranciere's especially fitting term.[270]

The other constituent element of the exhibition that Latour stresses in his essay is the catalogue itself, in a way similar to his emphasis on the role of the contributors' essays in *Iconoclash*. For Latour the written word is as much an 'actant' in the exhibition-as-network as the objects shown in the gallery or the display architecture. This trait takes an especially weighty presence with the printed version of *Making Things Public:* an assemblage of matters-of-concern in itself, divided into 15 subsections for a total of 1072 pages. The vast majority of the essays presented content that was not directly referenced in the exhibition, providing additional terrain and expanding the exhibition's curatorial scope even further. Even when directly addressed in the texts, the physical exhibits were addressed as things-among-things and mostly interspersed with the extremely diverse array of artefacts and cultural phenomena introduced by the essays; for example, Jaffrenou and Coduys' text on *The Phantom Public* was included in the section titled 'The Problem of Composition', placed after essays on visual depictions and optical tricks symbolically turning the many into one (Dario Gamboni and Simon Schaffer), and followed by essays on experimental music composition (Denis Laborde) as well as an artist's text on the televised shift from masses to crowds in Eastern European popular upheavals (Ana Miljacki, expanding on her multichannel video installation *Classes, Masses, Crowds – Representing the Collective Body*, 2005). Elsewhere, diverging positions were brought together in a polemical fashion much like interventions from opposed benches in a parliamentary hearing, further complicating the matters discussed in the catalogue.
Back in the exhibition space, visitors were presented at the very end of their visit with a display of Otto Neurath's *Isotypes*, a modernist visual language of strikingly simple, highly legible graphic signs used to represent statistical data and information panels in late-1920s Vienna, hugely influential on a century of infographics. Latour strategically placed the *Isotypes* at the end of the exhibition as a way to verify its efficacy as a curatorial 'experiment':

---

[270] See J. Rancière, *Aesthetics and Its Discontents*, esp. pp. 19-44.

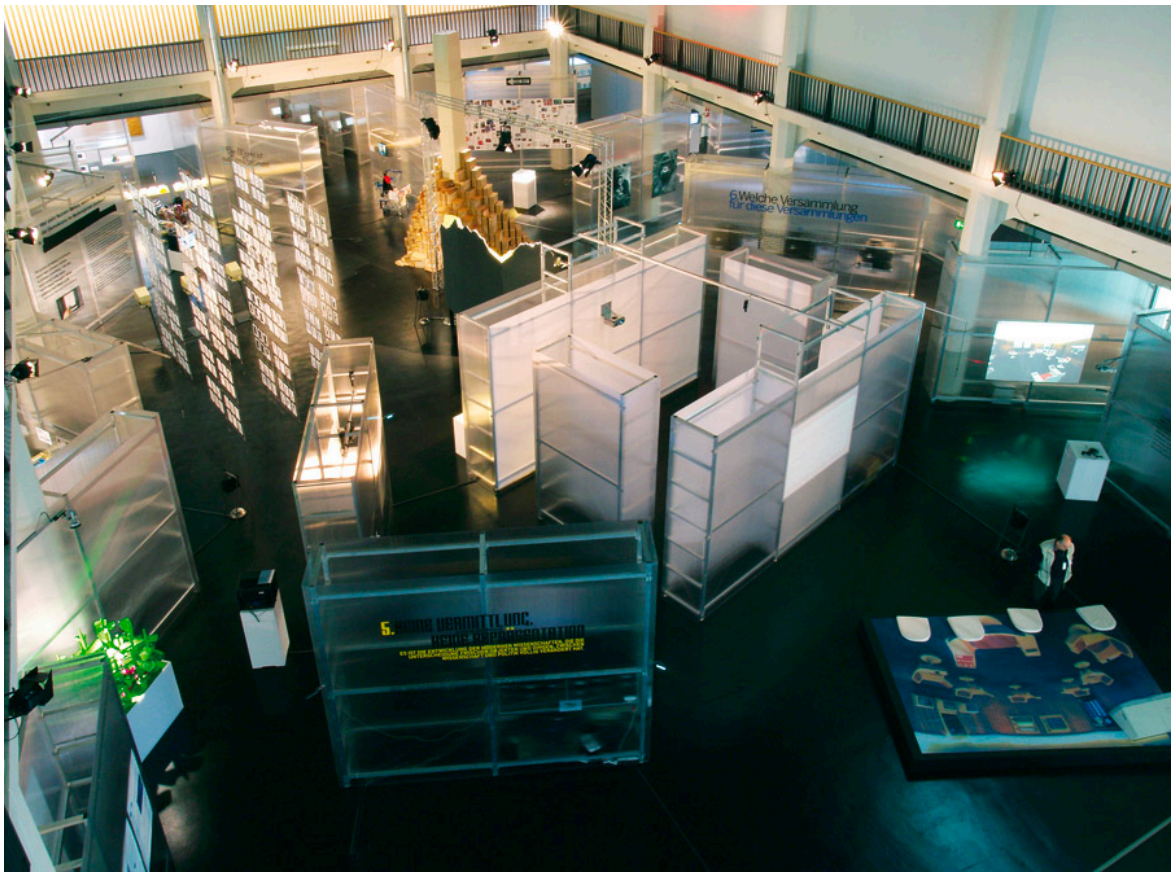

Fig. 26. *Making Things Public. Atmospheres of Democracy,* ZKM, Karlsruhe, 2005, installation view.

> [H]ere is a good case of how you can stage a falsifiable exhibition experiment. If the visitor who quits *Making Things Public* concludes that Neurath's modernist solution to the quandary of our age is more efficient, rational, pleasing, and politically correct than what is presented in the show — in other words, that objectivity is much more forward-looking than 'thingness' — then our show has failed. If, on the other hand, the visitor looks at the final *Isotype* section with a bit of nostalgia for the modernist style but grasps that the quandaries of our age can no longer be tackled by such a philosophy, politics, and design, then our experiment has succeeded. If so, visitors have hopefully been stimulated to inquire into how to assemble, through whatever means, the parliament of parliaments, the assembly of assemblies, that we have anticipated in this exhibition experiment.[271]

Despite this (probably tongue-in-cheek) clear-cut testing method, it is inherently difficult to measure the success of curatorial efforts of the size and ambition demonstrated by

[271] P. Weibel and B. Latour, 'Experimenting with Representation, in S. Macdonald and P. Basu (eds.), *Exhibition Experiments*, pp. 103-4., pp. 106-7.

Les Immatériaux, Iconoclash and *Making Things Public* in conveying complexity through aisthesic/affective analogy. This is a question that I believe applies to most thematic transdisciplinary exhibitions, regardless of the display design: methodological juxtapositions can generate diffractive readings for some, overwhelm and confuse with heterogeneity for others. I consider Latour in particular to be an accomplished curator of complex assemblages of things (to use his own vocabulary). *Making Things Public* in particular presented the viewer with a sensory overload that required an attentive, curious, patient public, already capable of reading the exhibition as a medium; on the other hand, the easily distracted might still have enjoyed the exhibition as sheer spectacle — which perhaps in itself is a reflection on the relationship between the silent majority and the political theatre generated in the friction between technocrats and populists. Whatever the overall public response, Latour knows full well that no experiment goes to waste: negative results are just as useful as the positive ones, despite the publication bias towards the latter. Perhaps the easily distracted still came away from the exhibition with a renewed sense of awe for the complexity of cosmopolitical discourse — complex enough no one grasp all its facets in a single sitting.

Perhaps the excesses of *Making Things Public* taught Latour a lesson too, and his later curatorial projects for ZKM — *Reset Modernity!* in 2016 and *Critical Zones: Observatory for Earthly Politics* in 2020 — reverted to more traditional exhibition designs, though their scope and ambition (and the heft of their catalogues) remained just as vast.[272] Both projects would deserve to be analysed in just as much (if not more) detail in the context of this thesis, but I shall defer this task to a future expanded version of this text.

[272] B. Latour with Christophe Leclerq, *Reset Modernity!* (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2016); exhibition curated by Bruno Latour, Martin Guinard-Terrin, Christophe Leclerq and Donato Ricci (ZKM, 16 April - 21 August 2016); B. Latour and P. Weibel, *Critical Zones. The Science and Politics of Landing on Earth* (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2020); exhibition curated by Bruno Latour and Peter Weibel with Martin Guinard and Bettina Korintenberg (ZKM, 23 May 2020 - 28 February 2021).

Chapter 4.
The Rise of Speculative Realism and Object-Oriented Ontology

So far this thesis has laid down a network of references and converging interests which can be understood as a backdrop against which the emerging fields of New Realisms (primarily Speculative Realism) on the one hand and New Materialisms on the other appeared on the horizon of the contemporary art world in the second half of the 2000s. This chapter shifts its focus to the pivotal moment that generated (and, according to some, immediately exhausted) the category of Speculative Realism (SR), and addresses a number of curatorial projects linked to SR as an explicitly cited source or motivating force, projects which in many ways marked the beginning of the syncretic reception of new realist and new materialist themes later cemented by dOCUMENTA (13).

I have discussed the premises and core ideas behind SR in Chapter 1, where I also outlined the diverging opinions regarding the uses and abuses of this much debated label. Here I refer to SR as the discourse surrounding the attempt to find a common ground and an umbrella term for a set of partially overlapping philosophical ideas, which happened to emerge around the same time at the start of the 21st century. As I have previously explained, however, this unifying attempt was rather short-lived: the definition of SR was eventually commandeered by some (Graham Harman and his acolytes) and thoroughly dissected and rejected by others which had become associated with it, gradually falling out of favour as a consequence. Nevertheless, for a number of years — from 2007 until around 2014 — the category of SR was used in earnest to refer to a set of loosely connected concepts that resonated with many artists and curators: it is this particular usage that interests me and that I will analyse here.[273] And although the mainstream Art world did end up appropriating a distorted version of what SR was originally meant to define, it is worth highlighting how the earliest phase of this 'SR moment' was in fact in no small part generated with a curatorial intent, especially when reassessed in light of my redefinition of the curatorial function as addressed in Chapter 7 of this text.

[273] In my view, the bookend moments defining this seven-year period are the publication of *Collapse II* in 2007 and the appearance of Ray Brassier's text 'Speculative Autopsy' in *Object Oriented Philosophy. The Noumenon's New Clothes* by Peter Wolfendale (Falmouth: Urbanomic, 2014).

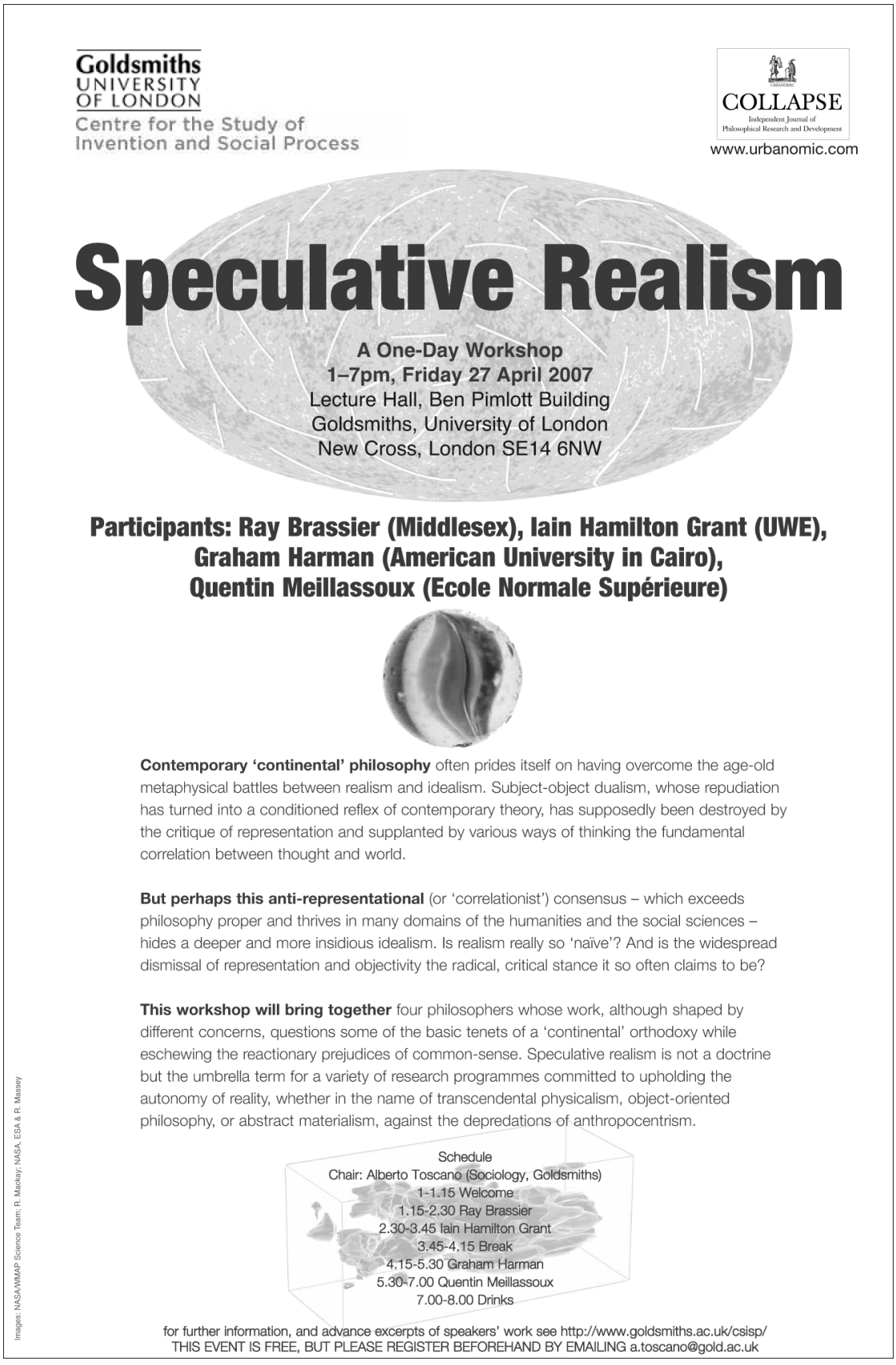

Fig. 27. Publicity for the conference *Speculative Realism: A One Day Workshop*, Goldsmiths, University of London, 27 April 2007.

Urbanomic and Robin Mackay's curatorial initiatives (*The Real Thing*, Tate Britain, 2010; *The Medium of Contingency*, Thomas Dane, 2011)

If one were to search for a point of origin for SR and the shockwaves it generated, the activities of Urbanomic, a small publishing company run by philosopher Robin Mackay and based in the Cornish town of Falmouth, can be singled out as an obvious catalyst. In the span of a few weeks Urbanomic saw the publication of the second issue of the journal *Collapse*, subtitled *Speculative Realism*, in March 2007, which marked the first published instance of the binomial label, and co-sponsored the conference *Speculative Realism: A One Day Workshop* held at Goldsmiths, University of London, on the 27th April 2007, featuring some of the contributors to *Collapse II*. These two events brought together philosophers Ray Brassier, Iain Hamilton Grant, Graham Harman and Quentin Meillassoux for the first time, with the specific intent of allowing these knowingly diverse thinkers to meet and confront their positions on the subjects of realism and correlationism.[274] The latter was a term taken from Meillassoux's recent book *After Finitude* (at that time yet to be published in English) as a useful shorthand to define a supposed common enemy for all four of the 'canonical' Speculative Realists, as they would soon come to be known.[275] Ray Brassier in particular was initially proactive in bringing attention to the potential points of contact between the four authors and even coined the title 'Speculative Realism' for the 2007 conference, which he effectively co-organised with Alberto Toscano (Goldsmiths) and Robin Mackay (Urbanomic).[276] As such, Brassier can be considered one of the prime motors in the birth of SR, even though he would later not only reject the label, but its validity as a meaningful philosophical descriptor.[277]

The experimental set-up for the Goldsmiths conference — i.e. bringing certain agents together based on the premise of their presumed compatibility and allowing them to react with one another in order to observe the outcome — resonated with the transdisciplinary approach driving the journal *Collapse*, as expressed in its mission 'to generate and to bring together philosophical writing from varying perspectives with work drawn from other fields, in order

---

[274] See my Chapter 1, pp. 44-547.

[275] Q. Meillassoux, *After Finitude*, p. 5; see my p. 45.

[276] Ray Brassier, *Nihil Unbound. Enlightenment and Extinction* (Basingstoke: Palgrave Macmillan, 2007), pp. xii, 31. For Brassier's involvement in the early steps towards the Goldsmiths workshop and a general account of the birth of SR, see Graham Harman, *Quentin Meillassoux: Philosophy in the Making* (Edinburgh: Edinburgh University Press, 2011), pp.77-9, and Brassier's own 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), pp. 407-421. Also see Graham Harman in 'Speculative Realism', *Collapse III*, p. 367.

[277] R. Brassier, 'Postscript: Speculative Autopsy'.

to challenge institutional and disciplinary orthodoxies and to set in motion new syntheses.'[278] By including texts on philosophy, literature, Artistic practices, science and even gastronomy (just to name a few of the subjects touched upon in the eight published issues), Mackay aimed at generating original and unexpected juxtapositions between otherwise disparate notions — candidly described by the founding editor as 'odd company' — precisely because of the potential he saw in their friction.[279] In the brief introduction to the proceedings from the Goldsmiths conference published in *Collapse III*, Mackay clearly spells out this methodology (though in this particular case remaining mostly within the boundaries of philosophy) as applied to the choice of contributors and speakers brought together under the SR moniker:

> Rather than announcing the advent of a new theoretical 'doctrine' or 'school', the event conjoined four ambitious philosophical projects – all of which boldly problematise the subjectivistic and anthropocentric foundations of much of 'continental philosophy' while differing significantly in their respective strategies for superseding them. It is precisely this uniqueness of each participant that allowed a fruitful discussion to emerge.[280]

Robin Mackay's varied practice, weaving philosophy into every facet of his publishing activities and art-adjacent events, is in my view an eminently *curatorial* one, where knowledge production is addressed as a vast and eclectic field with no clear disciplinary boundaries. Mackay actively seeks and makes virtue of the spaces between practices and academic fields as opportunities for productive dialogues, though always informed by a rigorous understanding of the underlying philosophical issues. Urbanomic's approaches and methodologies may be eclectic, but the questions and themes addressed always retain the level of complexity, argumentative precision and intellectual engagement demanded by philosophy *tout court*. Mackay's projects demonstrate how applying the category of the curatorial to philosophical modes of knowledge production does not have to automatically result in dilution and compromise: rather, an explicitly curatorial approach to philosophy is a way of understanding it as something that happens every time ideas are given a space, virtual or physical, to come into contact with one another with *diffractive* results.

Despite Urbanomic's disciplinarily inclusive spirit, the 2007 'Speculative Realism' Goldsmiths workshop was a rather specialised affair, mainly aimed at an audience of people

---

[278] Robin Mackay, 'Editorial Introduction', *Collapse II*, p.3.

[279] *Ibid*.

[280] Robin Mackay (?), 'Speculative Realism', *Collapse III*, p.307.

acquainted with philosophy at an academic level. In the foreground were epistemology and a wide range of philosophies of nature and cognition, as the subject of the event was precisely located in the space between these two categories: the theories of 'access' and, more specifically, possible ways to counter the (perceived) correlationist dogma implied in most continental philosophy. Given the focussed nature of the conference/workshop as a space for the invited quartet to compare and contrast notes, the presentations concentrated on the recent writings of each of the four speakers, then still rather obscure (for instance, Meillassoux's *After Finitude* was then yet to be published in English; Brassier's *Nihil Unbound* was still unreleased). None of the talks remotely touched upon the subjects of Art and (post-Kantian) aesthetics; indeed, these words are nowhere to be found in the conference proceedings — not even in reference to Harman's notion of 'vicarious causation' and its appeal to aesthetics as prime philosophy.[281] In other words, nothing in the founding moments of SR (*Collapse II*, the Goldsmiths conference, *Collapse III*) lent itself in particularly obvious ways to a cooption by discourses focusing on art. If anything, the 'strong version' of anti-correlationism discussed at this stage made it particularly difficult to relate to such products of human intellect without immediately becoming trapped once again within the realms of anthropocentric thought processes — certainly not without compromise, taking the form of mediation via *aisthesis* at the very least (not to mention the *noesis* of artistic practices and philosophy itself). Just how did the mainstream Art world then become so infatuated with Speculative Realism in such a short amount of time?[282]

It is possible to identify two main reasons for this jump, beginning with Mackay's own interest in genre-busting artistic practices, which led to the inclusion of visual arts as an integral component of *Collapse*'s remit from the start. In fact Urbanomic's journal *Collapse*, which began publication in 2006, was a revival of the photocopied magazine ****Collapse*, published by Mackay in 1995-6 when he was a student at the University of Warwick, affiliated with the experimental cultural theorist collective Cybernetic Culture Research Unit (CCRU) alongside the likes of Iain Hamilton Grant and Ray Brassier.[283] In a continuous commitment to

---

[281] Harman in 'Speculative Realism', *Collapse III*, p.378. Cfr. Graham Harman, 'On Vicarious Causation', *Collapse II*, pp.171-205. There is one reference at the very end of the transcript to Kant's 'Transcendental Aesthetic' (from the *Critique of Pure Reason*), made by Meillassoux in a reply to Brassier about the thing-in-itself in its distinction from the phenomenic (p.448).

[282] Again, the inclusion of the four 'canonical' SR thinkers in Art Review's 'Power 100' list in 2013 and 2014 is an egregious symptom of this 'hype'. See my p. 57, n. 140.

[283] 'Lee Gamble and Robin Mackay: Sound and Concept', Urbanomic website (<https://www.urbanomic.com/document/sound-and-concept/>); originally published as 'Lee Gamble Gets Deep with Philosopher Robin Mackay' (<http://www.electronicbeats.net/lee-gamble-gets-deep-with-philosopher-robin-mackay/>.

transdisciplinary eclecticism, Mackay has continued to be active over the years at the intersection between philosophy, the visual arts and sonic experimentation (his own sound works and runs as a DJ for art-conscious radio stations Resonance 104.4FM and NTS being cases in point). One of the contributions to *Collapse I*, the issue dedicated to 'Numerical Materialism', was a series of images by artist Keith Tilford, while *Collapse II* contained prominent visual elements in the forms of the stills from Clémentine Duzer's and Laura Gozlan's film *Nevertheless Empire*, as well as the photographs and diagrams in Kristen Alvanson's essay.[284] As an eccentric philosophy journal, *Collapse* was implicitly also addressed to a wider art-savvy readership, with the intent of spreading an approach to philosophy which could directly engage and intersect with other practices and fields of knowledge production rather than simply run parallel to them. At the same time as the art world was beginning to take notice of *Collapse* and SR, Urbanomic was involved in the organisation of several events with a visual arts slant: for example, the launch of *Collapse IV* ('Concept-Horror') was accompanied by a group show and live performances at Urbanomic's headquarters in Falmouth and at Divus Studio in London.[285]

The other key bridge between the heyday of SR and the art mainstream is undoubtedly Mark Fisher's contributions to *Frieze*, featuring some of the earliest mentions of SR on a platform dealing primarily with the visual arts, beginning with a number of online articles on *frieze.com*. The first instances were in reference to Graham Harman in February 2008, then more explicitly in 'Speculative Realism', a report on a conference held at the University of West England in Bristol ('Speculative Realism and Speculative Materialism') published on 12 May 2009, and finally in print in a review of Harman's book *Prince of Networks: Bruno Latour and Metaphysics* in the September 2009 issue of *Frieze*.[286] Mark Fisher (aka K-Punk) was also an associate of the CCRU in the 1990s, alongside Mackay, and closely followed the emergence of the SR phenomenon, although taking part more as a commentator and sympathiser than as a

---

[284] Clémentine Duzer and Laura Gozlan, 'Nevertheless Empire', *Collapse* Volume II, March 2007, pp. 235–256; Kristen Alvanson, 'Elysian Space in the Middle-East', *Collapse* Volume II, pp. 257–272.

[285] 'Concept Horror', *Urbanomic.com*, <https://www.urbanomic.com/event/concept-horror-launch/> [accessed 14 October 2021]. Also of note was Urbanomic participation in the Falmouth Convention, 'an international meeting of artists, curators and writers to explore the significance of time and place in relation to contemporary art and exhibition making', for which it organised a guided field trip ('a geophilosophical odyssey') titled *Hydroplutonic Kernow* (21 May 2010), accompanied by a special map. See R. Mackay (ed.), *Hydroplutonic Kernow* (Falmouth: Urbanomic, 2020).

[286] Mark Fisher, 'Clearing the Air', *frieze.com*, 20 Feb. 2008 [accessed 25 Nov. 2018], <https://frieze.com/article/clearing-air>; M. Fisher, 'Speculative Realism', *frieze.com*, 12 May 2009 [accessed 25 Nov. 2018], <https://frieze.com/article/speculative-realism>; M. Fisher, 'Books: *Without Criteria: Kant, Whitehead, Deleuze and Aesthetics*; *Prince of Networks: Bruno Latour and Metaphysics*', In *Frieze*, n.125, September 2009, p. 35 (also online: <https://frieze.com/article/without-criteria-prince-networks> [accessed 25 Nov. 2018]).

driving figure. I will discuss the critical fortune of SR in the art press in more detail in Chapter 5, but it is important to note here how the first wave of art-worldly interest in SR also begun in England, with the London art milieu quickly taking notice.

It is at this time that Urbanomic was invited by artist and curator Adrian Shaw to organise an event at Tate Britain for the 'Late at Tate' series, titled *The Real Thing* (3 September 2010) and focusing specifically on 'Speculative Realism and its impact on contemporary art practice'.[287] Shaw, who at that time was given remarkable freedom to experiment with the 'Late at Tate' public programme format, had discovered *Collapse* and SR through his interest in Deleuzian philosophy; he soon contacted Urbanomic with a proposal to programme an event together. His brief to Mackay for the Urbanomic-led Late at Tate was simply to 'drop collaspse [*sic*] into tate britain [*sic*] and let it infuse'.[288] The result was an evening of specially commissioned interventions, sound pieces, videos and talks, which ramped up SR's public exposure and constituted for many a first encounter with its theories and potential for

Fig. 28. Pamela Rosenkranz, exhibition view of the works installed as part of *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

[287] 'Late at Tate: The Real Thing', *Urbanomic.com*, <https://www.urbanomic.com/event/late-at-tate-the-real-thing/ > [accessed 25 Nov. 2018].

[288] Private e-mail correspondence shared with the author. This quote was included in a message sent by Shaw to Robin Mackay on 9 April 2010.

curatorial explorations involving artistic practices.

In a panel discussion he chaired as part of the event, Mackay mentioned Mark Fisher's article on SR in *Frieze* (presumably the 'Speculative Realism' article published on *frieze.com* on the 12th May 2009) as one of the motivating factors shaping the event, particularly his questions regarding the wider 'cultural ramifications' and 'political stakes' of what he saw as a growing and promising movement. Fisher's *Frieze* article explicitly raised the question of SR's relationships to political thought and praxis in relation to a paper given by Alberto Toscano in Bristol, where Meillassoux's speculative materialism was analysed in contrast to Marxist definitions of historical materialism, concerned with 'a social, material and extra-logical reality' that SR rejects.[289] Indeed, as the description included in the event's invite implied — 'Speculative Realism refuses to interrogate reality through human (linguistic, cultural or political) mediations of it' —, there is a paradoxical aspect to the very concept of 'speculative realist politics' via the inevitable centrality of issues of subjectivity and of human interests in the political sphere.[290]

The same can be said of art and aesthetics (in the traditional, post-Kantian sense), customarily considered to be eminently species-specific activities: from an SR standpoint, the moment the focus shifts to modes of human creativity, representation and communication of meaning, correlationism immediately and irreversibly re-enters the picture. On the other hand, as long as the concept of anti-correlationism can be thought and written about, as soon as it enters the realm of *episteme*, it can also be addressed as a subject or theme and as such become raw material for art — and for curatorial practices at large. Its value as a philosophical concept is not in denying the existence or relevance of a perspective 'for us' outright, but in shifting its placement in the paradigm through which we frame that perspective — and, as I will argue in Chapters 6 and 7, visual culture and artistic practices can be especially effective as reframing devices, aiding the purposes of anti-anthropocentric philosophies as complementary *analoga*. For Mackay, *The Real Thing* was an attempt to address some of these issues in the form of a set of applied curatorial exercises.

Mackay's process of curatorial selection and framing for *The Real Thing* gathered around some of the central notions addressed by the SR 'network' in the previous three-and-a-half years: a rejection of anthropocentrism and critique of logocentric/noocentric forms of

---

289 See Alberto Toscano, 'Against Speculation, or, A Critique of the Critique of Critique: A Remark on Quentin Meillassoux's After Finitude (After Colletti)', in Levi R. Bryant, Nick Srnicek and Graham Harman (eds.), *The Speculative Turn: Continental Materialism and Realism* (Melbourne: re.press, 2011), p.91.

290 'Late at Tate: The Real Thing' Facebook event page, <https://www.facebook.com/events/969131083098361/> [accessed 26 Nov. 2018].

knowledge production (relating to Meillassoux's anti-correlationism and notion of absolute contingency); a redefining of the categories of 'nature' and its false opposite of 'culture', focusing on deep-time and on the universe's radical apathy towards humanity; an appeal to scientific vs. naive realism; a reappraisal of the project of the Enlightenment and its aberrations, considering their impact on the environment and society on a planetary scale (the Anthropocene / capitalocene debate).

Some of the artists selected (recurring figures in Urbanomic's projects and publications) engaged directly with 'canonical' SR texts and figures: Florian Hecker's sound piece *Speculative Solution* (2010), filling the Duveen Galleries twice in the course of the evening, was explicitly inspired by Meillassoux's *After Finitude*; the works of Pamela Rosenkranz, inserted into a gallery of late-Victorian 'New Sculpture', were made in reaction to Reza Negarestani's *Cyclonopedia*; Amanda Beech's video *Sanity Assassin* (2009) was said to be informed by the nihilist outlook of Ray Brassier's *Nihil Unbound*. Other works could be read thematically as echoes of related preoccupations, like John Gerrard's live-generated 3D animation *Lufkin (near Hugo, Colorado)* (2009) – presented in a room of 19th century paintings of dramatic landscapes titled 'Art and the Sublime' –, the audio track *Extralinguistic Sequencing* by William Bennett and Mimsy DeBlois or Mikko Canini's video of a deserted and partially flooded City of London (*The Black Sun Rise*, 2010).

The panel discussion, featuring Amanda Beech, Mikko Canini, Mark Fisher, Iain Hamilton Grant and chaired by Robin Mackay, addressed some of the key themes of SR and their possible points of intersection with recent Artistic practices. During this talk, Mackay expressed his belief that the links between art and SR ran deeper than a passing shallow interest: 'the concerns of SR are echoed, or paralleled, in art discourse, and in the struggle against certain orthodoxies whose roots are similar to or identical to those of the philosophical orthodoxies from which speculative realists are trying to find an escape route.'[291] This common enemy was naive realism, with surface-level naturalistic figuration becoming a sort of parallel for the Sellarsian concept of 'manifest image' lamented in some form by all four canonical SR thinkers.[292] According to Mackay, 'we can use SR to think back into art history in various ways, and to think about what is philosophically at stake when realism becomes divorced from representation, indexicality, or authenticity; and even antagonistic towards them.'[293] This is a

---

[291] Amanda Beech, Mikko Canini, Mark Fisher, Iain Hamilton Grant, Robin Mackay, 'The Real Thing: Panel Discussion' (Urbanomic/Document UFD004), *Urbanomic.com*, <https://www.urbanomic.com/document/the-real-thing-panel-discussion/> [accessed 25 Nov. 2018].

[292] See my p. 52 and n. 111.

[293] A. Beech, M. Canini, M. Fisher, I. Hamilton Grant, R. Mackay, 'The Real Thing: Panel Discussion'.

key formulation, one that implies that it *is possible to focus on a wider definition of realism in art without letting the inevitably correlationist premise of human aesthesic-cognitive-epistemological faculties invalidate the speculative extra-human angle*: correlationist viewpoints *can* thus be understood in relation to a symbolic sliding scale of commitment to Anthropocentrism. In fact, as human beings we don't really have a choice on the matter: *noesis* is always necessarily involved whenever we communicate through art. As a cognitive apparatus among many, art can however be read as an especially apt vehicle to sidestep the 'common sense' of manifest images and adopt speculative perspectives, even though it remains fundamentally trapped in the (Cartesian) plane of human representations.

What remains problematic is to try and think through art by sticking to the four canonical SR texts, when their usefulness in this sense is quite simply very limited.[294] Urbanomic's project at this stage was to try and expand outwards from the foundational moment of the Goldsmiths conference, using art as one possible vector – an operation that the increasingly adopted equation of SR with strong anticorrelationism made especially hard. It was as if *After Finitude* constituted a sort of philosophical event horizon: once exposed to the black hole of absolute contingency, attaching any meaning or interpretive filter whatsoever to the mathematical code of the cosmos, a practice seen as a regression towards the human, meant contradicting the fundamental rule of Meillassoux's foundational text, i.e. rejecting or at least taking a critical distance from all forms of human access. Therefore, from this strict anticorrelationist perspective, the very idea of an 'SR Art' is a paradox, pure and simple.

However, the moment pure anticorrelationism is understood as a practically unattainable target, a transcendental *telos* which may well not be possible for humans to reach other than through logical/philosophical speculation, human epistemological categories and their interaction (including art, politics and the areas of praxis they occasionally share) come back into the fold as possible intermediaries on the way to understanding pure rationality through our cognitive faculties, via the mediation of analyses looking at what is sensible and knowable through lenses which can in fact be both speculative *and* realist. Especially important for Mackay is the idea that the Arts can be understood as a bridge between the two, when the knowable is so alien to human experience that it becomes supposedly impossible to grasp: 'artists and writers allow us […] to make experiments in living this impossible reality. That's why science fiction, weird fiction, are so important to SR.'[295] Mikko Canini's video of a post-apocalyptic London can be read as a simple and direct example of speculative fiction: a

---

[294] See my pp. 45-7.

[295] A. Beech, M. Canini, M. Fisher, I. Hamilton Grant, R. Mackay, 'The Real Thing: Panel Discussion'.

Fig. 29. *Speculative Solution cards*, published by Urbanomic on the occasion of the premiere of Florian Hecker's *Speculative Solution* at *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

contemporary sublime landscape visualising the consequences of an ecological catastrophe almost everyone knows to be real and already in progress (water levels rising), taking over the very heart of the ultra-capitalist system which has enabled and profited from the root causes of the crisis.

All the works exhibited during the event can thus be read as examples of such 'experiments in living [an] impossible reality', knowingly presented as partial, flawed attempts at grasping a real or absolute beyond human comprehension, yet still valuable as a kind of access different from and complementary to parallel efforts in philosophy. This dynamic is explicitly addressed in Florian Hecker's sound work *Speculative Solution*, commissioned by Urbanomic specifically as a response to Meillassoux's philosophy, particularly the concept of hyperchaos: the absolute lack of necessary rules, or the possibility for all rules — including the laws of physics — to suddenly be otherwise. Meillassoux himself considers his philosophical writings about absolute contingency as inherently inadequate examples (*analoga*) of this rational understanding of reality, because they are other than the pure, mathematically computable science they uphold. This essentially puts philosophical discourse (expressed in prose, not formulae) in the same category as art: 'when I imagine this world without science, I encounter exactly the sort of problem I think an artist would have: to figurate it, to find an *analogon* – not perfect, because you cannot show it, but you have to show its direction.'[296]

Similarly, trying to express the idea of hyperchaos through a sound composition (or any other work of art) is a fundamentally flawed exercise, for several reasons. First of all,

[296] Meillassoux in Florian Hecker, Robin Mackay and Quentin Meillassoux, 'Speculative Solution: Quentin Meillassoux and Florian Hecker Talk Hyperchaos', *Urbanomic.com* (Urbanomic/Document UFD001) [accessed 25 Nov. 2018], <https://www.urbanomic.com/document/speculative-solution-meillassoux-hecker/>, p. 3 of the PDF version.

composition implies rules, even at its most aleatory: 'random or stochastic methods […] still deal with things operating under laws of probability' and as such they are not suitable for demonstrating the absolute contingency of laws themselves (the rational principle of facticity).[297] Indeed, hyperchaos itself should not be thought of as equivalent to the idea of randomness, as it can also take the form of seemingly regular patterns: 'under the conditions of absolute contingency, […] the apparent constancy and stability of experience would be no 'less likely' than a complete chaos and disorder.'[298] Therefore, any form that tries to represent, explain or interpret this notion can never in itself be fully adequate, but only 'present within the limited scope of what can be presented', as Mackay explains, 'something that initiates a rational access to the notion of hyperchaos. Which is why we're […] extending the sound piece through […] text, so it would become a toolbox for conceiving of hyperchaos, rather than trying to present it.'[299]

In making a knowingly imperfect *analogon*, Hecker thus tried to create a composition that alternates sonic events (digitally synthesised sounds of uncertain nature, in themselves hard to describe) changing suddenly and unpredictably, including long phrases of silence, sameness, layering and repetition, as examples of an experience of hyperchaos. However this experience is already given as doomed to fail, something that can only ever faintly and partially evoke a phenomenon (like a sudden change in the current laws of physics) that may be impossible for humans — individually or as a species — to ever experience. As explained by Mackay, 'the 'phenomenal analogon' must be supplemented and amplified with other material which makes it obvious that the audience's task remains to 'raise up' the analogon to the rational level. […] The analogon is given qua inadequate, as a provocation.'[300] For its premiere in the Duveen Galleries on the occasion of *The Real Thing*, *Speculative Solution* was played out loud as an uncompromisingly harsh aural presence, accompanied by small cards bearing a series of quotations about hyperchaos from Meillassoux: a hybrid of sound art and philosophy that could not be reduced to either.[301]

This idea of art as 'phenomenal analogon' is key to understanding Urbanomic's curatorial *modus operandi* as a purveyor of philosophical hybrids, together with sets of interpretative tools needed to 'raise them up to the rational level'. Publications and events

---

297 *Ibid.*

298 *Ibid.*

299 *Ibid.*

300 *Ibid.*

301 The version later published on CD by Urbanomic in collaboration with record label Editions Mego came with a 160-page booklet featuring texts by Mackay, Meillassoux and Elie Ayache.

become spaces or framing devices for *analoga* to be apprehended under controlled circumstances, attempting to do something with philosophy other than the usual signification via text/spoken word and the occasional diagram.

Let us take as another example the display of works by Pamela Rosenkranz, an adapted version of her exhibition *Our Sun*, originally held at the Istituto Svizzero in Venice in 2009. Placed in a darkened gallery featuring late-nineteenth-century sculptures from Tate's collection such as Frederic Leighton's *The Sluggard* (1885) and Edward Onslow Ford's *The Singer* (exhibited 1889), Rosenkranz's works appeared to relate to the Victorian bronze nudes in their oblique references to the human body. *Bow Human* (2009), a floor sculpture made using an emergency blanket, a recurring object in Rosenkranz's installations, immediately suggests a human presence, perhaps hidden under the silvery mound. Scattered across the room, a multitude of branded water bottles containing liquids in various skin-tone hues (from the *Firm Being* series, 2009) were casually placed at the feet of the sculptures' plinths or standing on the floor slats, as if forgotten there by distracted visitors.

Fig. 30. Pamela Rosenkranz, exhibition view of the works installed as part of *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

In both cases the relationship to the human is very much *in absentia*, mediated by strange materials with rather uncanny connotations: on the one hand the emergency blanket suggests a body in need of urgent care, and its remaining inert on the floor may be interpreted as the ominous signifier of a lifeless, *thingified* body. Alternatively, there is no body there, just a thin metallic sheet that a chain of scientific and cultural abstractions connects in our minds to a use as protective shield for humans. The plastic bottles are metonyms for the commodification of water, a natural resource and basic need for survival repackaged and sold to us through the ever-popular marketing of naturalness and science-approved authenticity (Fiji, 'natural artesian water' 'untouched by man'; Smartwater, 'vapor distilled' for a 'purity you can taste'). Learning that the skin-tone liquids are actually pigmented fluid silicon instantly brings to mind synthetic replacements for bodily surfaces, perhaps for medical or cosmetic purposes: a link to Lyotard's technoscientifically-enabled 'immaterials'. On the back wall, the video *Loop Revolution* (2009) presents a satellite image of the Earth, bisected and mirrored like a moving Rorschach test: a psychological portrait of a planet split between 'nature' and its scientific interpretations, put forward by a species that is as technologically advanced as it is seemingly unable to reconcile the two sides of a false opposition of its own creation.

The influence exerted on Rosenkranz's work by Negarestani's *Cyclonopedia* — an undefinable mesh of natural history, occult theology and warfare politics, built as a novel interwoven with a philosophical treatise — lies partly in the 'complicity with anonymous materials' which shapes her choices of subjects and sculptural media as interfaces between the human animal and its synthetic counterparts. On the other hand, though, Negarestani's hybrid methods, weaving together theory and fiction, represented an attempt to fuse genres and experiment with philosophy as an expanded kind of prehension playing with the boundaries between *aisthesis* and *noesis*, a strategy which also resonated with Urbanomic's interests: if fiction can function as, or act together with, philosophy (and particularly well when of a speculative type), then so can artistic practices, especially when they are framed in a way that allows art to be read as 'phenomenal *analogon*' for a set of theoretical premises which are not only especially hard to represent in one's mind, but precisely *about* the inherent (near-)impossibility of such representations.

Following this premise, Mackay also presented a number of alternative extended captions for the historical paintings displayed in the room 'Art and the Sublime', renamed 'The Real and the Sublime' for the evening. The notion of the Sublime was especially helpful in the context of *The Real Thing*, as a historical example of *analoga* for a complex philosophical notion developed as a way of processing the 'great outdoors':

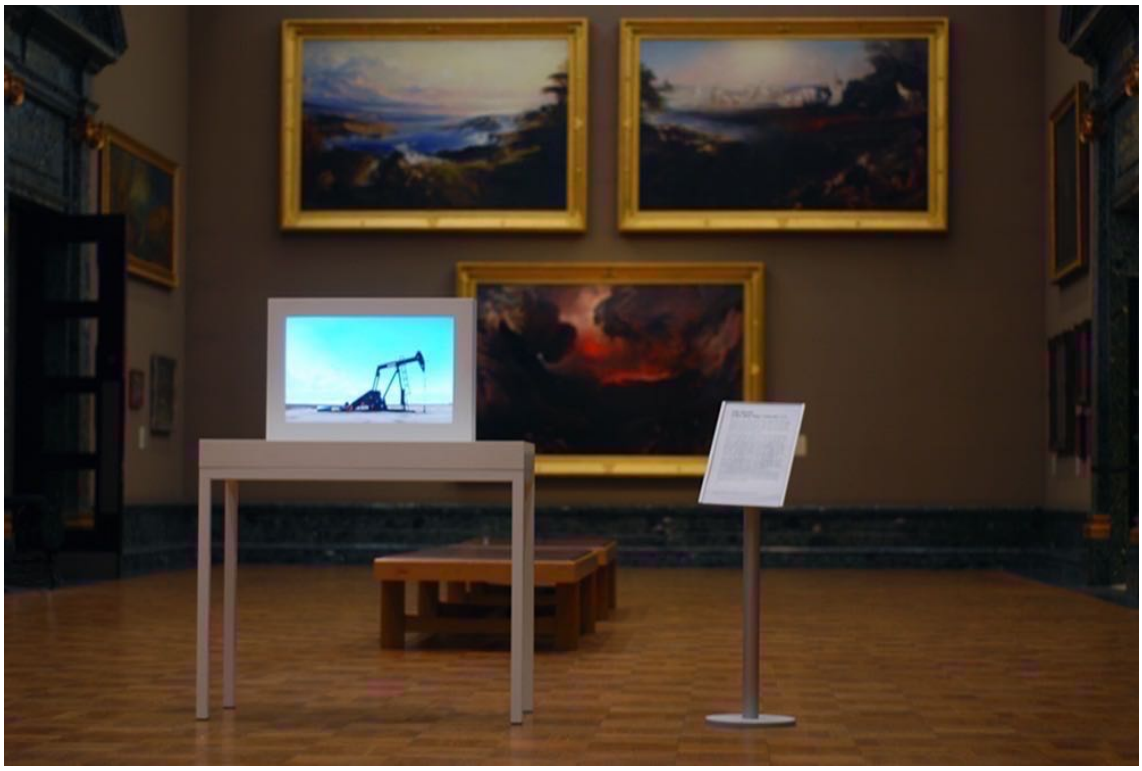

Fig. 31. John Gerrard, *Lufkin (near Hugo, Colorado)*, 2009, exhibition view of the work installed in the room 'Art and the Sublime' as part of *Late at Tate: The Real Thing*, Tate Britain, 3 September 2010.

> Speculative Realist philosophy asks how thought can access a reality that endures before, after, and without the human, a reality which the 'sublime' encounter with powers that exceed the capacity of the imagination also gestures towards. […] The subjective experience of the sublime is understood as the mark of an intrusion into human culture of a weird 'outside'. The real presses upon human consciousness, forcing thought to behold its own contingency in ever more precise and appalling ways.[302]

The short texts, written by a number of contributors to *Collapse* (including China Miéville, Timothy Morton, Reza Negarestani and Eugene Thacker), reframed a trans-historical selection of works by William Blake, Henry Fuseli, J. M. W. Turner, John Martin, Joseph Wright of Derby, John Everett Millais and William Orpen, among others, as prompts to think about the relationship between humanity and an environment seen as hostile, unknown or disproportionately powerful. However, the historical conception of the Sublime is posed in

---

[302] Unnamed author in 'The Real and the Sublime', *Urbanomic.com* (Urbanomic/Document UFD005) (accessed 25 Nov. 2018), <https://www.urbanomic.com/document/the-real-thing-the-real-and-the-sublime/>, p.1 of the PDF version.

contrast with a speculative realist understanding of this sense of awe in front of the incommensurability of the cosmos: 'Where the romantic conception continues to express conflicting tendencies of the organism—the will to inundation and the resistance against incorporation—SR encompasses the production of these drives as one contingent reality amongst others.'[303] If anything, the Sublime sense of awe should extend to the whole of experience, as generated by the same absurd and cruel cosmos, and very much including our species, whose impact is indeed cumulatively on par with that of a cataclysm of geological proportions. The awe-inducing geological formations and 'natural disasters' of Romantic landscape paintings are thus reframed as *hyperobjects* of sorts (to return to Timothy Morton's useful term): triggers for reassessing our humble place on the planet and the universe, or perhaps *memento mori* on a cosmic scale.[304]

If *The Real Thing* exemplified the potential of SR to shake the hegemony of anthropocentrism in a way that complemented the methods and contents of certain artistic practices, the event was less clear in addressing the more explicitly political ramifications of SR: what to do with these notions *besides* operating a general paradigm shift that puts humanity into perspective. Even during the panel discussion this subject was only briefly touched upon, mostly linking the philosophers' anti-Anthropocentric drive with the environmental concerns raised by parallel debates around the notion of the Anthropocene. However, as Mark Fisher put it in his article for Frieze, '[t]he role that speculative realism might play in a new anti-capitalism has yet to be established', and with its emphasis on anti-correlationism and contingency, *The Real Thing* provided limited help in addressing this looming interrogative. The main exception in this sense was the inclusion of Amanda Beech, whose video works focus on the power of images and of language, channeling the rhetorical power of philosophy through art. Beech's interest in SR and its connection to political agency, however, hinges on the way the latter is articulated *via art*, rather than in how SR can be applied directly to political praxis. Either way, Fisher's key question remains under-explored to this day.

A few months later, Mackay was involved in the exhibition *New York to London and Back — The Medium of Contingency*, held at Thomas Dane Gallery in London from the 18th January until the 19th February 2011 and co-organised by Urbanomic (Mackay and Tobias

---

[303] *Ibid.*

[304] But cfr. Reza Negarestani, 'Synechistic Critique of Aesthetic Judgement', in Christoph Cox, Jenny Jaskey and Suhail Malik (eds.), *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015), pp. 333-41.

Huber) with New York's Miguel Abreu Gallery. The show itself took the form of a fairly traditional group exhibition showcasing mostly Miguel Abreu Gallery's roster of artists (including Pamela Rosenkranz, Alison Knowles, R.H. Quaytman, Eileen Quinlan, Sam Lewitt, Liz Deschenes and others, plus Amy Sillman from Thomas Dane's own line-up) with works presented in the white-cube interiors of Thomas Dane Gallery, loosely woven together by the Meillassoux-inspired theme of contingency. A film screening, a public discussion and a publication based on the latter were also presented as integral parts of the exhibition.

Considering how Mackay unequivocally calls *New York to London and Back* 'Miguel Abreu's show', it is safe to assume that his curatorial input was probably limited to a discussion of the general thematic framing and, crucially, in organising the talk, titled *The Medium of Contingency*, featuring Mackay alongside Miguel Abreu, philosophers Reza Negarestani and Elie Ayache as well as artist Scott Lyall and curator Matthew Poole.[305] Transcripts of their presentations and panel discussion were also collected in an eponymous publication, launched before the end of (and thus with the intent to be seen as part of) the exhibition.[306]

Fig. 32. *New York to London and Back — The Medium of Contingency*, Thomas Dane Gallery, 2011, installation view showing works by Alison Knowles (left), Pamela Rosenkranz (centre) and Raha Raissnia (right).

[305] Mackay (ed.), *The Medium of Contingency* (London / Falmouth: Ridinghouse / Urbanomic, 2011), p. 6.

[306] See *ibid.*

Mackay was acutely aware of the commercial setting to which he was called to contribute his credentials as philosopher, to the point of bringing the subject of the art market to the fore as a central preoccupation in his framing of contingency, in relation to the exhibition, as an integral part of the mechanisms of finance in general and as a bridge with the system of art to which he finds himself to be accessory. He explicitly framed the event *The Medium of Contingency* as 'an unprecedented overlapping of the contexts of philosophical, financial, and art worlds', a nexus stressed by the participation of the 'options trader-turned-philosopher' Elie Ayache.[307] Ayache's theories, as outlined in his 2010 book *The Blank Swan: The End of Probability*, demand a shift in thinking the financial market no longer in terms of a system driven by probability, but rather as one which *drives reality through contingency*; in Mackay's words, 'The market is not a set of probabilities, but the medium of contingency—a regime of events neither probable nor improbable (Nassim Taleb's 'Black Swan'), but effective without prevision or reason—'The Blank Swan'."[308]

During the panel discussion, Negarestani offered a striking metaphorical reading of the role of the artist and writer (which I believe also applies to that of the professional curator). If speculation can be a tool to think otherwise from existing paradigms, Negarestani posits, it is also one that necessitates reason in order to direct this way of 'thinking otherwise' in ways consistent with the real; however applying reason alone is not quite enough to take the risks necessary to open up thought and radically shift paradigms. Artists and philosophers thus need to think of themselves and their work as a 'two-pronged tool', like a tuning fork, where one prong functions as a razor that destabilises, cuts and allows for vertiginous paradigmatic changes — including the scale changes necessary to think through scientific images — while the other anchors thought processes in the more traditional logic of reason: 'what this tuning fork does, it tunes speculation. The razor cuts for the extreme, it sheds possible grounds […]. On the other hand, […] the prong of reason sheds light on the field of surgery of this razor — it sharpens it.'[309]

Perhaps this multi-use tuning-fork-*cum*-razor tool is also precisely what allows disruptive, diffractive readings to happen when attempting to produce knowledges in-between disciplinary-epistemological boundaries, and exploring territories between artefacts that may not have been mapped out — or whose maps are no longer deemed useful. It is the waves

---

307 'The Medium of Contingency', *Urbanomic.com*, <https://www.urbanomic.com/event/the-medium-of-contingency/> [accessed 4 Jan. 2019].

308 *Ibid*.; Nassim Taleb, *The Black Swan: The Impact of the Highly Improbable* (London: Penguin, 2007); Elie Ayache, *The Blank Swan: The End of Probability* (Chichester: Wiley, 2010).

309 R. Negarestani in 'Discussion', in R. Mackay (ed.), *The Medium of Contingency*, p. 58.

produced by each tuning fork, each speculative tune, that end up meeting one another and generating constructive and destructive patterns of interference. A professional or at least self-aware curator not only always travels tuning fork in hand, but is also especially attentive to catching the tunes produced by others and actively seeks ways to produce resonant frequencies with theirs.

Overall, *The Medium of Contingency*'s talk however offered a rather critical outlook on the figure of the professional (art) curator, one that reflects Mackay's own ambivalence. In the publication's introduction, Mackay warned of the rise of art curators as a symptom of an all-pervasive neoliberalism, connected to 'the notion of 'human capital', the monetisation of social networks, the obligation to 'curate' and present the self, and the 'experience economy".[310] When invited to contribute to art-adjacent events, Mackay tends to define his role in contrast to that of the curator-as-exhibition-maker, being less interested in presenting artworks to be experienced in a traditional exhibitionary format and more in facilitating what he sees as a wider cultural conversation, one in which the visual arts must participate *alongside other artefacts and tools of knowledge production*. In the 2011 volume *Speculative Aesthetics*, (published by his Urbanomic imprint), Mackay explained:

> The key distinction I would make is between art as a set of institutions, […] the increasingly mystifying role that it plays in mediating subjectivity and shaping popular culture, which does indeed have an importance in the production of subjectivity; and the actual encounter with specific artworks, which does vanishingly little in terms of the transformation of subjectivity or even in terms of simple affect. [T]he kind of force we are taught to expect from art is entirely absent from the experience of contemporary art shows; it lies elsewhere, in other cultural forms.[311]

The role played by art (and curation thereof) in Urbanomic's cross-disciplinary efforts is complementary to and inextricable from a necessarily eclectic approach to the application of philosophy beyond its canonical forms, the emphasis being put in the spaces *between* practices and fields. Consider for instance the limited edition construction toy set Mackay co-designed and published a as a companion to Negarestani's philosophical text *Intelligence and Spirit* (*Unboxing the Machines: Toy Model AGI Playset*, 2018), at once artwork — though

---

[310] R. Mackay, 'Introduction: Three Figures of Contingency', in Mackay (ed.), *The Medium of Contingency*, pp. 7-8.

[311] R. Mackay in 'Discussion', in R. Mackay, Luke Pendrell and James Trafford (eds.), *Speculative Aesthetics* (Falmouth: Urbanomic, 2014), p. 42.

Fig. 33. Robin Mackay and Reza Negarestani, *Unboxing the Machines. Toy Model AGI Playset*, 2018.

Urbanomic's promotional materials never explicitly define it that way — and hands-on philosophical experiment.[312]

Urbanomic utilises artworks as fragments of texts and as stepping stones that should lead somewhere else, while most typical exhibition formats have a tendency to present individual works in isolation or within self-contained frames of reference and clearly demarcated spatial and temporal boundaries. The fact that Mackay has gradually decreased his involvement with curatorial activities dominated by the 'genre' of contemporary art following these two projects should therefore not come as a surprise. And in a sense, Mackay's trajectory as a reluctant curator can be seen as symptomatic of the whirlwind romance between art and SR: an odd couple brought together by a mutual fascination, but quickly pulled apart by incomprehensions and seemingly incompatible habits.

Over time, Mackay himself has taken his distance from SR. In fact, Urbanomic has published one of the most biting assessments of SR as a movement that never really was: Ray Brassier's 2014 text 'Speculative Autopsy' (a postscript to a book that itself was harshly critical

[312] Robin Mackay and Reza Negarestani, *Unboxing the Machines. Toy Model AGI Playset,* UF045 (Falmouth: Urbanomic, 2018). See 'Unboxing the Machines', *Urbanomic.com*, <https://www.urbanomic.com/event/unboxing-the-machines/> [accessed 20 Jan. 2019].

of OOO: Peter Wolfendale's *Object-Oriented Philosophy. The Noumenon's New Clothes*).[313] It is telling that Mackay's Urbanomic played a crucial role in the *launch* of SR as a diffractive experiment, but lost interest as the friction between the original group of thinkers brought together in conferences and publications waned, and as thinkers associated with it either reacted to it by dissociating themselves or, conversely, by trying to build consensus and a sort of canon to use as boundary markers within which SR could become a disciplinary apparatus of its own.

Recent exhibitions at the Museum Fridericianum (*Speculations on Anonymous Materials*, 2013; *Nature after Nature*, 2014; *Inhuman*, 2015)

Though some of Urbanomic's projects functioned precisely as eccentric collaborations with art-centric exhibitionary dispositifs, Mackay has voiced scepticism in the way the professionalised Art world engages with philosophy in ways that can feel perfunctory and disingenuous. In her contribution to the *Speculative Aesthetics* book, artist Amanda Beech gave a glimpse into her own polemical stance towards the subject of 'the 'intellectual jewellery' that goes on with art talks', seemingly quoting an unpublished remark made by Mackay: 'if you're running a public space and you want to add gravitas to some exhibition, you invite certain people to do the talk. No one listens, they're not bothered about what you say, it's just the presence that matters. It's a form of review or validation.'[314] It would be interesting to know if Mackay thought that this assessment also applied to his inclusion as a speaker in the *Speculations on Anonymous Materials* symposium (4 January 2014), organised to accompany the eponymous exhibition held at the Museum Fridericianum, Kassel, between the 29th September 2013 and the 23rd February 2014.

Speculations on Anonymous Materials was the first in a series of shows curated by the Fridericianum's then director Susanne Pfeffer, surveying the practices of artists mainly working in Europe and North America who 'grew up with the Internet'[315]. The two subsequent shows were titled *nature after nature* (11 May - 17 August 2014) and *Inhuman* (29 March - 14 June 2015). Considered together, these exhibitions represent an especially notable case study of a

---

[313] R. Brassier, 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), pp. 399-421.

[314] Amanda Beech in 'Discussion', in R. Mackay, L. Pendrell and J. Trafford (eds.), *Speculative Aesthetics*, p.41.

[315] Susanne Pfeffer in 'SUSANNE PFEFFER: How Art's POST-HUMAN TURN Began in Kassel,' *032c.com*, published 20 January 2016, <https://032c.com/how-arts-post-human-turn-began-in-kassel/> (accessed 27 January 2019).

curatorial project inspired by the writings of authors associated with the original wave of SR, while also channelling a number of NM themes and exemplifying their interpretation from an art-centric perspective.

The understanding of materiality and image-making reflected in the artworks selected for these three exhibitions embodied the influence of omnipresent and increasingly powerful technologies based on or enhanced by digital technologies, which have undeniably affected every aspect of everyday life — including the very concepts of 'materials', 'nature' and 'humanity'. In fact, this series of exhibitions was originally conceived as a take on what is often labeled (occasionally by Pfeffer herself) as 'Post-Internet art', or perhaps more appropriately, as Kerstin Stakemaier put it in her 2014 article on the exhibition for *Texte zur Kunst*, 'Post-Digital art', looking at the intersection between digital technologies, their enabling hardware and humanity's obdurate attachment to the haptic qualities of materials and 'hard copies'.[316] Stakemaier has defined Post-Digital Art as 'characterised by a prosthetic understanding of material revealing that the digital as a society-wide production paradigm has already entered its first crisis. The digital does not flow from the Internet to reality, but is exhumed from its everyday objects, revealing itself as always already present.'[317]

Either way, this much-debated terminology eventually turned out to be of limited relevance in Pfeffer's three linked exhibitions, particularly when compared to the influence of SR and NM on the work of participating artists. This is something that emerged during Pfeffer's research phase towards the exhibition, as she explained when talking about *Speculations on Anonymous Materials* in a 2016 interview:

> Much of this work is rooted in a specific type of contemporary philosophy – Speculative Realism, Object-Oriented Ontology. These are theories that center around this idea of thinking of 'objects as themselves,' as opposed to their subjective existence within the human mind. […] The relationship to Speculative Realism came through talking to the artists. Doing studio visits, there was a point when I realized that everybody was talking about theory actively, which I

316 Kerstin Stakemaier, 'Prosthetic Productions. The Art of Digital Bodies: on Speculations on Anonymous Materials at Fridericianum, Kassel', in *Texte zur Kunst* n.93, March 2014, *Spekulation/Speculation*, pp. 166-180. Also see Florian Cramer, 'What is Post-Digital?', in *APRJA*, Vol.3, Issue 1, 2014, *Post-Digital Research* (ed. by Christian Ulrik Andersen, Geoff Cox and Georgios Papadopoulos), <http://www.aprja.net/what-is-post-digital/> [accessed 27 January 2019]. Also see Omar Kholeif, *You are Here: Art After the Internet* (Manchester/London: Cornerhouse/SPACE, 2014); Berry, David M., and Michael Dieter (eds.), *Postdigital Aesthetics: Art, Computation, and Design* (Palgrave Macmillan, 2015); Cornell, Lauren and Ed Halter (eds.), Mass Effect: Art and the Internet in the Twenty-First Century (Cambridge, MA: The MIT Press, 2015).

317 K. Stakemaier, 'Prosthetic Productions', p. 168.

> think hadn't been the case for a while. For example, Ed Atkins, he's totally into theory. Pamela [Rosenkranz] is an expert. Timur Si Qin is totally into Manuel DeLanda's thinking.[318]

I find this passage to be a somewhat typical example, in the context of art-centric discourse, of how SR and OOO are often brought up in the same statement to vaguely summarise a set of influential concepts implied to be related yet distinct, without much discussion of the difference between the two: the whole NM/NR nexus reduced to a brief sentence, more often than not containing the word 'objects' and therefore automatically skewing the definition towards OOO — thus fuelling a pernicious terminological misunderstanding which still lingers to this day.[319] On the other hand, the trio of exhibitions at the Museum Fridericianum reflected an extremely wide set of interests and theoretical commitments, earnestly embraced by a number of artists who Pfeiffer initially brought together under a loosely defined 'Post-Internet' rubric, and as such it is a compelling sample of (indeed, a case for) these interlocking spheres of philosophical and artistic influence as a phenomenon of special significance in this particular moment in cultural history, also a time of intense reflection on a fast changing media landscape. Just by looking at the titles of these three exhibitions one can get a succinct overview of three key themes artists have reappraised through a NM and/or NR filter, in recent years and retrospectively, linking them back all the way to the ideas investigated by *Les Immatériaux* in 1985.

Formally speaking, however, all three exhibitions were lightyears away from the kind of statements made by *Les Immatériaux*: in the latter, artistic practices were treated in a way that was conceptually intertwined with science, engineering, literature, socio-anthropology, etc., and staged in a deliberately dramatic, psychologically oppressive layout designed to be read partly as theatre, partly as labyrinth. Here, on the other hand, artworks are presented once more following the neutralising and insulating grammar of the white cube applied in its purest form: instances of *contemporary visual art only*, presented in a pristine gallery setting where every work stands out individually against a blank background, as if set up in a photography

---

[318] Susanne Pfeffer in 'SUSANNE PFEFFER: How Art's POST-HUMAN TURN Began in Kassel,' *032c.com*, published 20 January 2016, <https://032c.com/how-arts-post-human-turn-began-in-kassel/> (accessed 27 January 2019).

[319] Other examples from the then recent past: Laura McLean-Ferris, 'Indifferent Objects', *Art Monthly*, July 2013; Svenja Bromberg, 'The Anti-Political Aesthetics of Objects and Worlds Beyond', *metamute*, 25 July 2013, <http://www.metamute.org/editorial/articles/anti-political-aesthetics-objects-and-worlds-beyond>; Maria Walsh, 'I Object', *Art Monthly*, Nov. 2013 (here SR and OOO are flat-out misunderstood for synonyms: 'object-oriented philosophy, also called speculative realism'); Jan Verwoert, 'Show Me What You Got', *Frieze*, Nov. 2013: <https://frieze.com/article/show-me-what-you%E2%80%99ve-got>.

Fig. 34. *Speculations on Anonymous Materials*, Museum Fridericianum, 2013, installation views with works by Yngve Holen (foreground) and Pamela Rosenkranz (background).

studio for a highly staged shoot (just see the official installation shots, tellingly devoid of people, for some rather literal examples).

Concentrating on *Speculations on Anonymous Materials* as the prototype for the following two shows, one can observe that most of the galleries displayed the work of maximum two artists at a time, in a way that both isolated them and created a set of linear linkages from one practice to another, from one distinct space to another: meat and flesh tones dialogue in the pairing of Yngve Holen and Pamela Rosenkranz; the prominent inclusion of branded water bottles connecting the works of Pamela Rosenkranz with Josh Kline's, and later morphing into Timur Si-Qin's skewered Axe bottles; Yves Klein's YKB monochromes referenced by both Rosenkranz and Ken Okiishi; the cast silicone hands in Kline's sculptures echoed in the replicas of early robotic prosthetic hands by Aleksandra Domanović; the latter's clear Perspex pedestals returning in different acrylic shapes in the works of Alisa Baremboym; digital prints on clear plastic linking Baremboym's installations with those of Kerstin Brätsch and Debo Eilers, and in turn finding an affinity with the advert-like quality of printed surfaces by Katya Novitskaya and Antoine Catala, alongside the corporate showroom language of GCC's installation. Meanwhile, commercially available modular stands, adjustable fasteners

Fig. 35. *Speculations on Anonymous Materials*, Museum Fridericianum, 2013, installation views with works by Katya Novitskaya (foreground) and Ken Okiishi (background).

and other off-the-shelf accessories pop up at various points throughout the exhibition like an idiosyncratic punctuation style shared by many of the exhibited artists.

Pfeffer's selection for *Speculations on Anonymous Materials* seemed to favour artists working in sculptural and spatial forms where each element has clearly defined edges or boundaries; in other words, obviously *object*-like. If every sculpture and installation had a distinct echo of a recent digital past, conversely every technically reproduced photographic and moving image either alluded to a physical origin or (dis)simulated a three-dimensional presence. Most of the works presented a limited array of elements in the form of oddly juxtaposed but mostly recognisable fragments, cryptically referring to external reality by metonymy. In many ways these practices can be seen as an evolved offshoot of sculptural (and curatorial) practices reflecting on 'objecthood' and 'thingness' art that were in vogue in the early 2000s; only this time the 'everyday' quality of the materials has shifted from modest, rubbish-like, awkwardly assembled and very analogue accumulations of debris to sleek-looking samples of materials or finished products.[320] Occasionally the works appear to be sculptures made out of *images* of materials and products, flattened simulacra one would expect

[320] See my pp. 15-8.

to find in an online shop or advert — and then possibly printed out again as hard copies, follow a Post-Digital logic that emphasises the tension between real and virtual, between de- and re-materialisation.

Though this 'boutique look' may seem diametrically opposed to the philosophical theatre of an essay exhibition such as *Les Immatériaux*, it is possible to interpret this choice of a rarefied installation design as a deliberate and meaningful mediation strategy subtly affecting the understanding of the works through their spatial framing. The presentation of technically advanced mass-produced goods and components thereof as if emerged ready-made from a neutral, indistinct background can be read as a visualisation of the idea behind the Negarestanian reference to 'Anonymous Materials' in the title: heavily processed matter whose provenance and modes of production are known to be complex, and yet remain fundamentally inaccessible to the vast majority of end consumers, both in the physical and in the epistemological sense. Shrouded in a mystifying layer of 'technoscience', undefined and yet sometimes deployed tactically in oversimplified forms (for example in marketing materials aimed at giving products an aura of credibility and/or a sci-fi appeal), most of the things we use everyday seem to just turn up fully formed on a shelf or on our doorstep; all the labour, technology and environmental conditions that have led to their coming into being — their *historical*-materialist baggage — intentionally concealed behind a formulaic blurb printed on the packaging. At the level of raw physicality, the mass from which both 'natural' and 'synthetic' materials are *really* made is not easily grasped in its chemical essence or geological origin, as compellingly expressed by Negarestani in *Cyclonopedia* and *The Medium of Contingency*. The materials of mass consumption are made to be seductive yet elusive. They may not be inert, but they are also not very cooperative; rather, they appear Other and indifferent to us. If anything, we adapt our behaviours to theirs in attempts to increase their lifespan - even though they are often designed to deteriorate and lose their appeal with every interaction, and to be as hard as possible to repair and restore. Even when they can be recycled, they usually need to enter a further processing chain from which we are excluded. And as pointed out by Lyotard, technology has certainly helped humans tame and coerce materials into doing their bidding in increasingly effective ways, but at the same time it has accelerated our understanding of their alien nature and their inherent agency: the more we observe and analyse them, the stranger they look. From this point of view, OOO's avowed anti-materialism and its distancing from the scientific 'undermining' of objects seems to be less useful to these artists than certain commentators seem to think — for instance David Joselit, who in his essay for the exhibition's catalogue (published much later, in 2018, in a single volume covering all

three related Fridericianum exhibitions) included a quotation from Harman's *The Quadruple Object* to discuss the shift away from the subject-object correlation purportedly demonstrated by the exhibited artworks.[321]

In fact, while I agree that anti-correlationism is in fact one of the theoretical aspects in which the artists selected by Pfeffer were interested at that time, *Speculations on Anonymous Materials* seems to me to be much less about the relations between objects *beyond* the human sphere and more about the continuing attempts by humans to corral and subjugate (rather than cooperate with) 'raw' materials, as well as their potential to be manipulated through advanced engineering, expressly for *human*, culturally and socially shaped purposes. In my view, the aspects of these works that are of interest from a SR standpoint lie in the tension between the manifest image of the products, the scientific image behind their production process and the indifference and resistance of the materials themselves to human affairs, expressed through their absolute, intractable contingency: anonymous materials whose immanence artists can only hope to temporarily intersect for certain expressive ends.

In a brief statement accompanying his *Axe Effect* series of sculptures (2011-13), Timur Si-Qin directly invokes the concept of contingency as an interpretative key. In his work this is expressed through a tension between the absurd techno-cultural distillate embodied by the bottles of Axe shower gel, the caricatured masculinity of its marketing strategies enhanced by the violent penetrative gesture of the sword impaling them, and the spillage of their contents in colourful puddles, whose formation the viewer is invited to interpret as an event outside the artist's full control. In turn, Si-Qin links the haphazard results of these smelly discharges back to the series of evolutionary circumstances that have led to the development of these weapons — one a tool for literal warfare, the other a weapon of olfactory seduction purportedly mimicking chemical aspects of our species' reproductive cycle — as equally fortuitous causal chains of phenomena:

> The Axe effect sculptures are objects that embody the system attractors of the contingent epic of evolution. The arms-race and the mating-call violently and erotically interpenetrate in the guise of a product-placement (an evolved strategy in itself) releasing synthetic pheromones to further compete for space and attention. The variations in forms of designed products are testament to the divergent pathways of bio-morphological memes and cultural norms, having

[321] David Joselit, 'Body Bags', in Susanne Pfeffer (ed.), *Speculations on Anonymous Materials. nature after nature. Inhuman*, exh. cat. (Cologne: Koenig Books, 2018), p.118. Also see Noemi Smolik's review of the show for *Artforum* (May 2014), where she straight-up calls Harman a 'speculative materialist' and namedrops OOO entirely without justification (N. Smolik, 'Kassel. "Speculations on Anonymous Materials", Fridericianum', *Artforum*, Vol. 52, No. 9, May 2014, pp. 334-5).

Fig. 36. *Speculations on Anonymous Materials*, Museum Fridericianum, 2013, installation views with works by Timur Si-Qin.

> undergone a state-change (in the neo-materialist sense) from evolutionary strategy to marketable ergonomics. The intricate patterns of fluid dynamics are a direct display of the beauty of contingency, a beauty embodied by the mechanisms of evolution itself.[322]

I am also reminded of the notion of territoriality as described by Deleuze and Guattari, a way of inscribing a significative difference with markers of boundaries: be it through pheromones or warfare, competition over space means inscribing one's presence in an environment by modifying its physical make-up, in a way not entirely dissimilar from a marketing or artistic practice.[323]

Of the trio of Fridericianum exhibitions, the closest to an attempt to think objects and/or materials in themselves and in their ecological relationships to one another was probably *nature after nature*, and even works such as Jason Loeb's lumps of ore or Björn Braun's nests woven by finches, presented in this second show in Pfeffer's series, generate meaning primarily

---

[322] Timur Si-Qin, 'Axe Effect, 2011–2013', *timursiqin.com*, <http://timursiqin.com/axe-effect> (accessed 4 February 2019).

[323] See my pp. 81-5.

Fig. 37. *nature after nature*, Museum Fridericianum, 2014, installation view works by Jason Loebs (foreground) and Ajay Kurian (background).

through the explicit relationship with man-made materials (packaging used to ship and display the ore in the former, plastic bits appropriated by the birds in the latter). The other key issue, addressed in particular in *Speculations on Anonymous Materials* and *Inhuman*, is that of trans-/post-humanism and artificial intelligence, where the dimension 'beyond the human' — and any attempt to empathise with a viewpoint other than the one afforded by our belonging to our species — can only be attained by passing *through* human forms of subjectivity. These three exhibitions have ultimately very little to do with anti-correlationism per se and little if anything to say with respect to objects *without* humans, in the panpsychist perspective of Harman and other OOO proponents but also ultimately in the Meillasouxian sense of the ancestral matter proving the existence of a universe before — and most likely after — humanity (i.e. the notion of the '*arché* fossil').[324]

Whether intentionally on unwittingly on Pfeffer's part, the selection of works presented in *Speculations on Anonymous Materials* seems to make a point about the *necessity to address and re-orientate human access itself*, rather than fall into the paradox of trying to experience, represent or simulate a reality where the human dimension supposedly does not factor in at

[324] See my p. 49.

Fig. 38. *Inhuman*, Museum Fridericianum, 2015, installation view works by Oliver Laric (foreground) and Nicolas Deshayes (background).

all, or is denied any specificity in the name of a flat ontology. For instance, as Si-Qin wrote in a later text about his practice, 'Aesthetics of Contingency: Materialism, Evolution, Art' (2017), the much-debated notion of the non-human agency of objects as the crux of the recent anti-anthropocentric 'trend', particularly as discussed in the art press, is misguided and unhelpful: 'The necessary step in dismantling the divide between subject and object is not to grant objects their own undeserved agency or consciousness and thereby raise them to the same ethical status as humans. […] But instead, the necessary step is to contextualize subjectivity, consciousness, and ethics as arising from within the material.'[325] This formulation, which by Si-Qin's admission owes much to De Landa and his theories around the emergent properties of systems, seems to me to be much closer to the neo-materialist concerns expressed by the artists gathered by Pfeffer and thematised in her three curatorial formulations of 2013-15. It is meaningful in this sense, and most likely not coincidental, that neither Harman nor any of the

[325] T. Si-Qin, 'Aesthetics of Contingency: Materialism, Evolution, Art', *Stream 04 — The Paradoxes of the Living*, November 2017. Online on *pca-stream.com*, <https://www.pca-stream.com/en/articles/timur-si-qin-aesthetics-of-contingency-materialism-evolution-art-108> (accessed 4 February 2019).

prominent object-oriented philosophers took part in any of the symposia programmed by the Fridericianum in connection with these exhibitions, nor did they contribute to the catalogue.

Negarestani's contribution to the *Speculations on Anonymous Materials* symposium, (Museum Fridericianum, 4 January 2014; with interventions by Maurizio Ferraris, Markus Gabriel, Iain Hamilton Grant, Robin Mackay and Reza Negarestani, chaired by Armen Avanessian) pointed at the importance of manipulating materials as a way of knowing them. Negarestani's talk, titled 'Frontiers of Manipulation', was an invitation to think through what he calls an 'engineering epistemology', a way to navigate the complexity of material systems by manipulating them. Since materials consist of various structural levels with completely distinct laws and behaviours, which require different modes of analysis (i.e. on a macroscopic, crystalline, atomic scale), the only way to understand how a given material works is by manipulating one layer in order to be able to give a causal and functional explanation of the behaviour of another. Even though Negarestani never explicitly mentions art in his talk, when prompted in a question by a member of the public he concedes that 'you can make a connection between [art and engineering] by way of a functionalist account of what they do.'[326] As in experimental practice, 'you have material inferences […] and you refine your methods. There is a form of refinement, of tweaking', and what really distinguishes the two is that in the end art 'is pure experimentation for the sake of experimentation' — the act of cutting operated by the razor end of art in his earlier metaphor of the two-pronged tool from his contribution to *The Medium of Contingency*.[327] This freedom to experiment is a freedom to switch between epistemological modes:

> Art has a certain form of multimodality that brings affect, brings a stimulation of cognitive systems […]; those things are very much […] connected to a functionalist account of what design is, engineering and also ethics […]. This brings [us] back to an understanding of art as a multimodal […] friction upon, for example, materials. That entails certain forms of emotion, material inferences, and that makes the problem complex.'[328]

---

[326] Reza Negarestani in *Speculations on Anonymous Materials* symposium, Museum Fridericianum, Kassel, 4 January 2014. Online as '6 Symposium: Speculations on Anonymous Materials - Reza Negarestani', *youtube.com*, *Fridericianum* YouTube channel, published on 18 January 2018, <https://youtu.be/Fg0lMebGt9I> [accessed 4 February 2019], 46:10-46:16.

[327] R. Negarestani in 'Discussion', in R. Mackay (ed.), *The Medium of Contingency*, p. 58; see my p. 154.

[328] R. Negarestani in *Speculations on Anonymous Materials* symposium, '6 Symposium: Speculations on Anonymous Materials - Reza Negarestani', 46:22-48:25.

The question remains of whether the format of an exhibition such as *Speculations on Anonymous Materials,* where the artworks appear to be very much 'final products' that ultimately emphasise the anonymity, that is the *unintelligibility* of those materials beyond the surface level, can shed any light on the possible points of contact between art and 'engineering epistemology', or if it is possible at all to do so, especially as it pertains to the category of the curatorial. Exhibitions such as *Laboratorium* and aspects of the shows co-curated by Bruno Latour analysed earlier in this thesis seemed to point in this direction through an explicitly transdisciplinary agenda. Here, on the other hand, one has to rely almost entirely on the encounters with these isolated, alienated objects. Arguably, this is precisely part of the argument constructed by Pfeffer about our post-digital age, where we mostly encounter the products of some of the most sophisticated technologies of production as floating, decontextualised 'cut-outs': anonymous materials packaged and marketed to us as commodities.

Perhaps credit should be given to Pfeffer for having managed to generate a certain kind of cognitive dissonance, of *chagrin* even, by accentuating the encounter with the most superficial layers of a given set of materials and at the same time piquing the viewer's curiosity by hinting at their anonymity, at a much wider set of tantalisingly hidden connotations which are essentially left to the viewer to decipher in the artworks' medium lines.[329] And making explicit links to speculative philosophies, in the exhibition's title and especially in the symposium, can be understood as an acknowledgement that this kind of exercise in material abduction is ultimately insufficient to exhaust the understanding of those materials, either because they remain opaque and infinitely withdrawing (to concede a OOO interpretation via Heidegger), or because the exercise remains necessarily confined to a surface-level engagement with manifest images.

What emerged from the symposium was a palpable tension and undeniable distance between the context of a contemporary art exhibition, in this case very much understood in a disciplinarily circumscribed sense, and philosophical discourse also understood in a strict sense. This is precisely the gap that Robin Mackay — whose activities I interpret as a bridge between NM/NR and curatorial practices — highlighted as a central problem, one he maintained curators cannot solve as long as they remain within the 'close-circuit' of 'specialised contemporary art discourse and practice' only. But also, and equally importantly, as long as the philosophers with whom curators try to connect their activities resist the

---

[329] Cfr. G. Quack, 'Materials beside Themselves', in Susanne Pfeffer (ed.), *Speculations on Anonymous Materials. nature after nature. Inhuman*, p.131.

invitation to disrupt their own close-circuits and take advantage of the curatorial intersection in the Venn diagram bringing together theory and exhibition-making. This kind of exchange can only work if it functions as a two-way street, fully open to methodological hybridisations in both directions.

Guilty by association: Anselm Franke's *Animism* (various venues, 2010-14) and the OOO panpsychist connection

In Chapter 1 I mentioned that the question of objecthood has often been overstated as a core concern of NM/NR, particularly when a limited understanding of the complexity of these philosophical discourses, combined with the overexposure of OOO, led to unhelpful conflations. In the art press, much of this confusion was complicated by the enduring interest in objecthood/thingness in relation to sculptural practices and installation art, as shown by the many exhibitions organised on the subject in the 2000s that focussed on assemblage practices and the use of found, ready-made materials.[330] Besides this facile link between 'object-based art' and OOO — a reading embraced by Graham Harman, as it provided him with plenty of opportunities to give talks in art-centric contexts and to publish essays targeting art-savvy demographics —, another recurring (and often connected) subject through which the art press has manifested an especially strong OOO bias was that of *animism,* linked to the attribution of agency to inanimate matter across different strands of NM/NR.

In this section I will focus on a curatorial project that was prominently discussed in this light: *Animism*, an extended touring exhibition curated by Anselm Franke which saw several iterations in various venues between 2010 and 2014. Though *Animism* was mostly read in a OOO key retrospectively, its critical reception contributed to bringing to the fore some of the most intensely debated aspects of OOO (which to varying degrees are also attributable to other strands of NM/NR): its attempts to reject or question 'human subjectivity' as the only conceivable viewpoint for philosophy and, above all, its panpsychism (alleged or avowed, depending on the individual position of each associated author). In fact I would argue that its approach to the subject has very interesting points of contact and overlap with NM readings of the inseparability of ontology and epistemology, in ways that are much subtler than a superficial (and object-oriented) reading of panpsychism.

---

[330] See my pp. 15-6.

Fig. 39. *Animism*, Haus der Kulturen der Welt, Berlin, 2012, installation views with historical documents (foreground) and works by Daria Martin and Len Lye (background).

The *Animism* projects by German curator Anselm Franke (first at M HKA and Extra City in Antwerp in 2010, then at the Kunsthalle Bern also in 2010, Generali Foundation in Vienna in 2011-12, Haus der Kulturen der Welt in Berlin in 2012 and further touring legs through to 2014) explored different ideas around 'animation', that is to say the simulation or appearance of life in inanimate objects, in connection not only to phenomenological effects — i.e. forms of organic *mimesis* — but also to deeper ontological considerations, including the attribution of agency or a 'life force' to those objects. Franke's adoption of the term 'animism' thus goes well beyond its immediate spiritualist connotations:

> When animation is taken outside the field of art, it turns into an ontological battleground. Far from being a matter of abstract considerations, this is a battleground at the frontier of colonial modernity, and in the context of contemporary politics and aesthetics, it concerns the urgent question of the transformability and negotiability of ontologies, where claims to reality and the ordering of the social world are at stake. On this battleground, the problem of animation was

> given the name 'animism' by nineteenth century anthropologists aspiring to see their work incorporated into the ranks of science.[331]

Reflecting on this development as a product of a positivist worldview, the exhibitions did not question the notion of animism primarily 'as a matter of belief, but rather as a boundary-making practice':

> The question of animation—what is endowed with life, the soul, and agency—seems inevitably and immediately to call for distinctions and boundaries: between animate and inanimate matter, primitive and civilized, subjective perception and objective qualities, the colloquial perception of the real and the merely fictive or imaginary, and last but not least, between interior self and exterior world.[332]

If the strict secularism of rationalist analysis lead to the artificial separation of nature from culture, looking back at and taking inspiration from animist cultures and expanded notions of 'animation' could potentially help fuse the two back together. Animism is therefore proposed as a figure through which modern epistemologies (and the power relations resulting from their hierarchies of knowledges) can be reassessed, identifying 'a colonial mechanism deeply ingrained in our everyday perception and our capacity to make sense of the world.'[333] In a way which is not so dissimilar from certain NM/NR propositions, Franke explains, 'the project refrains from postulating a life of things or images, not because this would go too far, but because it would not go far enough. The *Animism* project was built upon the conviction that what must be mobilized are the very grounds on which such [epistemological or, I would argue, *ontoepistemological*] distinctions are made.'[334]

The resulting exhibitions brought together 20th century and recent artworks with an array of historical documents, footage and textual sources, in order to redefine the notion of animism as a critical tool and to mobilise its potential to reveal the foundations of modernity in this tracing of 'unquestionable' and often hierarchical epistemological boundaries. *Animism* was arranged as a dense essay-exhibition (likely influenced by Latour's own curatorial projects) where the historical materials were not presented as contextual backdrops to the artworks, nor

---

[331] Anselm Franke, *Animism: Notes on an Exhibition*, *e-flux Journal* n.36, July 2012, <https://www.e-flux.com/journal/36/61258/animism-notes-on-an-exhibition/> [accessed 18 February 2019].

[332] *Ibid.*

[333] *Ibid.*

[334] *Ibid.*

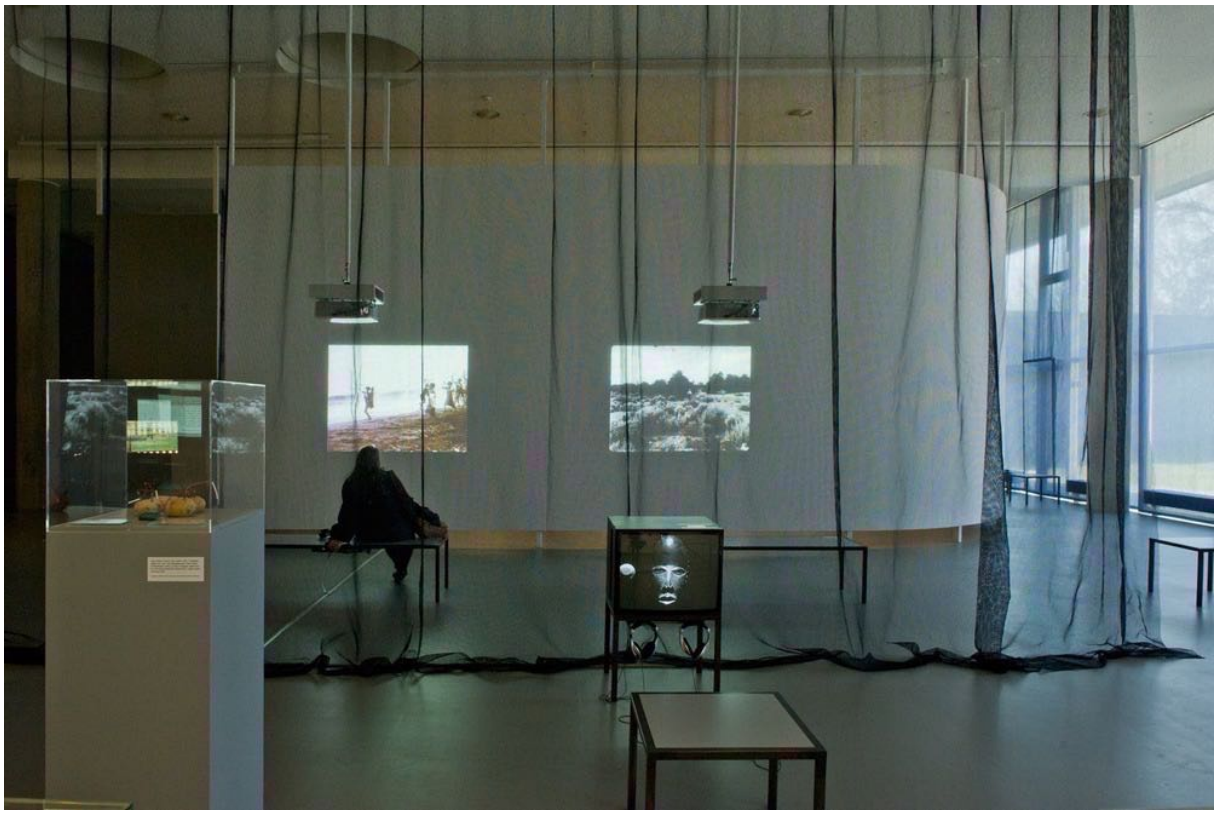

Fig. 40. *Animism*, Haus der Kulturen der Welt, Berlin, 2012, installation view with Victor Grippo's *Tiempo, 2da. versión*, 1991 (left) and *Les statues meurent aussi*, 1953, by Chris Marker and Alain Resnais (right, on the monitor).

were the latter meant to be read as commentaries or illustrations to the former. All the texts, including the ones collected in the two catalogues (published in 2010 and 2011 as two consecutive and complementary volumes), formed part of a thesis laid out by Franke in a way which could be read both as linear and synoptical, a curatorial treatise in which objects cross-referenced each-other in space and time as an organic argument, giving visitors the opportunity to zoom in and out at different levels and from different viewpoints.[335] This was partly helped by studied effects of architectural transparency, such as the thin black net curtains used at the version of the exhibition shown at the Haus der Kulturen der Welt (Berlin, 16 March - 6 May 2012), presumably in a subtle nod to the semi-transparent screens previously used in *Les Immatériaux* and *Making Things Public*.

For example, at the Haus der Kulturen der Welt visitors could encounter the film *Les statues meurent aussi* (1953) by Chris Marker and Alain Resnais next to Victor Grippo's potato-powered clock (*Tiempo, 2da. versión*, 1991), part of 'Chapter 2 - Objectification', while

[335] Anselm Franke (ed.), *Animism. Volume I* (Berlin: Sternberg Press, 2010); A. Franke (ed.), *Animism. Modernity through the Looking Glass* (Vienna: Generali Foundation / Cologne: Walther Koenig, 2011).

images of ethnographic films (appropriated as part of an artwork or displayed as stand-alone documentary) from a different section cropped up in the background. With these juxtapositions Franke also pointed at the exhibition format itself as a dispositif of colonial objectification, alongside anthropology and other ways of generating knowledge by distancing and classifying a phenomenon as 'other'. Nearby, a series of photographs by Candida Höfer from her ongoing series documenting ethnographic museums accompanied Jimmie Durham's *The Museum of Stones*, 2011/2012 — one of his humorous takes on museum displays — and Agency presented one of their archives of legal cases, *Assembly: Animism* (2011), in this case focusing on items that question binary distinctions of nature vs. culture and subject vs. object.

Elsewhere, Angela Melitopoulous and Maurizio Lazzarato's video installation *Assemblages* (2010), a portrait of psychotherapist, thinker and frequent Deleuze collaborator Félix Guattari and a highlight of the subsection of the exhibition titled 'Chapter 7: The Politics of Animism / Ecology / Nature', was visible through a curtain from the documentary section of 'Chapter 6: Soul Design', which featured Rorschach inkblot test cards and electroencephalographic equipment, books connecting occultism, primitivism and the birth of modern art and writings on the effects of mescaline by Henri Michaux. Further ahead one could see politically problematic early films by Edison and *The Skeleton Dance* from Disney's animated classic shorts *Silly Symphonies*, projected alongside Dada and Surrealist films by Hans Richter, Fernand Léger and Jean Painlevé displaying a fascination with animals, objects and their uncanny features. Of course, Freud's texts 'The Uncanny' (1919) and 'Totem and Taboo' (1913) also featured in the exhibition as key reference points crossing between disciplines and fields of knowledge.

There would be much to say about this multilayered and theoretically complex exhibition, but for the purposes of this thesis I shall focus on *Animism*'s frequent evocation in the art press at that time as symptomatic of an 'object-oriented *Zeitgeist*'.[336] It easy to understand the reasons for this association: OOP's and OOO's enthusiastic embrace of the agency and autonomy of things themselves, as they constantly interact with one another (though only ever on the surface level) in ways that are often rendered through vivid metaphors, combined with the upholding of the fundamental state of withdrawal and consequent inherent unknowability of all objects, were being labelled by some as a kind of neo-animist mysticism. In the case of Franke's interpretation of the notion, however, this link

[336] See for example JJ Charlesworth and James Heartfield, 'Subjects vs Objects', *Art Monthly*, n.374, March 2014, pp.1-4, esp. p.2. This has spilled outside the specialised art press and into critiques written by philosophers reacting top art's 'appropriation' of OOO/OOP: see Peter Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), p. 384, n. 494.

Fig. 41. *Animism*, Haus der Kulturen der Welt, Berlin, 2012, installation view with vitrines including documentary materials (foreground) and Angela Melitopoulous and Maurizio Lazzarato's three-channel video installation *Assemblages*, 2010 (background, beyond the net curtain).

has more to do with ANT's interest in non-human agency via *sociological* and *historical* interpretations of phenomena, than with the more speculative aspects of OOP and OOO which strive to give an ontological basis to genuine panpsychist commitments (e.g. via the theory of vicarious causation).

Franke himself does not make any explicit reference to OOO or SR in relation to the exhibition's theoretical underpinnings, though the influence of ANT on *Animism* was prominent, with Bruno Latour being referenced heavily in Franke's catalogue essays and even interviewed by the curator for *Volume I* of the catalogue (2010).[337] Isabelle Stengers also contributed a text to the second volume of the catalogue, *Animism. Modernity through the Looking Glass* (2011).[338] Latour's influence can be particularly felt in Franke's rejection of certain modern paradigms, particularly the presumed schism of culture from nature — a key

[337] Anselm Franke, 'Much Trouble in the Transportation of Souls, or: The Sudden Disorganization of Boundaries', in A. Franke (ed.), *Animism. Volume I*, 2010, pp. 11-51, and 'Angels Without Wings. A conversation between Bruno Latour and Anselm Franke', in *Animism. Volume I*, pp. 86-96.

[338] Isabelle Stengers, 'Reclaiming Animism', in A. Franke (ed.), *Animism. Modernity through the Looking Glass*, 2011, pp. 183-92.

point in Latour's book *We Have Never Been Modern*. Yet, judging Franke's exhibition in its own right and based on his own writings, one can hardly suspect him of being an active proponent of pseudo-animist ideas — and certainly not for the same reasons OOO authors found themselves having to defend the panpsychist implications of their ideas from accusations of animism and, as Peter Wolfendale put it in his harsh critiques of flat ontologies, 'ontological liberalism'.[339]

Even though Franke makes clear arguments for a critical and strategic decentering of human subjectivity, the exhibition itself never ventures very far from the epistemological fields it crucially problematises: anthropology and other products of modern scientific thought, disciplines that have historically been deployed in the service of asserting humanity's own central position with respect to the world. In Franke's theoretical propositions, the use of animism as a paradigmatic metaphor very much implies the presence of a human subject with respect to an 'other', both human and non-human, that is in turn humanised (in animist beliefs and in the aesthetic appeal of 'animation') or alienated (in the creation of definite boundaries and in the distancing of cultures which, conversely, appear to reject them hegemonic categorisations and rules). What counts for Franke is addressing those relationships between entities as a question of *perspective*, rather than as the positing of mutually exclusive opposites embodying complete and irreversible ontological difference (thing vs. human, 'us' vs 'them').

In what can be interpreted as a response to those who had begun to denounce anti-anthropocentric propositions as de-politicising tendencies, Franke observes that any position daring to reopen a conversation about animism (or, more in general, the agency of things) by presenting it as anything other than primitive superstition and/or irrational nonsense tends to be dismissed 'as the threat that we must exchange positions, for now we can only imagine ourselves as annulled, in the role of the inert, passive stuff that was previously the thing-like 'matter' out there.'[340] On the other hand Franke wants to reframe this as a more fluid, reversible dynamic, based on empathy and ethical commitment:

> To break open the double bind surrounding the modern relation to mediality requires that the active/passive nexus is conceived as a two-way street, a multistable picture whose figure/ground relations must at all times be available for inversion and the stereoscopic gaze. This

---

[339] P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), pp. 209-297, 379-383; cfr. R. Brassier, 'Deleveling: Against "Flat Ontologies."', in: V. Dijk, et al. (eds.), *Under Influence - Philosophical Festival Drift (2014)* (Antwerp: Omnia, 2015), pp. 64-80.

[340] Franke, *Animism: Notes on an Exhibition*, *e-flux Journal* n.36, July 2012, <https://www.e-flux.com/journal/36/61258/animism-notes-on-an-exhibition/> (accessed 18 February 2019).

> exchange of perspectives […] ultimately translates into actual possibilities to act on history. In the light of a contemporary situation that sees the displacement of boundaries from disciplinary institutions into the subject, this ability to account for and act on the active/passive nexus is perhaps a political demand par excellence.[341]

It should also be noted that, whereby the influence of Latour and ANT are explicitly acknowledged in *Animism* (both the exhibition itself and the accompanying publications and events), OOP and OOO do not seem to play any explicit role in this project; the only work by Harman mentioned in the bibliography is in fact his 2009 book on Latour, *Prince of Networks*. Lumping *Animism* with the wave of OOO-influenced exhibitions (whose scale I believe to have been generally overstated) is therefore incorrect and shows a lack of understanding of, or any serious engagement with, Franke's core theoretical position, concerned first and foremost with (onto)epistemologies of modernity, the resulting human praxes and their political consequences. If anything, *Animism* attempted to go beyond the hyperbolic propositions of flat ontology and the paradoxes created by its *complete* removal of boundaries by concentrating on an analysis of the very processes that create those boundaries in the first place.

In the case of artists and curators, showing an interest in the notion of non-human agencies seems to be enough, according to some critics, to become guilty by association of the crimes of *a*political assembly on the one hand, and/or naive vitalism on the other — regardless of the critical claims ultimately made by their overall projects, where the emphasis on objects is actually often complicated by its relation to a much wider and more nuanced discursive context. In the next chapter, I will present and analyse a range of such critical responses and mutual misunderstandings, treating these texts as integral parts of the discourses addressing NM/NR in relation to curatorial practices. In fact, as forms of cultural mediation, I would propose to interpret these as 'curatorial channels' in their own right, according to the interpretation of the category of the curatorial I will go on to outline in Chapter 7.

---

[341] *Ibid.*

Chapter 5.
'The return of the real – again!':
critical responses to the Art world's fascination with NM/NR

Since the start of this research project, only a handful of books have been published which explicitly investigate the intersections of new materialist, speculative and/or post-continental philosophies with aesthetics, the arts and related curatorial practices, all of them anthologies (Robin Mackay, Luke Pendrell and James Trafford (eds.), *Speculative Aesthetics,* 2014; Christoph Cox, Jenny Jaskey and Suhail Malik, *Realism Materialism Art*, 2015).[342] It is in no small part due to the lack of systematic overviews on these subjects that I have decided to undertake my own research, and as of 2023, this gap in the literature is yet to be filled. In this chapter I will analyse some of these key publications and a number of notable articles from art-centric periodicals. This review of the crossover literature and critical responses to the curatorial projects of the kind addressed in the previous chapters also serves here as a springboard for my own reflections on the (missed) opportunities, methodological shortcomings and theoretical quandaries this peculiar encounter of philosophy and art-centric curatorial discourses has generated.

The relevance of NM/NR for art, and vice versa, has proved to be in itself a rather controversial subject on both sides of the equation: on the art side, many of the essays dealing with these subjects appear to be dedicated at least partly to the justification or relevance of such a field of interest in the first place.[343] On the other hand, a strong distrust or flat-out rejection of the category of art, particularly of variously defined understandings of 'contemporary' art as a genre or (art) historical phenomenon, is a common trait in much of the crossover literature.

Critical backlash in art-centric Journals and Magazines, 2013-2016

Sceptical and negative critical responses to the influence of NM/NR — and particularly of OOP/OOO — on artists and curators gradually began to appear on art magazines, visual culture journals and other publications in the field of the humanities at large,

[342] See my p. 20, n. 18.

[343] Besides the references above, see for instance D. Joselit, C. Lambert-Beatty and H. Foster (eds.), 'A Questionnaire On Materialisms', *October*, Issue 155, Winter 2016, pp. 3-110.

most noticeably from around 2012 — the year of d(13). Exposure to Harman's 'branding strategies' often resulted in OOO being conflated with SR at large, which in turn often lead to discussions around its links with NM, e.g. via Meillassoux's identification as a 'speculative materialist' (a route facilitated by his inclusion in the 2012 book *New Materialism: Interviews & Cartographies* by Iris Van der Tuin and Rick Dolphijn).[344] And yet, despite the many avenues offering a relatively easy access to this sprawling network of diverse philosophical ideas, where the interest in 'objects themselves' and their agency was but one among many available subjects of radical enquiry, much of the Art-related critique remained solidly anchored around object-oriented positions and often unable to go very far beyond this somewhat blinkered 'thing-centric' aspect.

As I mentioned in Chapter 1, OOP and OOO were particularly well-suited to attracting the attention of the visual arts sector due to a number of factors: first of all, due to the notion of 'objecthood' already having a strong presence in art theory thanks to the likes of Michael Fried, in parallel with the continuing popularity of 'found objects' as artistic media and of sculptural practices influenced by material culture and 'thing theory'.[345] Another notable reason is the combination of Harman's accessible writing style with his special interest in art and aesthetics as integral parts of his philosophical commitments. Last, but certainly not least, Harman's eagerness to contribute to events and publications connected to the art world helped him establish his name and ideas as a frequent point of reference, particularly after the exposure he received with his involvement in d(13) in 2012.

Meanwhile, a growing number of authors connected to the visual arts began around this time to express various shades of distrust towards the rise of these novel 'philosophies of desubjectivisation', sometimes tackling the expanded field of NM/NR, sometimes chiefly focusing on OOO. Some critics considered these to be excessively anti-human(ist), nihilistic, even reactionary, and at turns either too rationalist or not rationalist enough — indeed, often found to be riddled with contradictions. These appraisals were frequently accompanied by a defence of the post-structuralist critical methods considered to be under attack — mostly with justifiable cause, though this aspect is an often misunderstood or overstated feature of NR/

---

[344] Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Ann Arbor, MI: Open Humanities Press, 2012). Dolphijn and van der Tuin exemplify the NM approach espoused at that time by the so-called 'Utrecht School', gathered around Rosi Braidotti at Utrecht University. For a time, the Utrecht School was a driving force for interdisciplinary research and debate around what I have described as the enlarged field of NM/NR, with van der Tuin chairing the research network (COST Action) 'New Materialism: Networking European Scholarship on How Matter Comes to Matter', along with co-chair Dr Felicity Colman, from 2014.

[345] Michael Fried, 'Art and Objecthood', *Artforum*, Vol. 5, No. 10 (June 1967), pp. 12-23.

NM, and one that many of the philosophers associated with NM/NR have since tried to correct.

This wave of backlash, which reached its peak between 2013 and 2016, was largely motivated by a general suspicion towards the political implications of NR and NM — or perceived lack thereof. Articles often isolated particular aspects of their philosophical positions to argue ideological inconsistencies, or conversely lamented the dearth and/or methodological curtailing of political engagement. SR's emphasis on anticorrelationism was often interpreted as a refusal on the part of these thinkers to offer solutions immediately applicable to human society and, by extension, considered irrelevant to artistic and curatorial practices dealing with outwardly socio-political content. For instance, in her *Frieze* article 'Speculative Realism in Germany', published in May 2013, Ana Teixeira Pinto expressed her concern for the latter's return to pure ontology, intentionally far removed from worldly human concerns: regarding 'the current surge of interest in 'speculation' and with Speculative Realism […] I cannot help [but] wonder whether, at this of all times, we shouldn't be less concerned with the truth of ontology and more interested in the social ontology of truth.'[346]

Meanwhile, the insistence on distorted readings of certain aspects of NR and NM in the art press, along with the widespread confusion between distinct and irreconcilable concepts and schools of thought, also gradually began to be acknowledged as problems by writers more attuned to the subtleties and variants of their distinct positions, while a general sense of fatigue and overexposure gradually set in.

Many responses from around this time focus specifically on a purported obsession with inanimate objects *in themselves*, often in direct response to exhibitions such as *Animism* (see Chapter 5), d(13) and *The Universal Addressability of Dumb Things*, a group exhibition on 'techno-animism' curated by artist Mark Leckey (various UK venues, 2013), whose exhibition catalogue explicitly mentioned 'Latour's network-actor theory and a growing number of object-oriented thinkers' in relation to Leckey's interest in 'the agency of things'.[347] Take for example the article 'Indifferent Objects' by Laura McLean-Ferris, published in the July-August 2013 issue of *Art Monthly*:

---

[346] Ana Teixeira Pinto, 'Speculative Realism in Germany', *Frieze*, May 2013, <https://frieze.com/article/real-deal> [accessed 3 March 2019]. This article took its cue from Alberto Toscano's essay 'Against Speculation, or, a Critique of the Critique of Critique', in L. Bryant, N. Srnicek and G. Harman (eds.), *The Speculative Turn*, pp. 84-91.

[347] Erik Davis, 'The Thing is Alive', in M. Leckey (ed.), *The Universal Addressability of Dumb Things*, exh. cat. (London: Hayward Publishing, 2013), p. 91. On this exhibition and its connection to OOO, also see Maria Walsh, 'I Object', *Art Monthly*, no. 371 (Nov. 2013), p. 11.

> forget human, embodied experience […]. It doesn't matter anyway – the world, an object too, goes on without you. The return of the real – again!
> Aside from some really serious problems regarding difference, what has happened to agency? Where can we step in and change things or protest in a system of objects? […] Care is the responsibility of humans, and even in an era of disembodiment we still have bodies, and these bodies and their experiences remain important – now perhaps more than ever. So it is for these reasons that I find it difficult to accept that these object-based systems, or what I understand of them currently, point the way forward.[348]

There are indeed very valid reasons for questioning the more explicitly desubjectivising and 'flat-ontological' tendencies of ANT, OOP/OOO and Bennett's strain of NM. For instance, Peter Wolfendale has reframed this position as a kind of 'ontological liberalism' or 'ontological egalitarianism'. The issue, he argues, is that by dissolving all boundaries between entities, and therefore between agencies, it becomes difficult to establish what it is that should motivate one to act in a principled manner. When should one stop being compassionate and start antagonising ('should we sympathise with the plight of smallpox, and if not, why not?')?[349] We are back once again to the question of the boundaries as addressed by Anselm Franke in his *Animism* project. However, whereby ANT offers at least the possibility of looking at the relations and power dynamics between actants, of negotiating a *Dingpolitik* where artworks and curatorial discourses can also play an integral part, OOP offers very little in the way of an ethical grounding through its analysis of the limited kinds of relations that are possible between objects of any kind, beyond superficial prehension.

In her article 'The Anti-Political Aesthetics of Objects and Worlds Beyond', published on *Mute* in July 2013, Svenja Bromberg has pointed out that subjectivity and human agency are not necessarily a given, a kind of universal human privilege that one can easily choose to disavow or question: certain human beings are treated as Others, objects, less-than-human, and systematically denied their political agency. From this viewpoint, assuming a position that further devalues their subjectivity and agency, however in good faith this may be, can hardly

---

348 Laura McLean-Ferris, 'Indifferent Objects', *Art Monthly*, July-August 2013, p.8.

349 P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes*, p. 383.

be considered a useful course of action in the face of the continuing hegemony of 'reified capitalist social relations'.[350]

Bromberg begins by admitting that it is possible to read the 'return to the object' — especially the most alien, weirdest properties of things themselves of which OOO is particularly fond — as a reaction against post-Fordist cooptions of quintessentially human, subjective modes of being as commodity forms:

> We are at a point where our faith in the powers of the subject to critique and subvert reality, as grounded in Enlightenment theory, has been truly defeated, not least by capitalism's now much discussed ability to demand precisely subjective – emotional or affective – investments in its exploitative machinery. […] But if capitalism wants us to be ever more alive, happy and truly engaged in shaping our own lives on the basis of the endless possibilities this world has to offer, then the critique offered by vitalist theories, aesthetic modes such as Bourriaud's 'relational aesthetics' and more critical forms of emancipated spectatorship against an objectifying and alienating capitalist reality appear assimilated and defused.[351]

Enter the de-subjectivising tendencies Bromberg identifies with OOO and NM, whose solutions allegedly 'no longer lie in the critique of these relations, but rather in a nonrelational and un-dialectical gesture that posits the world of matter against the man-made disaster of a neoliberal existence.'[352] Reaching for the otherness of things thus becomes a way of subverting these mechanism of objectification, trying to reach for a dimension so alien to human concerns, so absurd and unproductive (to us) that it cannot even be fully recuperated by cognitive capitalism.

For Bromberg any flat-ontologist attempt to bring non-human actants into the level of political discourse as equal stakeholders, without first explicitly and directly addressing the reasons behind the existing imbalances and underlying hierarchies of value, simply 'amounts to a naïve attempt at redefining politics' which refuses to face the fact that 'any such horizontal relationship is foreclosed from a democracy that exists within a capitalist state in which

---

350 Svenja Bromberg, 'The Anti-Political Aesthetics of Objects and Worlds Beyond', *metamute*, 25 July 2013, <http://www.metamute.org/editorial/articles/anti-political-aesthetics-objects-and-worlds-beyond> [accessed 4 March 2019]. Cfr. Jörg Heiser, 'Against Speculation. Philosophical manoeuvrings and political realities', *Frieze d/e*, no.15, Jun.-Aug. 2014, p. 4; also published on *Frieze.com*, <https://frieze.com/article/against-speculation> [accessed 17 March 2019].

351 S. Bromberg, 'The Anti-Political Aesthetics of Objects and Worlds Beyond'.

352 *Ibid*.

humans, with their powers and needs, are necessarily divided from a relationship with nature and the political realm that is not mediated by capital and class.'[353]

Overall, Bromberg's essay takes a polemical stance against the NM/NR tendency towards theoretical abstraction and reads as a defence of content-based, didactic art forms. For instance, Bromberg critiques the influence of Meillassoux on artistic discourse as lacking an outwardly political message and leading instead towards what she sees as a position of nihilistic resignation. She concedes that the thought of absolute contingency — as channeled through art — makes it possible to think of a future that is open to change; however, if that thought is not rooted in humanity's own agency to effect political change but rather in a cosmic scope that is radically beyond the human, the consequences would be to 'make capitalist social relations and our human struggles appear […] petty, inane and merely from this world.'[354]

It is true that Meillassoux arguments don't lend themselves to calls for political action, but that is not their aim; by that measure, neither do they make any claims that resistance and proactive commitment to enacting change in the present, on a human scale, are futile. In my view, blaming philosophies foregrounding a rationalist cosmic humility of having a depoliticising influence on artistic practice is not dissimilar from accusing, say, logic or the scientific method of lacking outwardly political applications: that is not what science is for — though its results, once interpreted, can and indeed *must* serve as the bases on which socio-political change should be enacted. What humans decide to do with a deeper knowledge of how the cosmos works will perennially remain a politically open matter — and one that, admittedly, other philosophies (beginning with ANT and NM) are much better suited to facilitating.

Ultimately, I believe that the wider reverberations of NM/NR, in art and beyond, have resulted precisely in a *heightened awareness* of a subject's responsibility, of the weight of one's presence in and relationship to the world. Philosophies positing the ontological possibility of reality being knowable beyond human access do not *exclude* humans (and their minds, including beliefs and opinions) from affecting and playing a part in that same reality. Again, this is a false dichotomy: shifting the focus (momentarily) away from the subject, from epistemology or from human access does not necessarily mean denying their validity or relevance in absolute terms, especially when this position is upheld speculatively in order to question and irritate anthropocentric methods. I suspect that this kind of critique resulted

---

353 *Ibid.*

354 *Ibid.*

from a lack of engagement with the positions of NM authors as valid counterparts to SR's brand of inhumanism, positions such as Haraway's and Braidotti's which far more overtly pointed towards the necessity of applying the lessons of anti-anthropocentrism to the sphere of ethics and politics. What was missing from the critical literature around this time was a nuanced understanding of the longer history of NM as a context for generating creative friction against the excesses of SR.

Object-oriented art and 'curatorial technique': Peter Wolfendale on Graham Harman's art-worldly appeal, 2014

Around this time, some writers specifically started to question exactly what it was that supposedly made OOO so different, so appealing to artists and curators, besides some useful catchy terms and vivid metaphors. One candid answer to this question had come a few months earlier from philosopher Peter Wolfendale, who in 2014 had published the book *Object-Oriented Philosophy. The Noumenon's New Clothes*. In this extended exegesis of a number of Harman's writings, Wolfendale attacked OOP — and, to a lesser degree, OOO — on a granular scale, from the insistent use of bombastic rhetorical tools (such as the endless parataxis of 'Latour Litanies') to what he considered to be a dubious application of philosophical terms and methodologies, systematically eviscerating individual aspects of its claims, including a harsh critique of flat ontology (as mentioned in the previous section).

Wolfendale dedicates a few pages to the relationship between art and OOP/OOO, described as a reciprocal appropriation of sorts based partly on a superficial mutual attraction, partly on a more or less cynical recognition of the bilateral benefits coming from this marriage of intents. Of course, as I have mentioned, Harman has a penchant for applying branding strategies to philosophy (like taking full advantage of the catchiness of the SR moniker even after it had lost all of its already fragile meaning), and the economic system revolving around art provided him with precious exposure to a sometimes naively curious public perennially hungry for novelty. In turn, this exposure led to Harman giving more talks, thus gaining more public recognition, more opportunities to publish, even more talks, and so on for a few years, until this hype cycle got exhausted and OOP/OOO were not so new anymore. As for the art world's initial attraction towards OOP/OOO, Wolfendale also identifies 'the foundational status that Harman grants to aesthetics' as a primary factor: 'Beyond providing art with a seeming metaphysical significance, the convergence of philosophical speculation and artistic

appreciation in the category of allure suggests that artists can do philosophy simply by doing art.'[355]

Interestingly, Wolfendale pinpoints one of the reasons for the timeliness of OOP as a crutch for art in the rise of what he calls 'curatorial technique', essentially a derivate of the art of contextual re-framing initiated by Duchamp, relying on the institutional legitimacy of the ready-made (and of the de-skilling of post-conceptual artistic practices) as a medium for art:

> the cultural inertia of the gallery as an institution allows one to counterfeit [any] cognitive affect, not merely by bypassing the specific conceptual frame the artists themselves intend, but by making any determinate conceptual frame unnecessary. This **placebo affect** is generated by encouraging the spectator to supply their own cognitive stimulation, on the basis that this is how one is supposed to think/feel when one encounters an artwork.[356]

Essentially Wolfendale laments the fact that post-conceptual practices lean into the kind of signification that happens at the boundaries between art and not-art — precisely on the relational mechanisms that, as I will argue in Chapter 6, have always been at play in artistic practices throughout history, but were dissimulated by notions of autonomy based on a narrow understanding of *techné* as purely manual skill based in mimetic effects.[357] Now, Wolfendale argues, 'Object-oriented art exemplifies the technical shift from composition to framing: from *skill in producing genuine works of art* to skill in interfacing autonomous objects with the artworld matrix' (my emphasis).[358] OOP lends a further level of conceptual legitimacy to the placement of objects and materials in a curatorial container that supposedly isolates them from 'their native contexts', as a kind of metaphor for the objects' withdrawal, autonomy and allure: the conceptual reduction of any object whatsoever to a self-contained artwork can now be described a philosophically-motivated artistic gesture pointing at 'objects in themselves'.

> The aesthetic novelty of OOP consists in providing a retroactive justification of this artistic/curatorial practice: the conceptual paucity that might be interpreted as laziness if it were not thinly veiled in various ways can now be openly portrayed as admirable restraint, insofar as it

---

[355] Peter Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), p. 384.

[356] *Ibid.*, p. 387. Emphasis (bold) in the original text.

[357] See my Chapter 2.

[358] P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes*, p. 388. For a deeper insight into Wolfendale's definitions of art, craft, beauty and the tension between their utility and purposelessness, see his essay/book review 'The Ends of Beauty: On Sinead Murphy's *The Art Kettle*', *Pli: The Warwick Journal of Philosophy* 24, 2013, pp.215-29.

> does no more than highlight the object's own allusiveness. […] Harman's work has transformed the term 'object' into a new constructive shibboleth whose exoteric concreteness ('to the objects themselves!') is *openly vacuous* ('everything is an object').[359]

Though I may not share Wolfendale's views on post-conceptual art, I also believe that OOP and OOO truly have very little to say about Artworks other than remarking on their ontology *qua* objects and on how they are particularly apt at coming across as withdrawn. With their exhortations to neither undermine nor overmine the object and their ultimately narrow interpretation of the possibilities of aesthetics, an analysis of artistic practices — and ultimately of any form of cultural production — steeped in OOP/OOO can only ever remain stuck between the properties of artefacts as objects and an emphasis on their nature as weirdly alien and supposedly unaccessible entities. Attempts to attain an 'other knowledge' through these objects is foreclosed in principle and all form, content and intent pertaining to an artwork has to be bent into the shape of a justification or illustration for a particular facet of this foreclosure. OOP is too preoccupied with differentiating itself from other philosophies and with denying certain forms of knowledge to lend itself to a truly transdisciplinary understanding of reality beyond its own rigidly circumscribed commitments.

The *October* 'Questionnaire on Materialisms', 2016

The publication of 'A Questionnaire On Materialisms' on the Winter 2016 issue of *October* (no.155) can be considered to be the apex both of the penetration of NM/NR into the art world and of the crisis that followed its critical appraisal.[360] Although *October*'s reputation as a source of cutting-edge art criticism has somewhat waned since the turn of the millennium, the moment its editorial board acknowledges the influence of a cultural phenomenon with a 'questionnaire issue' can nonetheless still be considered a good indicator of that phenomenon's cultural currency. This is possibly precisely because of the fact that *October* is the torch-bearer of a certain brand of post-structuralist, psychoanalytically-inflected art historical approach, by now fully institutionalised and considered old-fashioned by most:

---

[359] P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes*, pp. 388-389. Emphasis (italics) in the original text.

[360] D. Joselit, C. Lambert-Beatty and H. Foster (eds.), 'A Questionnaire On Materialisms' , in *October*, Issue 155 (Winter 2016), pp. 3-110.

its attention becomes a sign of imminent institutional recuperation, a marker of the decline of the disruptive, residual potency of an emerging approach or discursive strand.[361]

Moreover, the way this slippery subject matter was discussed in the various contributions sent in response to the questionnaire betrayed a general sense of weariness and self-consciousness, signalling the necessity of a deep, systematic reappraisal (one that never materialised beyond the questionnaire itself, however). Part of this ennui was likely due to the formulation of the questionnaire's own prompt, another instance of attempting to gather too many ideas under a reductive and potentially misleading umbrella, while clearly emphasising some core aspects over others through a number of leading questions:

> Recent philosophical tendencies, characterized as "Actor-Network Theory," "Thing Theory," "Object-Oriented Ontology," "Speculative Realism," and "Vibrant Materialism," have profoundly challenged the centrality of subjectivity in the humanities […]. At least four moves characterize these discourses:
> • Attempting to think the reality of objects beyond human meanings and uses. This other reality is often rooted in "thingness" or an animate materiality.
> • Asserting that humans and objects form networks or assemblages across which agency and even consciousness are distributed.
> • Shifting from epistemology, in all of its relation to critique, to ontology, where the being of things is valued alongside that of persons.
> • Situating modernity in geological time with the concept of the "Anthropocene," an era defined by the destructive ecological effects of human industry.
> Many artists and curators, particularly in the UK, Germany, and the United States, appear deeply influenced by this shift. Is it possible, or desirable, to decenter the human in discourse on art in particular? What is gained in the attempt, and what—or who—disappears from view? Is human difference—gender, race, power of all kinds—elided? What are the risks in assigning agency to objects; does it absolve us of responsibility, or offer a new platform for politics?[362]

Though a valiant attempt at an outline that applies to the whole sphere under analysis, the way these 'four moves' are presented is a dangerous generalisation to make, even when clearly flagged as such:

---

[361] R. Williams, 'Dominant, Residual, and Emergent', in *Marxism and Literature*, pp. 121-26.; see my p.101 and n.240.

[362] D. Joselit, C. Lambert-Beatty and H. Foster, introductory page to 'A Questionnaire On Materialisms', *October*, Issue 155 (Winter 2016), p.3.

> We wonder if it is possible to reconcile the different positions we've outlined, many of which seem to contradict one another, in order to theorize a new materialism or objectivity. If it isn't, what is at stake in those irreconcilable differences? Which, if any, are the productive materialisms for making and thinking about art today?[363]

One of the key problems lies of course in assuming the primacy of materialism over realism, or their complete interchangeability. Suhail Malik has been especially vocal in denouncing this fallacious tendency in his critiques of what he calls 'hegemonic neomaterialism'.[364] As he puts in his contribution to the questionnaire, which takes the form of a dialogue with Christoph Cox:

> what has been perplexing is how and why some strands of SR, primarily object-oriented ontology, have been assimilated to developments of poststructuralism from the mid-2000s, particularly materialist feminism, affect theory, some queer theory, and performativity theory. These theories certainly share with SR an interest in breaking up the centrality of the human actor and extending the world of relationality beyond its historically privileged agents (from all kinds of subjects to objects); but their other basic commitments are wholly incompatible with SR. It's this confused hybrid of theoretical stances that the word "neo-materialism" now predominantly signifies in contemporary art, defanging and, worse yet, expropriating SR's most challenging demands on the orthodoxies of both contemporary art and theoretical-academic hegemons.[365]

Malik's radical perspective was that of a necessity for art to leave behind its correlationist paradigms, which are effectively at the core of the various definitions and understandings of contemporary art: a phenomenon of aesthetic and intellectual prehension, highly subjective and based in direct sensual experience. Therefore for him the association of speculative realism with affect theory, feminist notions of embodied knowledges and any echo of Deleuzian vitalism, let alone any residual trace of phenomenology and the very notion of aesthetics as a philosophy foregrounding the senses, hindered the possibility of establishing a truly realist art, or as he put it elsewhere 'art as a rational exercise that eviscerates all lingering

---

363 *Ibid*.

364 Suhail Malik, 'Dispossed and Watered-Down. Hegemonic Neomaterialism and its Limitations', *Springerin: Hefte für Gegennwartskunst*, n.22, January 2016, pp. 48-50.

365 Malik in 'Christoph Cox and Suhail Malik', in 'A Questionnaire On Materialisms', p.26.

experiential conditions. Concept not feeling, rational and formalized not wanton and uncaptured, indifferent and impervious to you.'[366]

At the other end of the scale, contributors to the questionnaire closer to NM positions lamented the desubjectivising extremes of certain anti-humanist philosophies, either because politically useless or, on the contrary, dangerously reactionary, in ways comparable to some of the positions discussed above.

Overall, the questionnaire may be most useful precisely in highlighting the most contentious and irreconcilable positions assumed to be connected in a network of sorts (comparable to I have called the NM/NR nexus in this text), focussing on precisely its relevance to the expanded field of art — or lack thereof. Each of the contributors offered a necessarily partial, personal interpretation of the brief, which made it possible to offer counterarguments to each of the presented points based on the theoretical output of another featured contributor. As a consequence, when taken as a whole the questionnaire oscillates wildly between contradictory positions — just as the editors predicted.

For instance, the stances of figures defending an object-centric approach ('thing theorists' such as Bill Brown and Jeff Dolven), often defined in opposition to the socio-centric optics of historical materialism (see Harman, who spends most of his contribution pointing out the incompatibility of OOP/OOO and all materialisms), clash with those of authors lamenting their paradoxically anthropomorphising tendencies (Alexander Nemerov, Christopher S. Wood) or pointing out the fundamental impossibility and absurdity of eliminating the human dimension from both art and philosophy (Kerstin Stakemeier, McKenzie Wark).[367] Others, on the other hand, foreground the relational nature of certain strands of new materialisms in order to stress the inseparability of the human and non-human spheres (Emily Apter, Giuliana Bruno, Spyros Papapetros). Some go down the path of denouncing the excesses of an anti-humanist, extra-historical perspective as potentially complacent with the dehumanising tendencies of the dominant capitalist hegemony (Julia Bryan-Wilson, Andrew Cole, Alexander R. Galloway, Gregor Quack); others object to the emphasis put on the novelty of these materialisms and realisms, remarking on continuities with genealogies that they see as being downplayed by claiming their territory as *new* (Andrew Cole, André Rottmann) and including — in explicit relation to art — the combined roles of science, material culture, phenomenology and historical dialectics in shaping media studies

---

[366] Malik, 'Dispossed and Watered-Down. Hegemonic Neomaterialism and its Limitations'.

[367] 'A Questionnaire On Materialisms', B. Brown, p. 11.3; J. Dolven, pp. 32-3; G. Harman, p. 51-2; A. Nemerov, pp. 71-2; C. S. Wood, pp. 105-7; K. Stakemeier, pp. 98-100; M. Wark, p. 103.

and social art history (Julia Bryan-Wilson, Patricia Falguières), as well as several 'rematerialisations' and 'returns of the real' that can be traced in postwar artistic practices more or less independently of the dominant philosophical trends of the day (Alex Kitnik, André Rottmann).[368]

Most pointedly and incisively, some authors denounce the insistence on the absolute or radical novelty of recent materialisms and their holistic, ecologically-minded tendencies as a symptom of cultural myopia and privilege, making a point of acknowledging the parallels with ancient, systemically overlooked and disparaged knowledges that many — predominantly white and male — NM/NR thinkers had failed to recognise (Julia Bryan-Wilson, Mel Y. Chen, T.J. Demos, David T. Doris).[369] It is important to stress once again that throughout the preceding critical literature discussed above, the feminist genealogy of new materialism was not highlighted or even mentioned nearly as often as SR 'proper' or a vague, baggy definition of NM implicitly including and subordinated to the influence of SR. Despite Malik's protestations, the *October* questionnaire appeared at a time when that tide was just about to turn in favour of MN, as the SR hype had run its course and even Harman's art-world fans had begun to grow tired of his repetitive lessons in the autonomy and indifference of objects-in-themselves.

However, by 2016, the warnings of those critics less than impressed by the lack of explicit political commitments in this still confusingly baggy understanding of the NM/NR nexus and its influence on the art world seemed increasingly hard to dismiss. Far right political movements had gained more and more worldwide institutional strength and presence in cultural discourse, along with the culture wars fuelled by the reactionary rhetorics accompanying them at the time of Trump's election in the US and the Brexit referendum in the UK. Meanwhile, the urgency and clarity of the activist strategies of Black Lives Matters (and later #MeToo) proved to possess an ability to mobilise masses and vocalise dissent unlike anything the mainstream art world could ever dream to catalyse or even imitate from the safety of its white-walled echo chambers.

Against this background, pedantic debates on weird realisms and ontological minutiae in relation to artistic practices seemed rather futile and tone-deaf, even to those who fundamentally agreed with aspects of their philosophical premises. The general tone of these debates swiftly shifted towards stressing the political importance of subjectivity and human

---

368 *Ibid.*, E. Apter, pp. 4-5; G. Bruno, pp. 14-5; S. Papapetros, pp. 76-8; J. Bryan-Wilson, pp. 16-18; A. Cole, pp. 23-5; A. R. Galloway, pp. 45-7; G. Quack, pp. 80-2; A. Rottmann, pp. 89-93; P. Falguières, pp. 38-40; A. Kitnik, pp. 64-6.

369 *Ibid.,* J. Bryan-Wilson, pp. 16-18; M. Y. Chen, pp. 21-2; T.J. Demos, pp. 29-31; D. T. Doris, pp. 33-4.

agency in the here and now, with the consequence of finally filtering much of what remained of SR (mostly OOO) out of the art press. When anti-anthropocentric discourses gradually began to re-emerge in the art press after 2016, they did so with a decidedly relational, environmentalist, ecofeminist slant, with particular attention given to ancestral, indigenous knowledges as precedents for renewing humanity's relationship to its habitats as a much deeper material entanglement. The COVID-19 pandemic also provided a stark reminder of the the interrelation of human politics, planetary matters-of-concern and the agency of non-sentient entities, as if to prove the continuing relevance of thinking beyond the human and beyond the intuitive boundaries of established, fixed subjective identities.

NM/NR thus continues to resonate with intersectional and holistic understandings of the matters at stake in the present regimes of climate crises, systemic racisms and enduring class inequality. The 2016 shift has contributed to giving more relevance to strands and aspects of NM which do not foreclose or downplay *human* political agency, but rather invite that kind of engagement in ways that are consistent with distributed, networked materialist (ethico)ontoepistemologies where the human dimension is irreversibly enmeshed with the rest of the non-human universe, leading to a deeper understanding of the concepts of Anthropocene/Capitalocene and to the formulation of philosophically consistent correctives and conducts. Conversely, *pace* Malik, in the past few years the art milieu has shifted even further away from strong anticorrelationism, and the influence of SR is remembered today as little more than a passing curiosity, too incompatible with the way art *processes* reality (indeed, incompatible with the very fact that it does) to be of much practical use to it.

Chapter 6.
Sapience, 'art', *aisthesis*

So far, this thesis has offered a historical analysis of a historically situated network of influences between NM/NR and curatorial practices *primarily construed as platforms for the presentation of (contemporary) artistic practices*, even when embracing overtly transdisciplinary approaches. The reason for me to maintain a connection with the visual arts and their modes of mediation in my case studies is not simply limited to my academic and professional interest in art curation and its theories and histories: rather, I wanted to grapple with the role art has played in channelling NM/NR ideas, especially in relation to other forms of cultural production and epistemological spheres. Since the hybridisation of methodologies and the stretching of epistemic boundaries are key principles of NM/NR, my intent was to look at examples of curatorial practices allowing art, philosophy and science to intersect or at least converse with one another: it is their *potential for diffraction* that interests me, the kind of layering of frames and filters that curatorial strategies and formats can facilitate and amplify.

There is however a lot that this approach to the analysis of curatorial practices implies: even when layered, these frames and filters still come with a disciplinary baggage attached, beginning with inherited definitions. The next two chapter will try to look at some key terms the previous chapters took for granted, at some of the received meaning they bring with them and at how this can be taken apart or cut across to reveal different ways of operating in relation to one another. The aim is not to reject and throw away their baggage, but to see if NM/NR ideas can cut through them in different ways. Looking more closely at certain terms can help reveal the joints of those familiar disciplinary frames, and to loosen them in order to allow points of intersection that would otherwise remain hidden.

A starting point may be to go back to the notion of anti-anthropocentrism, and its root in the idea of *Anthropos,* understood as an individual of the species *Homo sapiens*. Already this definition implies that what characterises modern humans is their *sapience*, a uniquely complex kind of knowledge. Our ontology is already inextricable from epistemology — and indeed, it is that sapience, that self-aware knowledge that allowed us to come up with a definition to identify with. From this point of view too, we're onto-epistemological beings. And things get even more interesting if we consider that the Latin verb *sapere* means 'to be wise,' but also 'to have the ability to sense, to discern' (connected to the literal transitive sense of 'to

taste of'): to know is also *to sense*.[370] It is the way we derive knowledge from our senses that makes us what we are. Trite as it it, the method of looking up a word's etymology has already cut the idea of the *Anthropos* open, ready to be examined through the intersection of ontology, epistemology and *aesthesis*.

It is however *anti*-anthropocentrism that I am interested in: a paradigm shift by which that notion of sapience that makes us unique is precisely *not* the centre of the universe of meaning in which we live. Yet, as Haraway would point out, it is important to acknowledge our position, to situate knowledge at the observation point. The human culture that makes us is *a* vantage point.

An obvious issue immediately emerges in any attempt to relate the notion of anti-anthropocentrism to complex products of human culture such as art, science, philosophy and curatorial practices, as this thesis set out to do, precisely because they constitute forms of expression that are widely thought to be unique to our species. Historically, cultural artefacts such as art, philosophy and science have often been cited as foremost proof of the exceptionality of human intellect, the crowning achievements of a species that deserves to consider itself superior to — if not entirely distinct from — the rest of nature, based on a certain understanding of intellectual complexity (e.g. 'genius') as the single agent of linear, unidirectional, teleological progress.[371] To offer a notable example from the history of philosophy, this idea was expressed in Hegel's idealist historicism, centred on the mind as self-perfecting *Spirit*; the role played by art in this paradigm is that of a step towards the freeing of Spirit from the animal — which is to say the *material* and *embodied* — side of humanity.[372]

On the other hand, a widespread 'naive' understanding of progress consists in electing an idealised, disembodied concept of 'civilisation' as a kind of cosmic *telos*. This concept tends to be used as a way to justify the interests of powerful hegemons as the innate interests of humanity at large — e.g. prosperity, endless growth, distinction from and dominance over 'nature' being considered markers of primacy/superiority —, in order to maintain the *status*

---

[370] 'Sapient', Merriam-Webster.com Dictionary, *Merriam-Webster*, <https://www.merriam-webster.com/dictionary/sapient> [accessed 2 March 2024]; 'sapio', *Wiktionary,* https://en.wiktionary.org/w/index.php?title=sapio&oldid=78170883 [accessed 2 March 2024].

[371] For Kant, genius is a kind of freedom from the rules of nature, and therefore a justification for humanity to consider itself as (capable of becoming) supra-natural. At the same time, however, it is described an 'innate mental predisposition (*ingenium*) *through which* nature gives the rule to art'; Immanuel Kant, *Critique of Judgment*, trans. W. S. Pluhar (Indianapolis, IN: Hackett, 1987; orig. 1790), p. 174 (§46:307). On this paradox, see Michael Haworth, 'Genius Is What Happens: Derrida and Kant on Genius, Rule-Following and the Event', in *The British Journal of Aesthetics*, Volume 54, Issue 3, July 2014, pp. 323–337.

[372] Georg Wilhelm Friedrich Hegel, *The Phenomenology of Spirit*, trans. and ed. T. Pinkard (Cambridge: Cambridge University Press, 2018; orig. 1807).

quo of uneven distribution of resources and political agency.[373] In this view, the purpose of progress is acritically understood to be the perpetual preservation of *Homo sapiens* in its current form, the only desirable change being a limitless capacity of improving its average standards of living. Humanity is posited as a sort of fixed, never-changing entity that hovers above nature, absolutely exceptional among animals because of its intellectual faculties, yet still anchored to certain biological features in order to retain its core identity as a species intact.

To express anti-anthropocentric viewpoints through artistic and curatorial practices without challenging the premises of these perspectives, in which 'art' is rarely questioned as a human prerogative, can only come across as an inherently paradoxical endeavour. Is there a way — or a *need* — to resolve this conundrum in order to speak of certain cultural forms as non- or anti-anthropocentric?

In this section I will offer some working definitions for a number of key terms which I propose to rethink and reframe in order to navigate this apparent impasse. This process requires me to dissect my arguments and outline exactly what I mean by such loaded notions as 'sapience', 'culture', 'art' and 'aesthetics', in an attempt to describe them afresh in relation to the concerns of the NM/NR philosophies discussed above. The definitions to follow are for the most part my own elaborations and interpretations rather than attempts to relay other thinkers' existing schemata of thought. The remainder of this chapter is thus a formulation of some of this thesis' *underlying* hypotheses, which reflect my positions but not necessarily those of the curators and authors discussed in the previous chapters.

Artefacts and human exceptionalism: on sapience and semantic boundaries

Although I agree with their overall anti-anthropocentric aims, I do think neomaterialist positions against human exceptionalism stand on more solid ground when they provide consistent theoretical explanations for complex intellectual faculties, and specifically for human sapience. It is not quite enough to posit that there is *absolutely* nothing special about humanity, no justification for separating rational mindedness from dumb matter, without attempting to explain just how human behaviours and communicative faculties can result in cultural practices such as 'art' and 'philosophy': in other words, how to interpret the

[373] See for instance Francis Fukuyama's theory as set out in *The End of History and the Last Man* (London: Penguin, 1992), settling for neoliberal capitalism as the self-fulfilling prophecy of the 'end of history', and F. Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Straus and Giroux, 2002).

fact that our species *does* articulate matter in ostensibly unique ways, for the purpose of expressing and communicating thoughts that appear to extend well beyond primary biological functions (such as self-preservation and reproduction, including signalling one's presence, external dangers to members of one's community, one's suitability for mating and so forth).

In the NM paradigm, the emergence of human intellect as a complex form of self-aware intelligence can be explained as the cumulative result of material processes: evolution led to particular configurations of organic matter and relational behaviours, recurring through genetically encoded morphogenetic processes, which each individual perceives as aspects of 'human culture' (e.g. language, considered as the product of hard-wired habits expressing themselves as intersubjective exchanges, gradually transmitted and built upon from generation to generation). When considered as a Baradian 'apparatus', intellect is the result of complex processes in which *Homo sapiens*' 'consciousness' — another emergent property irreducible to the nervous system alone — plays a critical yet partial role.

In Chapter 1 I have explained how Barad, for instance, considers matter and meaning to be inseparable.[374] Extrapolating from her formulations in my own words, artworks and philosophical texts can therefore be thought of as instances of ontoepistemological phenomena that *become* recognisable as such through iteration, within a chain of entangled phenomena which include embodied apparatuses of sensual prehension, feedback loops of electrochemical responses in a human's organism and their interpretation, resulting in further chains of affective and mnemonic responses. This is all *from the perspective of the cognitive faculties of a situated subject* — itself another ongoing iterative material phenomenon emerging from its own ontoepistemological chains of becoming. As cultural phenomena are inherently intersubjective, they are always also entangled with other subjects, other apparatuses, other phenomena: they offer a kind of *contact between phenomena* existing within their own distinct chains of agential cuts. As part of a chain of ontoepistemological events partly modified by human intervention, the *transmission of knowledge* is one such kind of contact: aspects of the cosmos made intelligible, i.e. recognisable *qua* knowledge for exchanging with fellow humans and collectively building upon.

I consider agential realist ways of interpreting reality to be consistent with what we know and understand of physics, biology and cognition through various interconnected epistemological fields based on the methods of science. Agential realism however does little to explain *how* certain complex semiotic and cognitive faculties emerge *uniquely* (as far as we are able to tell) in the material assemblages we call humans, nor how we are supposed to explain

[374] See my pp. 37-42.

the distinction between sentience and sapience. How are humans *not* exceptional, yet uniquely capable of asking this very question — and thinking about it through artefacts?

In his 2018 book *Intelligence and Spirit*, Reza Negarestani is explicitly critical of dogmatic monisms and insists on the importance of *mind* — what he calls 'geist', in reference to Hegel's Spirit — precisely as a disembodied view 'from nowhere and nowhen', a phenomenon emerging from a community of rational agents cumulatively channelling *intellect as a self-reflexive* (and *self-perfecting*) *property*, but ultimately abstracted and potentially separable from the animal bodies currently serving as its vehicle: quite the opposite of the materially embedded 'situated knowledges' endorsed by many matter-realists.[375]

Intelligence and Spirit's definition of 'sapience' as the cause of humans' ability to think rationally and self-reflexively, along with its distinction from 'merely animal' sentience, is based on that of American thinker Robert Brandom, whose philosophy of language and mind (of analytical descent) has exerted a strong influence on both Brassier and Negarestani. In *Making It Explicit. Reasoning, Representing, and Discursive Commitment* (1994), Brandom laid out this difference by explaining sapience as one of the features characterising a shared identity, a sense of belonging not so much to a biologically-defined species but rather to a community of self-aware and 'reasonable' beings, described through philosophical arguments that function independently from existing definitions, and in fact test their logical boundaries:

> What would have to be true — not only of [other humans] but of chimpanzees, dolphins, gaseous extraterrestrials, or digital computers (things in many ways quite different from the rest of us) — for them nonetheless to be correctly counted among us? […] In understanding ourselves we should look to […] what we are able to *do*, rather than where we come from or what we are made of. […] 'We'-saying of the sort that might be of demarcational interest is not a matter merely of the production of certain vocables — indeed perhaps the relevant kind of attitude is not a linguistic matter at all. […] Making explicit to ourselves who we are requires a theoretical account of what it is in practice to treat another as one of us. […] [376]

While this may sound as an expansive logic, allowing to consider the set of 'sapient beings' as being theoretically larger than the set of 'anatomically modern humans', Brandom's distinction between sapience and sentience makes it very clear that sapience only applies to

---

[375] R. Negarestani, *Intelligence and Spirit,* pp. 21, 45, 54.

[376] R. Brandom, *Making It Explicit: Reasoning, Representing & Discursive Commitment* (Cambridge, MA: Harvard University Press, 1994), p.4.

entities capable of expressing their self-awareness and applying normative reasoning: in this perspective, the fact that inorganic matter may be able to respond to its surroundings — including the ways in which these dynamics are described in agential realism — is not enough to warrant recognition as sapience. In fact, according to Brandom this is not even enough to qualify for *sentience*, which is 'to be distinguished from the mere reliable differential responsiveness we sentients share with artifacts such as thermostats and land mines.'[377] On the other hand, sapience 'concerns understanding or intelligence, rather than irritability or arousal. One is treating something as sapient insofar as one explains its behavior by attributing to it intentional states such as belief and desire as constituting reasons for that behavior.'[378]

Negarestani (among others, such as Brassier and Peter Wolfendale) uses Brandom's definitions to argue against vitalist pan-psychisms and what Brassier had disparagingly called 'the indiscriminate attribution of agency to anything and everything'.[379] I personally interpret the difference between 'agency' and 'sentience' more as a question of shifting semantic boundaries: Barad, for instance, defines agency in a way that also allows for Brandom's distinction between sapience and sentience (and the 'reliable differential responsiveness' of certain inorganic assemblages) to continue to apply unchanged.[380] My understanding is that sentience and sapience emerge iteratively as particular expressions of certain phenomena/dispositifs: their differential value as 'a qualitatively distinct class of activities' is not necessarily denied by agential realism. I will therefore take the liberty to tentatively adopt these distinctions following Negarestani via Brandom, while maintaining that matter and meaning are fundamentally entangled, and that it is possible to think of sapience as an emergent property in terms that can ultimately be reconciled with agential realism's explanation for the possibility of describing real phenomena with a measure of objectivity.[381]

Let us then continue by observing that, following Brandom's account, sapience cannot in fact be considered proof of human exceptionality because it is not intrinsically unique to *Homo sapiens*. There is nothing in principle stopping, say, a cetacean species from developing sapience through processes of convergent evolution. Similarly, not only can intelligent extraterrestrial life forms exist; they may in fact take forms of sapience humans would struggle

---

[377] R. Brandom, *Making It Explicit*, p. 5.

[378] *Ibid*.

[379] R. Brassier, in 'Reason Is Inconsolable and Non-Conciliatory. Ray Brassier in Conversation with Suhail Malik', in C. Cox, J. Jaskey and S. Malik (eds.), *Realism Materialism Art*, p. 219. Cfr. Peter Wolfendale, 'The Reformatting of Homo Sapiens', in *Angelaki*, vol. 24 n. 1, February 2019, pp. 55-66.

[380] K. Barad, *Meeting the Universe Halfway*, pp. 175-9. See my pp. 37-42.

[381] K. Barad, pp. 132-85.

to recognise as such (alas, we may not quite be smart *enough*). On the other hand, heated debates rage on regarding the possibility of artificial intelligences constituting fully sapient entities, and consequently whether sapience can exist independently of living organisms or other material/spatial constraints.[382] Indeed, there seems to be no universal consensus on the exact, most complete definition of life itself, in both scientific and philosophical terms: one need only consider the still unresolved (and probably inherently unresolvable) question of whether viruses can be considered 'living things'.[383]

Which leads me to the next point: the distinction between matters of *ontology* and matters of establishing conventional *semantic* boundaries as part of epistemological practices like science and philosophy. Constituting the very core of the objective knowledge vs. constructionism debate, this distinction is often simply bypassed by approaches that tend towards anti-realist perspectives, its relevance outright denied or set aside with the rest of the 'reality' of things-in-themselves, presumed to exist *outside* subjective representations and therefore intrinsically out of reach.

On the other hand, Barad's agential realism denies that there is a fundamental difference between ontology and epistemology at the level of matter itself, while at the same time allowing for consistent phenomena (e.g. the laws of physics that can be described using the classical model) to give certain material assemblages *features that appear to be local* once matter constitutes itself into entangled 'meanings', as entities 'interpret' each other iteratively. As some of these features lead to predictable behaviours or patterns at different levels of material intra-action — subatomic, atomic, molecular, cellular, etc. —, some onto-epistemological boundaries are predictably performed according to these agential patterns (Barad calls this 'agential separability — the condition of exteriority-within-phenomena').[384]

---

[382] Materialists must reject the idea of fully disembodied life forms, but I am very much not qualified to address this question in relation to artificial general intelligence. For a sceptical view on the emergence of fully-fledged consciousness in AI, see Roger Penrose, *The Emperor's New Mind: Concerning Computers, Minds and The Laws of Physics* (Oxford: Oxford University Press, 1989).

[383] Eugene V. Koonin and Petro Starokadomskyy. 'Are viruses alive? The replicator paradigm sheds decisive light on an old but misguided question', *Studies in History and Philosophy of Biological and Biomedical Sciences*, Vol. 59 (2016), pp. 125-34; online at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5406846/> [accessed 2 October 2021] (doi:10.1016/j.shpsc.2016.02.016). For some classic texts on the definition of life, see Erwin Schrödinger, *What is Life?* and *Mind and Matter* (Cambridge: Cambridge University Press, 1967; orig. 1944, 1958); Francis Crick, *Life Itself: Its Origin and Nature* (New York, NY: Simon & Schuster, 1981); Lynn Margulis and Dorion Sagan, *What Is Life?* (New York, NY: Simon & Schuster, 1995); The Global Genome: Biotechnology, Politics and Culture (Cambridge, MA: The MIT Press, 2005); Eugene Thacker, *The Global Genome: Biotechnology, Politics and Culture* (Cambridge, MA: The MIT Press, 2005) on the notion of 'selfhood', see L. Margulis and D. Sagan, 'The Uncut Self', in *Slanted Truths: Essays on Gaia, Symbiosis, and Evolution* (New York, NY: Springer-Verlag, 1997), pp. 59-74.

[384] K. Barad, p.140.

Consider for instance the way the material composition of certain assemblages allows for consistent or predictable effects when they find themselves in close proximity to one another, e.g. the way light bounces off a given surface. This effect in turns triggers our sense of sight, allowing our brain to consistently (if fallibly) recognise those light patterns as distinct shapes/textures/objects/phenomena, and so forth. In these cases, the dependable emerging patterns make themselves 'differentially intelligible to another part of the world'; their consistent (emerging) features *can* therefore be described as such, with increasing levels of accuracy as our species collectively compiles more and more data about how the cosmos works.[385]

At this point, to return to my working definitions, it would be useful to try and establish whether the boundaries of the dispositifs defined as 'sapience', 'art' and 'artefact' can be correlated to real, consistent, 'ontic' properties of the matter co-constituted into the phenomena they define. To what extent can they be described in objective terms?

If we posit that consistent local properties emerge in material phenomena because of the 'rules' of morphogenesis, and that sapience is one such emergent property that has become reliably encoded in and expressed by the human genome, then its expression — its 'differential intelligibility' — through various human behaviours can in principle be described in the language of science as an objective 'fact'. However, even the descriptions of science — already linguistic or symbolic *analoga* of certain phenomena, created for the purpose of communicating information — have to make use of a certain amount of 'semantic shortcuts' or heuristics in order to process and describe complex phenomena. Some scientific terms and definitions refer to statistical approximations from sample data sets; others are derived by logical induction, positing hypotheses for 'invisible boundaries' ('universals') that cannot, or are yet to be, empirically verified. Certain morphogenetic rules — e.g. physical constants such as the speed of light in a vacuum (c) and the gravitational constant (G) — have been experimentally and/or theoretically demonstrated to be 'fixed' properties of matter (and even so they may still be subject to revision).[386] Outside of physical constants, and leaving aside the question of how 'pure' mathematics corresponds to physical reality, *the descriptions of science*

---

[385] *Ibid*. It should be noted that the predictability of material intra-actions is for Barad non-deterministic. As each instance of 'observation' operates an agential cut, and therefore can open up new possibilities: 'possibilities do not sit still' (*ibid*., p.177). Indeed, scientific innovation is capable of intervening on the drawing of agential boundaries by creating 'artificial' conditions, for example in those experiments aimed at creating 'new', highly unstable atomic elements. Each new scientific discovery either draws a new boundary or adjusts existing ones.

[386] 'Fundamental Physical Constants', NIST website, <https://www.nist.gov/pml/fundamental-physical-constants> [accessed 24 June 2020].

necessarily rely on semantic approximations.[387] Succinctly put, this is stating the obvious: *the language of science is not identical to material reality, but always an abstraction*, and more often than not one that is based on arbitrary choices turned into conventional descriptors in order to be of practical use as shareable notions.

Take the example of biological taxonomy, 'the analysis of an organism's characteristics for the purpose of classification'.[388] Since we now understand the evolution of life forms as a continuum, all classificatory boundaries have to be understood as somewhat arbitrary, based on statistics derived from observations of a set of morphologically similar organisms at a particular moment in time: 'universal' rules abstracted from 'particular' phenomena, repeating themselves with a *measurable* degree of consistency. Their relationship with material reality is however debatable and subject to periodic revisions, as our descriptions of phenomena change with accumulated knowledge. Jean-Baptiste Lamarck understood this as early as 1809 (fifty years before Darwin's *The Origin of Species* was released): '[…] classes, orders, families, genera and nomenclatures are weapons of our own invention. [… A]mong her productions nature has not really formed […] constant species, but only individuals who succeed one another and resemble those from which they sprung.'[389] In other words, the boundaries between *taxa*, like all boundaries abstracted from individual, contingent phenomena, are *constructs* built around the objectively verifiable testimonies of individual specimens and experimental results. In this sense, *most science is in fact science fiction* (or, as Haraway would say in a way that is especially appropriate here, *speculative fabulation*) 'based on real events'.[390]

Looking at ourselves, we are said to belong to the *sub*species *Homo sapiens sapiens*, the only 'anatomically modern human' species still in existence following the disappearance of Neanderthals (*H. sapiens neanderthalensis*). However, Neanderthals did likely non so much 'go extinct' but rather merge with *H. sapiens sapiens* through interbreeding, complicating their

---

[387] For a text on the languages of mathematics and logic notation, e.g. 'predicate calculus', from a perspective directly connected to the NM/NR nexus, see Q. Meillassoux, 'Iteration, Reiteration, Repetition. A Speculative Materialist Analysis of the Sign Devoid of Meaning' (orig. 2012), in A Avanessian and S. Malik (eds.), *Genealogies of Speculation,* pp. 117-197.

[388] E. Lawrence, *Henderson's Dictionary of Biology* (Pearson/Prentice Hall, 2005).

[389] Jean-Baptiste Lamarck, *Zoological Philosophy* (Chicago: University of Chicago Press, 1984; orig. 1809), pp. 20–21. Cfr. Kevin de Queiroz, 'Ernst Mayr and the modern concept of species', *Proceedings of the National Academy of Sciences*, May 2005, vol. 102, n. suppl. 1, pp. 6600-6607; online at <https://www.pnas.org/content/102/suppl_1/6600> [accessed 8 October 2021]; DOI: 10.1073/pnas.0502030102.

[390] D. Haraway, *Staying with the Trouble,* pp. 10-13; D. Haraway, 'SF: Science Fiction, Speculative Fabulation, String Figures, So Far', *Ada: A Journal of Gender, New Media, and Technology*, No. 3, 2013, <http://dx.doi.org/10.7264/N3KH0K81> [accessed 14 October 2021].

respective identity boundaries.[391] Meanwhile, others dispute the edges between the subspecies of *Homo erectus* and *Homo sapiens*, and so on: after all, it's fictional boundaries all the way down to the single individuals, as Lamarck pointed out. Therefore, not only is the emergent dispositif of 'sapience' not specific to *Homo sapiens*, but the boundaries of the category of the *H. sapiens* species itself are blurry and only meaningful in a statistical sense and for practical purposes. When did (the majority of) hominids start exhibiting markers of sapience? When did primate tool-making skills turn into a knowing production of crafty artefacts? When did hominids start reliably *communicating* through artefacts, including language both spoken and written? What are the odds this may happen again in the Anthropoidea clade (a taxonomic grouping based on common shared ancestors), on Earth, or somewhere else entirely?

In summary: sapience can be considered an emergent faculty independent of particular individual embodiments (such as particular species), yet still dependent on the material vessels from which it emerges iteratively. Moreover, part of that iterative process is of a *social* nature: sapience encoded at the level of individuals is purely potential without its collective, intersubjective history. At this moment in history, the only artefact-making, language-wielding, art-appreciating entity we know of with a degree of certainty does happen to be us, humans; but we have no reason to believe sapience should be *unique to us*, nor can we definitively rule out that it could one day emerge through inorganic technological embodiments, such as may be the case with self-aware artificial general intelligences.

The only way discussions of (and through) artefacts can be reconciled with a rejection of human exceptionalism and at the same time of logocentrism (or of an understanding of the faculties of reason as *qualitatively* superior, whether practiced by humans or other entities, and whether materially realised or fully disembodied) is *to consider sapience as equivalent to other emergent properties of matter* — such as, say, echolocation, if we want to compare it to properties that require being encoded in the genome of a sentient organisms as a minimum condition, or the tangle of phenomena that produce a planet's magnetic field, to compare the scale of intra-action to a different level of material relationships altogether. To wit, while sapience may be a particularly rare and potent property, making the beings endowed with it capable of changes to themselves and their environment on a magnitude that cannot compare to that of *similar* life forms, as an emergent property it is one among many; on a cosmic scale, sapience-wielding humanity continues to be a drop in a functionally infinite ocean.

---

[391] Richard E. Green et al., 'A Draft Sequence of the Neanderthal Genome', *Science*, vol. 328, n. 5979 (7 May 2010), pp. 710–722.

This is not to say human sapience is *qualitatively* equivalent to a bat's echolocation *from our perspective*, and since our perspective is all we have at the moment — indeed, likely all we'll ever have — it is understandable that we humans should be so very impressed with what *we* can do, including 'art', and that we should want to cultivate our skills so that we can extract more benefits from them. Meanwhile, if we consider the cumulative effects of human actions as part of the natureculture continuum, our intelligence cannot be considered to make any qualitative difference to the way we interact with our non-sapient surroundings. The dynamics — however complex — are the same as if we were just merely sentient or mechanical: what changes in practice is, crucially, that *we happen to understand the effects of what we do, individually and collectively, and can take responsibility for them*.

Cosmic nihilist epiphanies are therefore no justification for resignation, inaction and/or dismissal; they cannot make 'intraspecies matters', 'cultural constructs' including art and *especially* politics, *any less important to us in the here and now*. However, the inhumanity of the scientific method does help us gradually understand how things work in complex material interrelations, and therefore how to better deal with what we perceive to be 'our own' human interests as entangled in a myriad intra-actions, phenomena that will always involve or otherwise affect more than just our species — indeed, more than just whichever arbitrary grouping constitutes a politically-charged 'we' (e.g. a cohort, polity, constituency or community) at any particular point. And to truly understand science is also to understand its limitations, practical and semantic, especially when it comes to explaining what is *experienced as real* — such as the tangible consequences of cultural constructs put to ideological use, and the physical and psychological effects they can have on individuals.

On these bases, I think it is safe to conclude that there is no need to demote or downplay sapience in the name of upholding anti-anthropocentric perspectives. Human artefacts are expressions both of our intelligence *and* of its materially-bound situatedness, understood as a necessary condition for its emergence as a property channelled through complex assemblages; as such, it can help us understand our position in relation to the rest of the cosmos. Sapient self-awareness *does* make us 'special', in the sense that it gives us a feature through which we can define ourselves in comparison to other existing life forms; at the same time it makes us capable of understanding that *our specialness cannot be justified by any feature other than this self-awareness in itself* — and the awareness of the tremendous power this self-awareness affords us. Even considered as a scalable property, capable of improving upon itself exponentially and reaching ever-growing levels of complexity, sapience is still bound to a physical world it will (probably) never be able to transcend. It might outlive *Homo sapiens* as a

species, but that's not saying much, because *species have no finite boundaries anyway*. On the other hand, communities' boundaries still function as concentric circles of entangled assemblages, responsible for the agential cuts we operate on one another in the here and now — and, within the 'sapient community', collectively aware of weighty concepts such as 'future' and 'consequences'.

Artefacts for sensing: on the boundaries of 'art'

Having demystified humanity's ability to produce artefacts as expression of a *particular but not exceptional* property of our species as a complex assemblage, I will now seek to apply the same line of argument to the boundaries of 'art'. To define 'what art is' is a proverbially daunting task; all explanations are bound to be flawed, partial (i.e. expressed from a culturally situated standpoint) and subject to endless revisions as history marches on.[392] What I hope to offer here is less an answer and more a way of *reframing the question* in relation to the *practical* uses of boundary-making, particularly through processes of linguistic abstraction: *the act of defining as a cognitive shortcut or heuristic*. My aim is partly to draw attention to the permeability of boundaries and partly to stress how disciplinary compartmentalisation hinders the understanding of cultural forms by fossilising perceived differences, while downplaying or filtering out points of contact between phenomena. At the same time, and perhaps counterintuitively, this section also provides a justification for my own art bias as demonstrated in this thesis: to attempt to define what distinguishes art from other kinds of human artefacts is, I believe, especially helpful when grappling with processes of knowledge production from a NM/NR standpoint — and will prove useful later in clarifying my definition of the category of the curatorial as inherently transdisciplinary.

I have explained how the 'onto-epistemological cuts' described by Karen Barad are essentially boundary-making events, and that to define a complex phenomenon through language is to turn it into a finite *dispositif* for the purposes of linguistic processes: a way to make phenomena manageable and communicable by mapping them and encoding them with coordinates.[393] Beyond the fact that the boundaries of linguistic phenomena are necessarily based on processes of abstraction, most words — e.g. common nouns and, as we have seen,

---

[392] For an extended reflection on the definition(s) of art that doubles as a metatheory on the subject, including several historical examples ranging from anthropology to art history to semiotics, see Thierry de Duve, *Kant after Duchamp* (Cambridge, MA / London: The MIT Press, 1996), esp. pp. 1-86.

[393] Cfr. G. Deleuze and F. Guattari, *A Thousand Plateaus*, p. 287-92, on Haecceity.

taxonomic classifications — have inherently slippery definitions because they refer to a spectrum of heterogeneous real occurrences, which is to say they apply to sets of instances that manifest certain shared features but with a range of internal variations.[394] Fringe cases near the edges of these spectra may be effectively indistinguishable from different phenomena altogether; put in terms of set theory, fictional boundaries can intersect each other like the outlines of Venn diagrams, making some things share features with adjacent sets.[395] *The properties that make a cultural artefact an 'artwork'* (already a culturally-specific, 'western' concept, bound to language and history) *can be said to exist on such a sliding scale*, one that is closely connected to the slipperiness of the notion of 'sapience' itself, and similarly entangled with its emergence as a social, cumulative, construed feature.

While sapience may rely on a set of functions encoded in the human genome over countless generations, the way this manifests in practice varies dramatically in function of the situatedness of each individual phenomenon/material assemblage we call a human, and is impossible to reduce to individual traits: as I explained, sapience is a *collective* property of *Homo sapiens* as a social animal — a shared characteristic emerging *through* and *as* culture, while remaining only potential in a single human's genetic make-up. The forms in which self-awareness and complex communication skills shape human artefacts as products of sapience are closely tied to one's position in history and geographical location as much as they depend on the genetic features of each individual and their neurophysiology as it unfolds through their lifetime. After all, an individual's evolving cultural milieu and personal experiences affect their body and behaviour, their psyche and their organism, in ways that are impossible to separate. The same is true of the artefacts they produce.

So far I'm not claiming anything particularly original or controversial: this is tantamount to saying that the ways in which we define art are historically variable and culturally constructed. Our current perspective on what constitutes an *artistic* practice tends to retroactively inform our understanding of 'art' as a supposedly ahistorical abstraction: most people intuitively interpret the oldest known example of rock art from Australia or the animal painting in the cave of Lubang Jeriji Saléh in Borneo (all dated over 40,000 years old) as 'works of art', presumably meaning they have something in common with what we define as art *now*, even though we can simultaneously hold that their motivation and social function must have

---

[394] Some spectra may be better described through multiaxial diagrams, but here I'll stick to the analogy of a linear sliding scale for the sake of simplicity.

[395] See 'Set theory', in J. Allwood, L. Andersson, & O. Dahl (eds.), *Logic in Linguistics* (Cambridge: Cambridge University Press, 1977), pp. 3-14.

Fig. 42. Three hand stencils found in the Maltravieso cave, Spain (colour-enhanced). One of these has been dated to at least 64,000 years ago and it is likely to have been made by a Neanderthal.

been different at the time they were produced from our current understanding of art and its ecologies.[396]

If one absolutely must try to define art's fundamental features in a way that is capable of referring to all its forms from any time since the appearance of the first anatomically modern humans, the edges of 'art-making' begin to merge with those of 'artefact' production in general, including 'tool-making' and 'language': an intentional expression, transforming materials for the purpose of communicating and/or for other practical (including ritual/symbolic) uses. These in turn are among the very same traits paleoanthropologists and ethologists use as markers of sapient intelligence, which is ultimately why what defines artefacts at large is directly correlated to the notion of sapience (artefacts as 'things made by *H. sapiens*'). Moreover, to identify a single point of origin for whatever we decide to understand as 'art' is most likely impossible: remaining on the subject of cave paintings, the oldest such artefacts currently known to us is said to be a red hand stencil dated to at least 64,000 years ago (in Maltravieso cave, Cáceres, Spain), made likely not by *H. sapiens* but by a Neanderthal, which brings us back to the taxonomic arbitrariness conundrum. Additionally, what scientific communities extrapolate from observations and data is always subject to a certain amount of

[396] Bruno David and Ian J. McNiven, 'Introduction: Towards an Archaeology and Anthropology of Rock Art', in B. David and I. J. McNiven (eds.), *The Oxford Handbook of the Archaeology and Anthropology of Rock Art* (Oxford: Oxford University Press, 2018); online at *Oxford Handbooks Online*, <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190607357.001.0001/oxfordhb-9780190607357-e-57> [accessed 19 September 2021].

speculation and cognitive bias: can paleoanthropologists definitively distinguish between a functional and decorative mark (and, in turn, an intentionally human-made mark from an accidental trace) *beyond all reasonable doubt*?[397] Without completely reliable localised knowledge (in other words, direct experience of that marking event and its motivations), the best experts can do is infer.

Most importantly, if mark-making is an expression of intentionality and self-reflexivity, a form of communication emerging from the cascading effects of *becoming-sapient as a kind of morphogenesis*, it can therefore be said to always ultimately manifest itself as a biologically *functional* phenomenon. Even the simplest of phatic, non-referential expressions has a function: as Deleuze and Guattari argued, the marking of *territorial* boundaries (more on which in the next section).[398] This makes it even harder to refer to notions of utilitarian function as a distinguishing metric for 'art', universally construed. What else can then distinguish a cave painting or incised pattern from the handicraft applied to the shaping of a tool for purely functional purposes, *if the boundary cannot be definitively based on matters of either form or function, and all sapient mark-making is always necessarily a mix of both*? Is this really a question of an artefact's *purpose,* beyond *the expression of sapience itself*?

At this point, I would argue that there really is *no reason* to assign an absolute, universal definition to 'art' (or any of the more or less direct translations of this word/concept in other languages/cultures) other than as *a variable function* — or perhaps a *symptom*, or even a *byproduct — of sapient self-awareness at large*. New definitions of art will continue to gradually emerge depending on historically and culturally variable circumstances, and I cannot exclude that the spectrum of traits I am about to discuss may turn out to be just as informed by historical specificities as all the flawed general theories of art I have encountered in the past.[399]

To demonstrate how definitions, as cognitive tools, are necessarily bound to the historical and geographic variations of language as an expression of the cultural situatedness from which they emerge, and how additional variations can occur in operations of translation, the case of the ancient Greek word *techné* and its relation to the contemporary usage of the English word 'art' is especially instructive. The word *techné* can be translated as 'craftsmanship'

---

[397] The disputed interpretations of artefacts at the Lomekwi archeological site in Kenya suggest otherwise. See the 'Lomewki' entry, *Wikipedia*, <https://en.wikipedia.org/wiki/Lomekwi#Artifacts> (accessed 5 September 2020), and cfr. Bruno David and Ian J. McNiven, 'Introduction: Towards an Archaeology and Anthropology of Rock Art'.

[398] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. by B. Massumi (London/New York: Continuum, 1987; orig. 1980), pp. 342-86. See my pp. 206-11.

[399] Larry Shiner, *The Invention of Art: A Cultural History* (Chicago: University of Chicago Press, 2001).

or 'skill' as well as 'art', and has been used to refer to all kinds of *applied knowledge*, in contrast with the purely theoretical, 'disinterested' kind of understanding defined by the term *epistemé*. It is possible to observe a shift in its usage already among ancient Greek philosophers, as *techné* gradually diverged from a quasi-synonym of *epistemé* and was increasingly put to use to refer to material applications — *epistemé applied in practice* through making and doing: a *know-how*.[400] Aristotle still occasionally uses the two terms interchangeably, but the term was by his time increasingly used to refer to practical skills — *techné* as 'technique', 'art' (from the Latin word for *techné*, '*ars*') as partly synonymous with a refined manner of execution, a set of skills developed over time; in other words, expressions of *inherited culture* through the products of *cultivated* human activities (which is to say through *artefacts*).[401] Interestingly, a return to the hybrid etymology of the term *techné* as 'applied knowledge' in ancient Greek philosophy can be useful to think about artistic practices after the processes of 'deskilling' developed in the 20th century, from the Duchampian readymade to the reductionist escalations of abstract, minimalist and conceptual art forms.[402] Even where the *manual* dexterity of a craft developed through practice (e.g. the expert carving of stone or skilful application of pigments) is no longer a necessary condition for a practice to be perceived as art-making, its *techné* can still be understood as a way of bringing something *new* into the world, a form of *poiesis*: a way of constituting or facilitating the emergence of phenomena that can only be processed as such because of some form of intervention operated by a self-aware being, leading to significantly different results from a similar assemblage that could have potentially emerged *without* sapient manipulation.[403]

Territorialising marks

What then of those forms of *poiesis* that are not specifically human in origin, and yet humans tend to perceive as 'artefacts' of sorts? Are these phenomena — already usually

---

[400] Richard Parry, 'Episteme and Techne', *Stanford Encyclopedia of Philosophy*, first published 11 April 2003, revised 27 March 2020, <https://plato.stanford.edu/entries/episteme-techne/> (accessed 4 July 2020).

[401] *Ibid*.

[402] On the subject of deskilling, see John Roberts, The *Intangibilities of Form. Skill and Deskilling in Art After the Readymade* (London / New York: Verso, 2007).

[403] This is the interpretation stressed by Heidegger in his text 'The Question Concerning Technology', although his aim is ultimately to explain how *techne* 'is a mode of *aletheuein*', of disclosing truth. See Martin Heidegger, 'The Question Concerning Technology', in *The Question Concerning Technology and Other Essays*, translated and with an introduction by W. Lovitt (New York / London: Harper & Row / Garland, 1977), pp. 12-13.

presumed to be limited to sentient life forms — always to be interpreted as potential markers of sapient self-awareness? It might be useful here to expand on Deleuze and Guattari's idea of art-making as a way of marking a territory — and vice-versa — in connection to the notions of *refrain, rhythm* and *milieu* (the latter borrowed from the writings of ethologist Jakob von Uexküll on *Umwelt*) as presented in the chapter/*plateau* '1837: Of the Refrain' from *A Thousand Plateaus* (1980), a text that can help shift away from the default anthropocentrism and organic chauvinism of traditional narratives on the origins of art.[404]

The passage in question discusses the refrain, or *rhythm*, as a way of countering chaos, in order to mark a territory from an indistinct chaos for the purpose of *communicating* to others, a process of marking that happens through forms of 'transcoding'; rhythms are repetitions of these acts of transcoding. In Deleuze and Guattari's spatial metaphors, the notion of rhythm is in turn closely related to that of *milieu*, and both are forms of differentiation from *chaos*:

> From chaos, *Milieus* and *Rhythms* are born. […] Every milieu is […] a block of spacetime constituted by the periodic repetition of the component. […] Every milieu is coded, a code being defined by periodic repetition […]. Rhythm is the milieus' answer to chaos. What chaos and rhythm have in common is the in-between — between two milieus, rhythm-chaos or the chaosmos […]. There is rhythm wherever there is a transcoded passage from one milieu to another, a communication of milieus, coordination between heterogeneous space-times.[405]

The repetition of rhythm as a passage between milieus is also what allows for the emergence of *difference*, which makes it possible to perceive rhythm out of undifferentiated chaos: 'A milieu [exists] by virtue of periodic repetition, but one whose only effect is to produce a difference by which the milieu passes into another milieu. It is the difference that is rhythmic, not the repetition, which nevertheless produces it'.[406] And then there is the territory, 'an act that affects milieus and rhythms, that 'territorializes' them. […] There is a territory precisely when milieus components […] cease to be functional to become expressive. *There is a territory when rhythm has expressiveness*.'[407]

---

[404] G. Deleuze and F. Guattari, *A Thousand Plateaus*, pp. 342-86; Jakob von Uexküll, *A Foray into the Worlds of Animals and Humans, with A Theory of Meaning*, trans. by Joseph D. O'Neil (Minneapolis: University of Minnesota Press, 2010, orig. 1934).

[405] G. Deleuze and F. Guattari, *A Thousand Plateaus*, pp. 345-6.

[406] *Ibid.*, p. 346.

[407] *Ibid.*, p. 347. My emphasis.

The markings that assemblages of the kind we understand as 'living forms' (or more specifically as 'animals') make in order to communicate are a way of creating something new, or that would not exist otherwise: all such markings are thus acts of *poiesis*. Here, borrowing from Deleuze and Guattari, I might refer to markings as anything that *expresses* and *transcodes*, though not necessarily an *intentional* — let alone self-aware — act of expression: a genome expresses itself *morphogenetically* in a number of ways that produce distinct forms or, in Deleuze and Guattari's lingo, *milieus* and *territories*.[408]

I consider this to be a form of agency, one that emerges well before the cumulative features of self-awareness and intentionality manifest themselves through certain material assemblages. In other words, I would argue that the expression of territoriality should not be understood as connected to markers of animal intelligence: its only requirement is the capacity of an assemblage to respond to it as a *meaningful* stimulus. From a Baradian perspective — and in my personal view — meaning can operate poietic cuts at any point in the organisation of matter. Deleuze and Guattari explicitly talk of territoriality as an expression of the genetic code, itself an organisation of material assemblages at large, and thus not limited to animal behaviour in a strict sense.[409]

Deleuze and Guattari's argument continues in a direction that is gradually closer to the kind of behaviours humans understand as poietic as well as expressive, lending themselves to increasingly anthropomorphic interpretations as 'animal forms of art-making' down to the naming of the species: 'The brown stagemaker (*Scenopoeetes dentirostris*) lays down landmarks each morning by dropping leaves it picks from its tree, and then turning them upside down so the paler underside stands out against the dirt: inversion produces a matter of expression.'[410] Here is an example of territorial expression resulting in reproductive behaviours: the brown stagemaker's poietic act attracts the attention of potential mating partners and, in return, is interpreted by them as what biologists and ethologists understand as criteria of sorts for the selection of desirable sources of genetic material for optimal offspring production.

The meaning of territorialisation is thus not limited to the creation of boundaries for defensive purposes, borders whose crossing is perceived as an act of aggression and results in intra-species violence.[411] Communicating through territorial differentiation is just an emergence of marks — of meaning-generating *cuts* — from chaos, some of which repeat as

---

[408] *Ibid.*, pp. 355-6.

[409] *Ibid.*, p. 356.

[410] *Ibid.*

[411] *Ibid.*, p. 348.

Fig. 43. A brown stagemaker, also known as tooth-billed bowerbird (*Scenopoeetes dentirostris*) male arriving at his court with a new leaf. A cleared area of the forest floor with a collection of upside-down leaves is the display court of this bowerbird species. Atherton Tablelands, Wooroonooran National Park, Queensland, Australia. Photo: Tim Laman.

patterns, or what Barad calls the 'iterative' character of phenomena. It is not the aggressive or sexually-driven behaviour that motivates the cut and its perpetuation as a pattern/phenomenon; rather, it is the behaviours that emerge around the need to generate cuts that differentiate an otherwise indistinct chaos, and have consequences on the distribution of territories and territorial functions across individual beings.[412]

At this point Deleuze and Guattari make the link between the notion of 'art' and territoriality explicit, and do so in a way that shifts the definition away from sapience, intentionality, sentience and all such boundaries altogether. Rather, their description can in principle operate at the level of semiosis (meaning-generating) in general as the dynamic that creates those boundaries:

[412] *Ibid.* The importance of endosymbiosis in the evolution of life on earth, as expressed in Lynn Margulis' paradigm-shifting studies in microbiology, attests to the fact that violence and exclusion of the other, inter-or intra-species as they may be, are not necessarily the only or best evolutionary strategies. See L. Margulis (then L. Sagan), 'On the Origin of Mitosing Cells', in *Journal of Theoretical Biology*, vol. 14, no. 3 (1967), pp. 225-74, and L. Margulis and Dorion Sagan, 'Preface', in *Microcosmos: Four Billion Years of Evolution from our Microbial Ancestors* (Berkeley and Los Angeles, CA: University of California Press, 1997; orig. 1985), pp. 13-23, esp. pp. 15-6.

> Can this becoming[-expressive of rhythm or melody], this emergence, be called Art? That would make the territory the result of art. The artist: the first person to set out a boundary stone, or to make a mark. […] The expressive is primary in relation to the possessive; expressive qualities, or matters of expression, are necessarily appropriative and […] delineate a territory that will belong to the subject that carries or produces them. These qualities are signatures, […] the constituting mark of a domain, an abode. […] And what is called *art brut* […] is merely this constitution, this freeing, of matters of expression in the movement of territoriality: the base or ground of art. […] The stagemaker practices *art brut*. […] Of course, from this standpoint art is not the privilege of human beings.[413]

Indeed, it is not the privilege of *any* being, sentient or not, but a function of matter itself: the way of the chaosmos. Here we have a theory of 'art' that applies *all poietic phenomena and behaviours*. Not the creation of material artefacts as such but, simply put, *the distribution of matter in significant ways — in ways that generate difference*.

This approach, however, does not help art theorists make sense of their *actual* subject matter one bit. Perhaps we simply have to admit that to draw boundaries at the level of sentient assemblages is necessary if only as a way of restricting the scope of analysis to a particular subset: *art as made by beings one can identify with*. The boundary of that extent — a boundary marked by empathy or dependant on context — can in theory shift outwards *ad infinitum*, though it tends to stop at living things because of organic chauvinism (indeed, one could call the latter a 'territorial instinct', too).

On the other hand, there is no reason *not* to pick an arbitrary boundary for the sake of generating discourse: of demarcating the territory of 'human art theory' as a discipline for the purpose of producing a knowingly partial understanding of reality *the only way we know how* (which is to say, as the embodied assemblages identifying as human beings and, individually, as subjects). The key is in being aware of the relative arbitrariness of such gestures, rather than doubling down on differences between 'territories', defined as ontologically fixed boundaries presumed to apply at every level of material interaction. And to play with those boundaries — deterritorialising disciplines — is fundamental to understanding reality as an ongoing cascade of meaning-producing processes. *Transdisciplinarity thus becomes an admission of the arbitrariness of disciplinary boundaries*, expressing the need for *transterritorial* motions in the

---

[413] G. Deleuze and F. Guattari, *A Thousand Plateaus*, p. 348-9. Deleuze and Guattari return to the example of the brown stagemaker again in their book *What Is Philosophy?* (1991), where they discuss the different yet complementary roles of philosophy, science and art as creative endeavours revolving around the production of concepts. Here they also expand on the relationship between art, percepts, affects and 'becoming-animal'. G. Deleuze and F. Guattari, *What Is Philosophy?*, trans. by H. Tomlinson and G. Burchell III (New York, NY: Columbia University Press, 1996; orig. 1991), p. 184.

endless task of understanding reality: a struggle that creates new knowledge and thus new territories.

So here we have it: art *arbitrarily* defined as a species-specific form of poiesis, a subset of 'art' at large as the production of shifting boundaries between territories at any material level. This circumscription is made necessary by our species' way of parsing information, as ontoepistemological processess of differentiation can only be prehended by *H. sapiens* through our cognitive abilities, which in turn depend on the limited interfaces afforded by our bodies: in other words, through *aisthesis*, in the most etymologically pure sense of the word, and *affects*.

A surplus irreducible to any function other than prehension itself: on *aisthesis* and Art with a capital A

Deleuze and Guattari's definition of territorial mark-making as an expressive rhythm that generates patterns of difference between milieus, as well as Barad's understanding of material intra-actions as rooted in the generation of meaningful boundaries, also invalidate the distinction between autonomous expression and heteronomous, instrumental function as a rigid dualism.[414] And it should be obvious from a post-Duchampian perspective that *it is not the artefact as finished product that determines its 'being art'*, neither considered in its form nor in its function, *but the praxis that leads to its creation and that stems from its use*: the shaping of its current/ongoing state of being as a particular material assemblage. The 'art work' is of course not limited to, say, the cave painting as a finished product, but begins with the *act of painting* the cave, if not in earlier preparatory acts, and lives on as it continues to communicate to those who perceive it.

However, this inflationary notion of art as artefact-making is still of limited use when trying to understand what it is exactly that a Neolithic petroglyph can be said to have in common with a performance by Tania Bruguera or a language-based sound piece by Lawrence Weiner, and at the same time what it is that we interpret as their fundamental difference from other coeval artefacts possessing a more overtly utilitarian function (e.g. a spear head). There is obviously something else to our understanding of the nebulous category of 'art' — in the western, anglophone, contemporary sense of the word, therefore in a *situated and retroactively*

[414] See Theodor W. Adorno, *Aesthetic Theory*, ed. by Gretel Adorno and Rolf Tiedemann (London: Continuum, 1997; orig. 1970), and cfr. J. Rancière,'The Aesthetic Revolution and Its Outcomes: Emplotments of Autonomy and Heteronomy', *New Left Review*, 14 (March-April 2002), pp. 133-51.

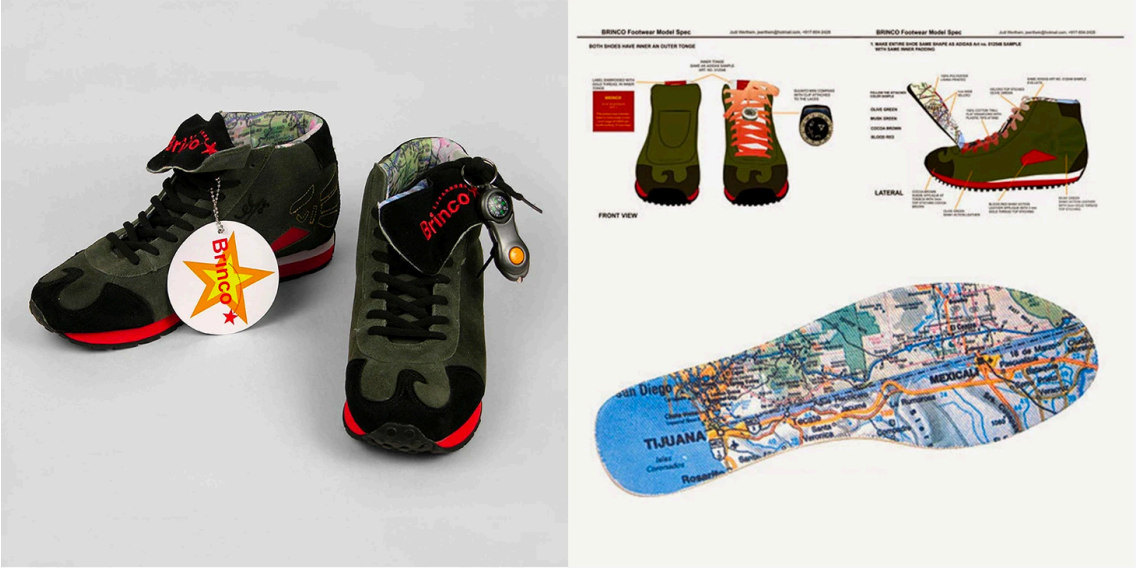

Fig. 44. Judi Werthein, *Brinco*, 2005. The Argentinian artist organised the manufacturing and distribution of these specially-designed trainers free of charge to people attempting to cross the border illegally in Tijuana, Mexico. The shoes included accessories such as a torch, compass and a map of the border area printed on the insole. At the same time, she sold the shoes as 'limited edition' art objects for over $200 a pair in the US city of San Diego, and donated part of the money she raised to a Tijuana shelter helping migrants in need.

applied sense, an *a posteriori* boundary-modifying mode — that complicates our understanding of this subset of *techné* / *ars* as 'knowledge in practice': something that identifies the 'art' of the so-called 'fine arts' as *a surplus irreducible to any function other than prehension itself*. For the remainder of this thesis, I shall call this distinct subset of 'knowledge in practice' *Art*, with a capital A, to distinguish it from the 'art' of sapient artefacts at large.[415] So what is it that makes us interpret an artefact as an expression of capital-A Art — this 'Art factor'?

Consider a poietic gesture claiming the making and usage of an outwardly utilitarian tool — say, a pair of trainers as in the case of Judi Werthein's *Brinco* project, 2006 — as a work of Art or part thereof, i.e. attaching an additional meaning to it (by way of operating a new ontoepistemological cut in order to shift its identity boundaries) that nevertheless leaves the form and other uses of the object completely intact. Or take the case of radically reductionist conceptual art practices *à la* Art & Language, where the 'outwardly utilitarian tool' can be a philosophical statement, conveyed in any form whatever. What is being *added* to the world here, what *significant* difference is being produced by doing so? What skill or knowledge can be said to have been put into practice by doing so?

---

[415] No relation to Lacanian algebra here — the presence of the letters a/A is coincidental in my argument. However, it would certainly be interesting to diffractively apply a Lacanian approach to the other/Other to this theory in a future. In quotations, the word 'art' is always left as it appears in the source text.

On the face of it, it would seem to me that all these examples retain a certain ineluctable reliance on sensorial perception, that is to say on *aisthesis*. However, *pre-rational sense perception alone is not enough to make a phenomenon recognisable as Art*; otherwise we wouldn't be able to distinguish the features that make it identifiable as Art, or even as a 'lower case a' artefact, from all other stimuli that may reach our nervous system — naturally occurring phenomena, 'not-art', or instances of non-sapient (i.e. not self-aware) poiesis. There is something about 'art' as made by human animals that carries with it the specific (territorial) markers of sapience: something about the semantic category of art at large, its least common denominator, appears to be a sheer manifestation of the *cognitive self-awareness* that defines (i.e. territorialises) our species as sapient. I consider this to be the crux of the matter, the differential cut: Art with a capital A, this subset of poietic activities, must ultimately function as a reflection on *aisthesis* itself *as an integral part of our cognitive faculties*, even at their most complex and abstractly self-referential, and by extension *of sapient knowledge production*. Taking away all other use-values, this is all that remains: that surplus is the marker of sapience itself, conveyed *through* and *as* sensual stimuli, because it is *aisthesis* that *enables both the expression and the prehension of that very semantic threshold*.

I should stress that the point I am making here is different from simply saying that art (in the wider, lower-case sense) has to rely on sensorial perception. All acts of mark-making generate meaning through material intra-actions, and I do maintain that the friction between the marked boundaries, the intra-action occurring at the edge of the newly enacted ontoepistemological cut, always operates on the level of *aisthesis* for all kinds of phenomena. In non-sentient matter, *aisthesis* is synonymous with material prehension, as shaped by dispositifs we tend to interpret via scientific *analoga*, e.g. through 'the laws of physics'. In living creatures, *aisthesis* has the added element of sentience, from environmental responsiveness to complex forms of cognition: a mix of pre-cognitive affects and cognitive processes that reaches a level of self-awareness towards the sapient end of the spectrum.

This is where art can acquire its capital A, emerging as a facet of sapience: *the capacity to point back to the inescapability of sense perception, of bare material interfacing, without which there would ultimately be no sapience because rational thought would not be able to prehend itself as such*. Ultimately, this awareness forces us to face the ineliminable material and embodied basis of sapience: not simply our being dumb-matter-that-interfaces-with-the-world, nor just our functioning as uniquely complex material entanglements possessing the emergent property of self-awareness that enables rational thought, but *always both at once*

(and with its double meaning, the root of 'sapience' in the Latin *Sapere* makes the word particularly fitting here).

Other modes of knowledge production, including science and philosophy (which are part of lower-case 'art at large' in this schema), can also make sapience reflect upon itself, and yet are not (always also) Art. Indeed, science and philosophy can arrive to the same conclusion — the inevitable materiality of sapience as embodied knowledge — through different means. However, Art is a *different* form of knowledge-in-practice: the specific 'Art function' of certain (lower-case) artistic practices is to *empirically demonstrate* the affective, material residue of our interfacing with the world in order to process it, from the barest of sentient responses through the most complexly layered forms of abstract communication. Thus, in a way, Art can be said to be *sapience thinking itself by — and while — sensing itself*.[416]

At the same time, sapience is not a fixed property: it exists as a gradient, articulates itself in myriad different ways and constantly evolves in a decidedly non-linear fashion. Thus, anchoring a definition of Art to the slippery notion of sapience hardly helps in restricting its boundaries within the realm of human activities.

Aisthesis vs. aesthetics: philosophical misunderstandings

Does all this mean that 'aesthetics' is, in fact, not such a bad moniker for the philosophy of art at large after all?

I should first of all clarify that I categorically reject the conflation of 'aesthetics' as used in modern Euro-American cultures with the philosophy of Art in a general sense. My adoption of the term *aisthesis*, intended as the process of sensorial prehension — along with the adjective *aesthesic* —, is a way to mark this distinction, to try and altogether bypass the cultural baggage attached to the appropriation of the ancient Greek word *aisthetikos* ('sensitive, sentient, pertaining to sense perception') by modern western philosophy, where it has been used to refer primarily to the philosophy of beauty and taste beginning in earnest with

---

[416] Cfr. Peter Osborne, *Anywhere or Not at All. Philosophy of Contemporary Art* (London / New York: Verso, 2013), p. 41. It is important to note (as Osborne does; see pp. 44-6) that this notion of 'Art' should still not be understood as a ahistorical universal: the way artistic practices manifest themselves will always be culturally situated, and so are the terms and theoretical methodologies used to describe them. And every linguistic generalisation necessarily erases some layers of difference: I am mindful of the semantic and political consequences of those erasures.

Alexander Gottlieb Baumgarten's writings (e.g. *Aesthetica*, 1750), then spread most influentially through its later adoption by Immanuel Kant.[417]

Of course, Baumgarten based his own definition of '*aesthetica*' on an existing understanding of the Greek term *aisthetikos*: up until then, the term applied first and foremost to scientific discourses around the bases of cognition, and it is precisely this sense that Baumgarten posited as a necessary condition for art appreciation. However, this semantic expansion was not without its critics — including Kant himself, who was initially uneasy with the implication that the principles of art criticism could have anything to do with (his own particular understanding of) the mechanisms of scientific reason.[418] Kant's own use of the term at that time defined aesthetics as a science of the *pure* forms of intuition enabling knowledge in a general sense, an interpretation which he takes to correspond more precisely to 'the language and the sense of the ancients, among whom the division of cognition into αισθητα καί νοητα [*aisthéta* and *noéta*] was very well known'.[419] For the Kant of the *Critique of Pure Reason* (1781) as for 'the ancients', *aisthéta* are 'things of sensibility', perceptions or sense stimuli, as opposed to *noéta* which are 'things of the mind': thoughts, rational cognition. Yet by 1790 he appears to have changed his mind, as the *Critique of Judgement* famously embraces aesthetic judgements as judgements of *taste*, demonstrating a widening of his own interpretation of the word while practically establishing aesthetics as *the* branch of philosophy concerned with Art. However, there is more to this change of heart, not a retraction but rather a significant evolution in Kant's thought, based on an intuition that is actually rather useful to my own NM recovery of *aisthesis*.

Philosopher Peter Osborne explains this intuition in his 2013 book *Anywhere or Not at All. Philosophy of Contemporary Art*, though his premises and discursive aims are radically different from mine. In Chapter 2, Osborne retraces the history of this semantic shift and of the (mis)uses of the term 'aesthetics', from Baumgarten and Kant to the rise of German idealism (August Wilhelm and Friedrich von Schlegel, Johann Gottlieb Fichte, Friedrich

---

417 Alexander Gottlieb Baumgarten, *Meditationes philosophicae de nonnullis ad poema pertinentibus* ('Philosophical considerations of some matters pertaining the poem'), 1735; *Aesthetica*, 1750; Immanuel Kant, *Critique of Judgement*, 1790. The Greek word *aisthetikos* was in turn derived from *aisthanomai*, 'I perceive, feel, sense'. Cfr. Douglas Harper, 'aesthetic', *Online Etymology Dictionary*, <https://www.etymonline.com/word/aesthetic> [accessed 20 September 2020].

418 Barry Hartley Slater, 'Aesthetics', *Internet Encyclopedia of Philosophy,* <https://iep.utm.edu/aestheti/> [accessed 20 September 2020]. Hartley Slater also notes that the modern usage of the Greek term began in a more etymologically sound sense, probably with a series of articles published by the English journalist Joseph Addison on the then brand new magazine *The Spectator* in 1712.

419 Immanuel Kant, *Critique of Pure Reason*, 1st ed. (1781), trans. Paul Guyer and Allen W. Wood (Cambridge: Cambridge University Press, 1998), A21/B35, p. 156.

Wilhelm Joseph Schelling, Georg Wilhelm Friedrich Hegel and their Jena-based peers), a trajectory that in his view culminates with Theodor Adorno's *Aesthetic Theory* (published in 1970).[420] Crucially for Osborne, the problem with the conflation of Art and 'aesthetics' is that it puts *too much emphasis* on sense perception as a necessary condition of art, something that he considers to be a weak and fatally incomplete foundation for a 'serious' philosophical investigation that intends to explain the role and functioning of art as more than a source of synaptic responses.

Though this premise may seem opposite to my own position, which is one of *recovery* and *rediscovery* of the importance of sensation and affect, Osborne and I come to strangely similar conclusions: neither of us considers *aisthesis* to be a sufficient condition for Art *by itself*, but rather believe that *it is the interplay between sensation and rational self-awareness that characterises Art* as understood from today's perspective. This is for Osborne the core of the *Critique of Judgement*, transcendental critique as applied to the aesthetic *power* of judgement: 'It is a […] critique of a particular power of the faculty of judgement, not criticism of particular judgements.'[421]

Kantian aesthetics should thus be interpreted as a point of reflection of the mind upon itself: precisely the ineffable passage from *aisthéta* to *noéta* as the premise for reason, the key shift enabling knowledge to go beyond itself, to build upon itself in the mind and thus attempt to peer into the realm of metaphysics. Now, this understanding of the mind as ontologically distinct from the body, metaphysics as necessarily *other than* and *irreducible to* empirical experience, is of course incompatible with NM's fundamental monism; yet Osborne's argument is useful to a neomaterialist reading precisely as it highlights what Kant understands as the supposed *threshold* between the two spheres:

> the standpoint of a transcendental critique of the structure of judgement abstracts from all concretely sensuous particularity […]. It is thus not actually 'aesthetic', in Kant's original sense of 'things of sensibility' [as] distinguished from the 'things of the mind'. Rather, it is decisively 'of the mind', or, better, it is 'of the mind' and 'of sensibility' at the same time: in pure aesthetic judgements of taste, the ontological distinction between *aisthéta* and *noéta* collapses. The mind feels itself.[422]

---

[420] Peter Osborne, *Anywhere or Not at All. Philosophy of Contemporary Art* (London / New York: Verso, 2013), pp. 37-69.

[421] *Ibid.*, p. 40.

[422] *Ibid.*, p. 41.

Osborne thus attributes to Kant's *Critique of Judgement* the role of expanding the meaning of aesthetics 'by extending it beyond the sensible (spatial and temporal) apprehension of the objects of outer and inner intuition to include reference to the feelings accompanying the relations of reflection constitutive of the internal cognitive structure of subjectivity itself.'[423] Perhaps counterintuitively, considering his pivotal role in German idealism, according to Osborne the Kant of the *Third Critique* formulates a theory of aesthetics *almost* as a way to do away with the mind-body dualism, if only to the extent that subjects are capable of becoming objects to themselves *qua* thinking-and-feeling subjects.[424]

As Osborne points out, the historical misunderstanding of the scope of 'aesthetics' arises when the semantic slippage of the term in the *Third Critique* becomes tangled up with Kant's analysis of the judgements around Art, which — precisely in order to be judged 'as Art', as opposed to the 'beautiful' forms of 'nature' — should be, in theory, *excluded* from the realm of 'pure' aesthetics and restricted to what he calls 'logically conditioned' aesthetic judgements: *aisthéta* that have already turned into *noéta*.[425] Conversely, by Kant's own schema, 'pure aesthetic judgements' should only apply to Art when it appears to us '*as if* it were a mere product of nature', by which Kant essentially meant Art whose mimetic effects are so illusorily convincing that they succeed in dissimulating their sapient origin.[426] By downplaying the difference between 'pure' and 'logically conditioned' aesthetic judgements, however, Kant paved the way for his interpreters to use the general, *unqualified* term 'aesthetics' for both.[427]

But what if one were to recover the notion of the collapse between *aisthéta* and *noéta* as the single most useful lesson of Kant's *Third Critique*? What if art's 'special connection' to aesthetic faculties is not to be rejected wholesale because of its partiality, but rather *fundamentally re-evalued in light of this partiality*?

This is, essentially, what Osborne also does in Chapter 2 of *Anywhere or Not at All*, only with the crucial difference that his critical target is the continuing (or, perhaps, resurgent) prevalence of the notion of 'aesthetics' as *the* philosophy of Art, and of its reliance on sense perception as the foundation of Art's autonomy. Osborne rightly points to Adorno's

---

[423] *Ibid*.

[424] Note the emphasis on the 'almost': Kant spends part of the *Critique of Judgement* precisely refuting the 'single substance' theory of 'Spinozism' based on what he calls the 'teleological principle' (see esp. 272-7/§72-3:391-5). On this basis, Kant can never completely abandon the belief that there has to be something else besides matter, something organising matter and giving it a *purposeful* form.

[425] P. Osborne, *Anywhere or Not at All*, pp. 41-6.

[426] I. Kant, *Critique of Judgment*, p. 173-4/§ 45:306-7; cfr. P. Osborne, *Anywhere or Not at All*, p. 42.

[427] P. Osborne, *Anywhere or Not at All*, pp. 42-3.

understanding of 'the *dialectical unity* of art as autonomy and social fact' as a notable instance of a philosopher finally grasping the insufficiency of *aisthesis* in isolation not only from complex cognition, but also, indeed *more importantly*, from Art's manifestations as historical, culturally situated phenomena.[428] To make this very valid critical point, however, Osborne scorns the very use of the word 'aesthetics' (and its whole semantic family) in relation to Art, deemed at best a way to reinforce the confusion, at worst a marker of lexical and philosophical ignorance, and either way symptomatic of 'a culturally conservative phenomenon'.[429]

Osborne himself, however, goes to great lengths to explain precisely that Art fundamentally cannot do away with its reliance on aesthetic faculties, and that it would be simply wrong to pretend otherwise. This is one of the key features he attributes to 'post-conceptual art' as the Art produced under the present socio-historical (and art-historical) conditions: in fact, he explains, it was the failure of extreme conceptual reductionist practices to completely forego *aisthesis* that has *de facto* demonstrated the sheer ineluctability of aesthetics as part of Art's processes of signification.[430] This point is important enough to Osborne that it motivates him to propose critical category of 'postconceptual art' as an alternative to the widely used 'contemporary art' label, based on a 'presentist', generic, transient experience of temporality that really says nothing about how Art functions; conversely, postconceptual Art is defined as an understanding of current Artistic production 'premised on the complex historical experience and critical legacy of conceptual art, broadly construed, which registers its fundamental mutation of the ontology of the artwork' precisely by changing the definition of Art *in light of this unsuccessful attempt to expunge* aisthesis *as a condition for Art*.[431] I agree with Osborne on the importance of concept-driven Artistic practices as a major ontological (onto*epistemo*logical in my case) boundary-shifter, and will use the 'postconceptual Art' moniker in lieu of 'contemporary Art', wherever possible, for the remainder of this text.[432]

For Osborne, Adorno's rediscovery in the 1960s by the 'new art history' scholars goes hand in hand with his understanding of contemporary Art as 'post-conceptual art', as art

---

[428] *Ibid.*, p. 44.

[429] *Ibid.*, p. 43.

[430] *Ibid.*, p. 48-9.

[431] *Ibid.*, p. 48.

[432] I should note however that I consider Osborne's definition of conceptual art, even 'broadly construed' to go beyond the Anglo-American origins of the label, as problematic, as it implicitly privileges certain Eurocentric narratives on modernism as sole catalysts for this ontological shift; see *ibid.*, pp. 48-9. Conversely, I would like to redefine the notion of 'concept-driven Artistic practice' in a decidedly transcultural light — though this task is beyond the capacity of this thesis.

historians had to grapple with self-reflexive artistic practices that reacted to the restrictive category of aesthetics-based autonomy.[433] As Osborne recounts, after the Second World War Clement Greenberg epitomised the last bastions of formal aestheticism, the enemy that the new art history rallied against as its proponents deployed Marxist, post-structuralist and psycho-analytical theories to point out the many ways in which Art's purported aesthetic autonomy was always a fallacy, if not a dangerous reactionary myth. Until a recent recovery, most notably by French philosopher Jacques Rancière, the term 'aesthetics' and its entire semantic field was in fact treated with suspicion by the majority of Anglophone and European art historians and theorists.[434] However, Osborne's perspective seems to be that the 'hegemony of aesthetics' never *really* went away, because the alternatives did not fundamentally address what was wrong with that fallacy.

Osborne also seems to think that the resurgence of interest in aesthetics in recent years, alongside the emergence of Deleuze-infused affect theory (which as I have mentioned parallels the rise of NM/NR), is really little more than a continuation of that old habit of absolutising, or at the very least *overstating*, the reliance on sense-perception as such an ontological feature: a return to aesthetic*ism* that, in his view, makes it difficult to dig deeper than the surface level of form.[435] No concessions are made for the possibility that some of the more nuanced theories recovering and reassessing of the role of sense perception in Art may be reconcilable with his own.

Conversely, I consider a viewpoint suggesting that ('contemporary') Art is 'primarily *other than* aesthetics' to be an equally misleading viewpoint, one with an unacknowledged noocentric bias which I wish to question. I want to return to understanding 'aesthetics' in its difference from the philosophy of Art in order to reframe the latter as the analysis of a historically- and culturally-situated set of practices that do not coincide with, but also can never fully get away from, *aisthesis*. I posit that this ineluctable material, sensual, affective core of Art is not at all a problem, an obstacle or burden that humanity has tried and failed to eliminate — nor, by that measure, one we should aim to forsake in a posthuman future. Rather, I think it is the key to understanding Art as both symptom of and catalyst for sapient knowledge: *aisthesis* as an aspect that needs to be positively stressed in order to fully grasp Art's ontoepistemological *modus operandi*.

---

[433] *Ibid.*, pp. 7, 11.

[434] See J. Rancière, *The Politics of Aesthetics: The Distribution of the Sensible* (London: Continuum, 2004; orig. 2000), *Aesthetics and Its Discontents* (Cambridge/Malden, MA: Polity, 2009, orig. 2004), and *Aisthesis: Scenes from the Aesthetic Regime of Art* (London: Verso, 2013).

[435] P. Osborne, *Anywhere or Not at All*, pp. 6-8.

The Art function as a tool for curatorial diffraction

So far in these last two chapters I have mostly written about Artworks (and related curatorial practices) as catalysts or vectors for *rational* thought processes: carriers of intentional forms of semiosis, like most artefacts primarily meant to function as vessels for a certain content (i.e. as 'messages'). This still holds even when considering the possibility of uncertain and open interpretations, or to the Artistic practices being the moment of content/knowledge generation in itself.

However, one of Art's distinctive advantages is that it can provide a uniquely 'safe' space to transpose, process and experiment with aspects of reality perceived to be *ir*rational or *pre*-rational, including *aisthesis* itself, and certain aspects of human cognition that don't seem to 'make sense' — paradoxical emotions, altered states of mind, logical lapses, anything *not yet rationally understood —*, *while at the same time still being an expression of sapience* (as opposed to, say, an involuntary or unacknowledged absence of reason). Again, Art is not the *only* space to do so, as science and philosophy (among other forms of knowledge production) also do their best to fulfil this role through their own methodologies, which however are themselves constructed primarily through rational means. Conversely, because of the fact that the apparatus of Art practically demands the triggering of non-rational, affective reactions due to its partial yet inescapable reliance on *aisthesis*, it is in essence irreducible to the understanding of these very reactions via *purely rational* epistemological schemas. It requires reason to sense its bodily abilities and limits *in order to be both prehended and understood*.

Art's license to be irrational also includes the exercise of the most rigorous forms of rationality, those capable of expanding our heuristic methods by pushing them beyond, if not *against*, what we perceive as 'common sense' (the manifest image, to reprise Sellars' terminology), and sometimes stretching reason to the point where science and philosophy seemingly reach their limits: hypothesising what lies beyond rational/human knowledge and its possibilities is, for example, the essence of science/speculative fiction as well as a recurring horror trope.[436] It is not a coincidence that scientists themselves make extensive use of metaphorical language and visual representations (including diagrams and mathematical formulae) to get to grips with reality, in a way not dissimilar to the way philosophers use linguistic and schematic *analoga* of thought. One could argue that, as situated human practices, philosophy and science (for instance) can only exist via the formulation of such

[436] Eugene Thacker, *In the Dust of This Planet. Horrors of Philosophy vol.1 (*Winchester: Zero Books), 2011.

analoga — and I contend that what shapes these *analoga* is precisely their *curatorial* function: ways of communicating which can channel, refract or diffract the thinkers'/authors' intents.

The *analoga* used as part of the methods of science and philosophy are not however necessarily 'Art' (though they can *also* be), because their primary curatorial aims and strategies are fundamentally different. Conversely, and precisely because of its foregrounding of cognition and affect, Art does not strictly speaking *need* to be read through scientific or philosophical lenses in order to fulfil its own communicative/curatorial functions. Art does not *need* to conform to 'logic' and 'external truths' beyond the reality of the aesthesic effects it generates or channels: in other words, it does not need to make (*rational*) sense in order to make (*aesthesic*) sense. However, *if* Art is used to communicate or attempt to grasp reality in a neomaterialist key, then it should be framed as a way to understand the role *aisthesis* and affects play as material conditions for knowledge at large, *including* the kinds of epistemological methods we understand as rational and approximating objectivity. Which is to say: if sense-perception and affects are inescapable, then avowedly matter-realist forms of curating via Art can take on the task of revealing these human thought processes *as embodied cognition*: Art as a way of pointing out the intrinsic 'impurity' of reason as a materially-bound apparatus interconnected with, dependent on and afforded by unfathomably complex chains of phenomena — which themselves can be understood as the result of mutual prehension, of ontoepistemological dynamics.

In his essay for the landmark anthology *Carnal Knowledge. Towards a 'New Materialism' through the Arts*, Jondi Keane has proposed a way of explaining how Art can complicate processes of cognition by introducing the notion of *Æffect*, an attempt 'to correlate two historical modes of information capture and research value: affect in the arts and effect in the science[s]. This approach […] invites a multimodality assessment of the plastic potential of thought, feeling and sensation to be reconfigured.'[437] According to Keane, the role of the environment in the co-constitution of meaning — the complexity of the immeasurably vast tapestries of entangled matter that we find ourself navigating by prehending — is routinely ignored in favour of an arbitrary set of identity boundaries and relationships that only *appear to us* (*qua* culturally situated human animals) to be essential features of the phenomena observed. *Æffect* is what enables these heuristic mechanisms, summarised in a compound neologism that acknowledges the role affect can play *alongside* scientific ways of describing embodied forms of cognition, as complementary and irreducible to one another. To identify

[437] Jondi Keane, 'Æffect: Initiating Heuristic Life', in E. Barrett and B. Bolt (eds.), *Carnal Knowledge. Towards a 'New Materialism' through the Arts* (London: I.B. Tauris, 2013), pp. 43-4.

those interpretive devices for what they are can in itself become a heuristic strategy highlighting the embodied nature of cognition, and Keane proposes that Art is an especially useful training ground for this interpretive shift: 'an attentiveness to the qualities of experience within processes of rigorous activities, such as can be the case in […] art production, leads us toward the more omnidirectional *Æffectivity* of an heuristic life.'[438]

The foregrounding of aesthesic effects often plays precisely with in-between states, ambiguities and paradoxes of perception and cognition, as if to test the limits of 'common sense', forcing us to face the fact that our material relationship with the world is far more complicated than our brain unwittingly takes it to be — at least when it can't be bothered to peer underneath the surface of the manifest image. This kind of ambiguity is not the same thing as the non-committal naive relativism of certain anti-realist philosophical viewpoints: the intent is not that of presenting phenomena as open to interpretation because 'there are no objective truths'. Rather, it is a way of pointing at what it actually means to prehend from an obligate subject position, by drawing attention to the sensorial oversimplifications needed for humans to make practical decisions and parse information: the cognitive shortcuts imposing identity-forming boundaries between a particular entity and its environment, X and not-X, true and false — *according to my cognitive abilities at this particular moment and for this particular purpose*. In fact, ambiguity is precisely what makes it necessary to clarify what can be proven to be objectively true, by intentionally suspending certain innate cognitive habits and allowing sapience to change our perspective in light of accumulated knowledges (e.g. by adopting a scientific optics). Aesthesic ambiguity scratches the surface of perception so that we may be able to access what lies underneath — and in this sense, some such Artwork-generated scratches reach far deeper than others.

Here the Artwork's purported 'lack of utilitarian purpose', as identified in Kantian aesthetics, can be reinterpreted as a shift in the general purpose of *perception itself*: a way to 'disturb' its flow — the flow of manifest images — by redirecting our senses and intellect towards our *relationship* with external reality, in a way which can lead to questioning the trickery of 'common sense', of heuristics led by cognitive biases. Like in Heidegger's notorious example of the broken hammer, shifting one's relationship to the tool from an immediate ('ready-to-hand' or *zuhanden*) one to one of theoretical understanding ('present-at-hand' or

[438] *Ibid*., p.51.

vorhanden), the function of Art is to *break or damage* reality, interfering with our perception of it, so that perception itself can become 'present-at-hand'.[439]

One of the roles of the curatorial with respect to Art is to enable a context for this shift, to shape the conditions of reception of certain narratives and ideas via Art, where this is involved, so that cognition and reason, their trajectories and priorities, are deflected or diffracted enough that they can become visible to themselves, betraying their role as filters and sorters of otherwise undifferentiated stimuli or meaningless phenomena (as in unintelligible *to us*). If Art can 'make you look at things differently', as the trite adage goes, that is because it can strategically emphasise the role of *aisthesis* in cognition, leading our intellectual faculties astray on their way to work (their labour being secretly decoding the world for our brains to handle) and 'distracting' us with mirrored surfaces that catch out attention and point it back at our senses. Those self-reflections also play with our cognitive-heuristic depth of field, complicating the relationship between what constitutes the 'ground' or the 'figure' by revealing what we readily interpret as identity boundaries to be arbitrary, incomplete, sometimes fallacious translations: reality only as given to us and filtered through our limited capabilities to interface with the cosmos.

This, to be clear, does not mean that nothing else can or should be accomplished by an Artwork, that it cannot share this purpose shift with other more immediate, mundane or practical pursues: an artwork can *also* represent, mimic, carry information, signify, incite, induce certain chemicals reactions in our bodies, have a specific use-value and exchange-value, etc. I consider this to be a key aspect of the curatorial in relation to Art: to enable that cognitive shift *as well as* whatever else a certain narrative is meant to accomplish, often as an interplay between these effects from which *further* effects emerge.

---

[439] M. Heidegger, *Being and Time*, trans. J. Macquarrie and E. Robinson (Oxford: Blackwell, 1962-78, orig. 1927), pp. 135-8 (par. 1.3, section 22).

Chapter 7.
Resetting the curatorial

Having explained my take on the meaning of *aisthesis* and its role in a matter-realist theory of art/Art, it is finally time to provide some definitions for my understanding of the category of *the curatorial*, another operative term worth unpicking in some detail in order to enable its reinterpretation through an NM/NR lens. This nominalised adjective has relatively recently emerged in discourses around curating as a way to describe a *function* related to but in some significant ways *other than* applied curatorial labour. Beatrice von Bismark, Jörn Schafaff and Thomas Weski have remarked how the curatorial is in a way 'not unlike the function of the concepts of the cinematic or the literary', in the sense that the term refers to features deriving from a set of codified practices but can be applied with a level of theoretical abstraction that exceeds those contexts *sensu stricto*.[440] If curating is posited as a medium for cultural transmission, then 'the curatorial' can be understood as a concept whose definition transcends the 'medium specificity' of curatorial praxis and can be used to refer to more generalised features of cultural production.

I find it especially useful to use the notion of the curatorial to think about curating beyond disciplinary boundaries (*especially* Art), and more in general to understand the relation between cultural production as a defining *intraspecies* activity and the production/transmission of knowledge at the interface between human cognition and the 'reality' it prehends. My interest in the curatorial goes well beyond the more obvious and descriptive uses of the term as a way to refer to a certain professional sphere: 'curating' as *the work of exhibition-making* and other forms of labour (intellectual, relational and logistical) enabling the production, display and mediation of artefacts and other carriers of knowledge, or 'the technical modality of making art go public', as defined by Maria Lind.[441]

In this section I will refer to some existing definitions for the category of the curatorial as a distinct term indicating an expanded theoretical notion and then proceed to offer a definition of my own. This will help me better explain how a focus on human culture and its communication can turn their assumed anthropocentric biases inside out, precisely by articulating human knowledge as a way of grasping material phenomena through

---

[440] Beatrice von Bismark, Jörn Schafaff and Thomas Weski, 'Introduction', in B. von Bismark, J. Schafaff and T. Weski (eds.), *Cultures of the Curatorial* (Berlin: Sternberg Press, 2012), p. 8.

[441] Maria Lind, 'Performing the Curatorial: an Introduction', in M. Lind (ed.), *Performing the Curatorial: Within and Beyond Art* (Berlin: Sternberg Press, 2012), p. 11.

entanglements of *aisthesis* and sapient cognition. This understanding of the curatorial also allows me to further justify my specific interest in the role Art can play in revealing those dynamics — even though at the same time I maintain that the curatorial (or 'curating', for that matter) should not be interpreted to have any special relationship with Art over other forms of knowledge production.

The assumed centrality of Art in curatorial discourse is increasingly being questioned through appeals to transdisciplinary approaches. However, I find that there is a tendency to forget that the myth/misunderstanding of Art's autonomy was and is a major contributing factor to the isolation of the field from other forms of cultural production, and as a consequence Art-specific curation found itself trapped in a myopic paradigm of its own making. One does not need to dig very deep to find evidence of this historical short-sightedness. The semantic field of 'curation' — in its modern and current usage — originated in the contexts of private collections at the time of their gradual transition into publicly-accessible resources. A curator (from the Latin *cura*, meaning 'care', 'concern' or 'responsibility', making the word *curator* literally translatable as 'caretaker') was originally a figure taking care of the conservation, documentation and display of certain gatherings of objects as they begun to be understood as repositories of knowledge worth *systematically* preserving and sharing on the basis of expert knowledge.[442] The evolution of the field thus runs parallel to the gradual post-Enlightenment emergence of encyclopaedic museums out of Renaissance *Wunderkammers*, and, from the mid-1800, extends to the rise of temporary exhibitions from international expositions, arcades and *salons*.[443] In fact, in the cases of most *Wunderkammers* and commercial fairs — early stepping stones towards museums and exhibitions as we know them today — *Art was only one among many types of lower-case artefacts on display*. Modern forms of museological specialisation came a bit later, as related academic disciplines gradually emerged — including Western Art history, formally arising as a particular branch of the

---

[442] On the etymology of the term, especially as used by the Romans and in medieval ecclesiastical Latin, see David Levi Strauss, 'The Bias of the World: Curating After Szeemann & Hopps', in *The Brooklyn Rail*, Dec. 2006 - Jan. 2007, <https://brooklynrail.org/2006/12/art/the-bias-of-the-world> (accessed 24 January 2021), and David Balzer, *Curationism. How Curating Took Over the Art World and Everything Else* (London: Pluto Press, 2014), pp. 23-27. Both Levi Strauss and Balzer provide pointed insights on previous usages in ancient Rome (*curator*, *procurator*) and the medieval church (the 'curate'), drawing out parallels to contemporary (Art) curators, as these etymological links suggests that they 'have always been a curious mixture of bureaucrat and priest.' (D. Levi Strauss, also partially quoted by Balzer).

[443] Tony Bennett, 'The Exhibitionary Complex', in *New Formations*, n. 4, Spring 1988, p.73; also see T. Bennett, *The Birth of the Museum: History, Theory, Politics* (London: Routledge, 1995); Tristan Garcia and Vincent Normand, 'Introduction', in Tristan Garcia and Vincent Normand (eds.), *Theater, Garden, Bestiary. A Materialist History of Exhibitions* (Lausanne / Berlin: ECAL-University of Art and Design Lausanne / Sternberg Press, 2019), pp. 11-23.

humanities in the 19th century with the work of Jacob Burckhardt and Heinrich Wölfflin.[444] Newly minted specialists took some decades to reshape the landscape of museums along those disciplinary lines; by then, the figure of the museum-curator-as-collection-caretaker had had enough time to establish a certain common practical knowledge, and therefore a shared professional identity, that preceded those academic boundary shifts. This common background is what allows the notion of curatorship to still be applied across museological and disciplinary boundaries.

In fact, the notion of a specialist 'curator' was already established in England by 1662, when Robert Hooke — contemporary of Newton and early innovator in the field of microscopy — was appointed 'Curator of Experiments' for London's Royal Society, with the responsibility of organising public demonstrations and displays of selected specimens from the Society's collections: a *connoisseur* not of Art but of science.[445] This example also shows how early the term began to be used to refer to roles fulfilling education and mediation functions: not just keepers of ancient artefacts and rare curiosities tucked away in dusty drawers and private vaults, but also *interpreters and communicators of knowledge in-the-making*, in the case of Hooke rather literally activated through objects (e.g. scientific instruments) and performed in the presence of an audience.

I would argue that the current overwhelming emphasis on the visual Arts in relation to curating is mostly a product of recent discourses on the subject, reacting to the rise of the independent Art curator-producer-author in a way that emphasises its differentiation from the figure of the traditional (Art) museum collection keepers. In contemporary curatorial discourses, the latter category is understood to be a cohort of professionals trained primarily as Art historians and widely assumed to think of artworks as finished products to be preserved in a fixed state. This differentiation is a particular, disciplinarily situated and partial viewpoint that has become increasingly influential following the meteoric rise of curating as an academic subject in European and North American universities' Visual Arts departments from the late 1980s onwards.[446] As Art curators have tended to write about groundbreaking aspects of their

---

444 This is precisely part of Bennett's riposte to Douglas Crimp, which opens his essay 'The Exhibitionary Complex', (*ibid*., pp. 73-102). Cfr. Douglas Crimp, 'On the museum's ruins', in Hal Foster (ed.), *The Anti-Aesthetic. Essays on Postmodern Culture* (Washington: Bay Press, 1985), pp. 43-56, and Michel Foucault, *Discipline and Punish: The Birth of the Prison* (London: Allen Lane, 1977, orig. 1975). For a comprehensive chronicle of the rise of canonical Western art historiography, see Udo Kultermann, *The History of Art History* (New York: Abaris Books, 1993, orig. 1966).

445 D. Balzer, *Curationism*, pp. 27-8.

446 See Paul O'Neill's *The Culture of Curating and the Curating of Culture(s)* (Cambridge, MA / London: the MIT Press, 2012). Cfr. Felix Vogel, 'Notes on exhibition history in curatorial discourse', in *On Curating*, issue 21 - *(New) Institution(alism)*, Dec. 2013, p. 47.

peers' and predecessors' practices as a kind of self-awareness generated by developments in post-conceptual Art and its modes of display, related exhibition histories and case studies focusing on Artistic practices post-1960s have vastly dominated the literature. The net result is that contemporary Art exhibition-making now *de facto* commandeers the generic lexicon of curatorship: in the absence of other qualifiers, literature on curating often presupposes that the quintessential professional curator concerns themself primarily with Artistic practices and related modes of display.[447]

Either way, in a less parochial sense that acknowledges and embraces that earlier shared history and the continuing diversity of the field, 'curating' can still be said to refer to activities related to the fields of museology *and* exhibition-making, old and new, expanded over the years to (re)connect more explicitly with aspects traditionally ascribed to the production of artefacts in the present tense, extending before and often after the singular moment of their public presentation: in other words, with the facilitation and mediation of culture as a dynamic assemblage.

Admittedly, this recent shift is where post-conceptual Art deserves the most credit for innovating the field of curation. In the case of Art, curators increasingly expanded their remit by taking on a range of responsibilities previously ascribed to patrons of the arts, commissioners, critics and dealers, as well as to artists themselves *qua* self-promoters: the organisation of events, the PR surrounding an artist's work and other fundamentally 'managerial' tasks that accompany but are (usually) other than 'the making of art' understood in a strict sense.[448] Over time, the line between artist and curator became more blurred; the hybrid activities of exhibition-makers such as Harald Szeeman, Walter Hopps, Seth Siegelaub and Lucy Lippard from the late 1960s, connected to Art's so-called dematerialisation and embracing of process-based practices, are often mentioned in the new canon of curatorial histories as turning points in this development.[449] Thus emerged the 'curator-as-producer' as a professional subset, and the critical discourses that this particular shift catalysed as it problematised both the pros and cons of that expanded role. Commentators from within and

---

[447] For instance, in the introduction to *Performing the Curatorial,* even Maria Lind has a tendency to discuss Art curatorship as a default position, even while advocating for a less siloed and more transdisciplinary curatorial 'expanded field'. See M. Lind, 'Performing the Curatorial: an Introduction', in M. Lind (ed.), *Performing the Curatorial: Within and Beyond Art* (Berlin: Sternberg Press, 2012), pp. 9-20.

[448] In fact, the emergence of curators-as-producers practicing *alongside* artists parallels the emergence of artists knowingly acting as curators; see T. Smith, *Thinking Contemporary Curating*, pp. 101-38, and James Voorhies, *Beyond Objecthood. The Exhibition as Critical Form Since 1968*, esp. pp. 21-70; cfr. Beti Žerovc, *When Attitudes Become the Norm. The Contemporary Curator and Institutional Art* (Ljubljana / Berlin: Igor Zabel Association for Culture and Theory / Archive Books, 2015).

[449] See Paul O'Neill's *The Culture of Curating and the Curating of Culture(s)*, pp. 9-49.

Fig. 45. Peak conceptual dematerialisation and its curatorial re-materialisation: *c. 7,500* (curated by Lucy Lippard), 1973, installation view, Walker Art Centre, Minneapolis, Minnesota.

outside the profession then began to raise key questions: if the voice of the curator becomes more authorial, what does that do to the authorship of the artists they work with? Can curatorial practices be understood as forms of critique, and *vice versa*?[450] These questions in turn fed back into and fundamentally reshaped institutional practices around Art, gradually affecting other museological disciplines as well, partly on the basis of that shared cultural history and basic methodological toolbox.[451] From this point of view, the influence of this

[450] On the theme of curatorial questions, see Jens Hoffmann (ed.), *Ten Fundamental Questions of Curating*, (Milan: Mousse Publishing, 2013), and P. O'Neill, M. Wilson and L. Steeds (eds.), *The Curatorial Conundrum* (Feldmeilen / Annandale-on-Hudson, NY and Cambridge, MA: Luma Foundation / Centre for Curatorial Studies, Bard College / the MIT Press, 2016).

[451] Though slowly, the influence of institutional critique spread outwards from Art museums through hybrid curatorial projects (e.g. Fred Wilson's *Mining the Museum* exhibition at the Maryland Historical Society, 1992 -3). Canonical narratives in museums dealing with historical, anthropological and scientific subjects were by then the subject of much academic debate, intensifying in the 1990s, so these developments can be considered parallel. See for instance Emma Barker (ed.), *Contemporary Cultures of Display* (New Haven / London: Yale University Press / The Open University, 1999). Also of note is the spread of thematic exhibitions featuring contemporary Art to non-Art-centric institutions: consider for instance the programme of temporary shows organised by the Wellcome Collection in London.

dialectics of 'contemporary' Art curation within, without and against the museum on the evolution of curatorial practices at large cannot be understated. It can and should, however, be questioned in its continuing Art-centric bias and put into perspective on a more overtly dialogical and transdisciplinary basis, if curatorial practices are to become the innovative knowledge production engines their advocates so often purport them to be.[452]

Much has already been written on the evolution of curating in relation to post-conceptual Artistic practices, and I shall defer to the existing literature on the subject for a deeper historiographical analysis on this (already overexposed) section of the curatorial Venn diagram. Good overviews of this history can be found for instance in Paul O'Neill's thorough survey *The Culture of Curating and the Curating of Culture(s)* and Terry Smith's *Thinking Contemporary Curating*, both published in 2012.[453] Rather than rehashing this well-trodden historical narrative, my aim here is to concentrate more specifically on how this "reflexive turn' in exhibition theory' (as defined by Nora Sternfeld in her essay for the book *Cultures of the Curatorial*) led to definitions of 'the curatorial' as an expanded field of critical theory and practice.[454]

When trying to define it in relation to the expanded category of 'the curatorial', I tend to interpret the gerund 'curating' primarily as *a set of practices with real world constraints and implications* (economic, bureaucratic, logistical, ethical…). As a museum curator whose main remit is collection displays, I find my institutional work partly reflected in the traditional definitions of curator as keeper and interpreter of an Art collection — a national collection in a public institution no less. My main job is, simplifying drastically, to select objects from a larger group (in my case, a vast and still growing collection of Artworks made after 1900) and to put them on display in relation to one another, in order to create a certain spatialised, four-dimensional narrative — taking the temporal/durational dimension into account as well, as a constitutive feature of curatorial narratives — for a wide-ranging public assumed to have a different kind of access to / knowledge level of those objects, and to generate a modicum of new knowledge in the process. Though I strive to keep my motivations pedagogical and emancipatory at heart and my methods led by a desire to question and raise questions in

---

[452] This trait is common to several authors referenced in this section, but I am referring especially to the approaches exemplified by Jean-Paul Martinon (ed.), *The Curatorial. A Philosophy of Curating* (London: Bloomsbury, 2013). Within this anthology, Irit Rogoff's essay 'The Expanding Field', (pp. 44-5) addresses the need to transcend disciplinary boundaries head on.

[453] Terry Smith, *Thinking Contemporary Curating* (New York, NY: Independent Curators International, 2012; P. O'Neill, op. cit.

[454] Nora Sternfeld, 'What Can the Curatorial Learn from the Educational?', in B. von Bismark, J. Schafaff and T. Weski (eds.), *Cultures of the Curatorial*, p. 334.

others, my default position *qua* museum professional is, intrinsically, a rather authoritarian one, specifically that of an agent of the hegemonic 'exhibitionary complex'. This is the name given by Tony Bennett to a way of policing access to knowledge/power through post-Enlightenment modes of display, as argued in his 1988 essay 'The Exhibitionary Complex', where these are analysed in dialogue with and in response to Foucault's understanding of the 'carceral archipelago' and the 'clinic' as pervasive power dispositifs in the age of modernity.[455] Raymond Williams' lexicon of *dominant*, *residual* and *emergent* cultural forms/moments is also helpful here: I like to think I operate in a residual role, working both within and against the museum's dominant modes, and occasionally finding avenues to at least open up a conversation with emergent, i.e. truly subversive and antagonistic, practices.[456] However, juggling existing pressures around revenue-generating spectacle, economic-political subservience and various forms of crowd control, my role has so many strictures and compromises already built-in that little space and energy remain available to me to push the envelope along with the pencil. In this sense, 'real-world conditions' keep curat*ing* practically tethered to 'the exhibitionary', both understood as a set of professional practices and as an ideological paradigm.[457]

Meanwhile, it is also worth noting that, as of 2021, the word 'curating' has well and truly spilled from the jargon of art/Art and museology to everyday English, finding widespread usage besides both the traditional museological context where it originated *and* the specialist discourses related to the display of post-conceptual Art. These days the term is widely understood in an expanded sense as a synonym of 'editing' or 'selecting', associated with platforms such as publications, screenings, concerts, festivals and broadcasting; more recently and increasingly it is also found in reference to retail design, online streaming services, social media platforms and web-based marketplaces.[458] To give a working definition of this term that is phrased vaguely enough to encompass this expanded usage, the 'curatorship' word family can be understood to refer to the *gathering and organisation of objects, the structuring of*

---

[455] T. Bennett, 'The Exhibitionary Complex', in New Formations, n. 4, Spring 1988, p.73; T. Bennett, The Birth of the Museum: History, Theory, Politics (London: Routledge, 1995).

[456] Raymond Williams, 'Dominant, Residual, and Emergent', in *Marxism and Literature* (Oxford: Oxford University Press, 1986), pp. 121-26. Cfr. P. O'Neill, *The Culture of Curating and the Curating of Culture(s)*, pp. 25-26.

[457] Cfr. Paul O'Neill, Mick Wilson and Lucy Steeds, 'The Curatorial Conundrum Introduction', in P. O'Neill, M. Wilson and L. Steeds (eds.), *The Curatorial Conundrum* (Feldmeilen / Annandale-on-Hudson, NY and Cambridge, MA: Luma Foundation / Centre for Curatorial Studies, Bard College / the MIT Press, 2016), p. 7.

[458] T. Smith, *Thinking Contemporary Curating* , pp. 17-8. Cfr. Steven Rosenbaum, *Curation Nation: How to Win in a World Where Consumers are Creators* (New York: McGraw-Hill, 2011); David Balzer, *Curationism. How Curating Took Over the Art World and Everything Else* (London: Pluto Press, 2014).

sequences of events or the enabling of certain practices, with the purpose of providing a guided experience of these phenomena. In other words, any organised gathering of things can be correctly defined in English as having been 'curated'. Though it seems easy to distrust this development as a phenomenon that delegitimises and cheapens the meaning of curating as a (potentially) critical practice, I think there are positive side-effects to this inflationary linguistic phenomenon, with latent capacity to *enrich* discourses around the subject; nevertheless, to address the emergence of definitions of 'the curatorial' it is best to start from more 'specialist' usages of the term.

Following the 'self-reflexive turn' discussed above, 'curatorial studies' have taken on a somewhat independent meaning in academia, again overwhelmingly in relation to the curation of post-conceptual Artistic practices, and in tandem with the rise of 'exhibition histories/studies' as an offshoot of Art historiography that focusses on modes of public display.[459] Across Arts and Humanities faculties worldwide, it is not uncommon to come across courses teaching 'curating' (or some related combination of terms) as a mostly theoretical subject broadly preoccupied with critical methodologies as *potentially* practicable through modes of display.[460] In turn, this phenomenon has contributed to the development of a notion of 'the curatorial' as something *other than* — or at the very least *beyond* — curatorial praxis *per se*, a sort of distillation of the theoretical underpinnings of museology and exhibition-making as a multidimensional critical practice.[461]

There is however little consensus on the defining features of 'the curatorial' and its relationship to curat*ing*; in general there is a tendency to understand the two terms in

---

[459] I think the field of exhibition histories has the potential to be much more than 'an offshoot of Art historiography', but judging by the Art-centric literature associated with this field I do believe this to be a fair summary of its current *modus operandi*. For some classic publications on exhibition histories: *Thinking about Exhibitions*, Bruce Altshuler, *The Avant-garde in Exhibition: New Art in the 20th Century* (New York, NY: Harry N. Abrams, 1994), *Salon to Biennial: Exhibitions That Made Art History. Vol. 1: 1863-1959* (London: Phaidon, 2008), and *Biennials and Beyond: Exhibitions That Made Art History. Vol. 2: 1962-2002* (London: Phaidon, 2013); Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne (eds.), *Thinking about Exhibitions* (London: Routledge, 1996); Mary Anne Staniszewski, *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art*. (Cambridge, MA: The MIT Press, 1998); the 'Exhibition Histories' series of books published by *Afterall* (2010-ongoing); Jens Hoffman, *Show Time: The Most Influential Exhibitions of Contemporary Art* (London: Thames and Hudson, 2nd edition 2017). Also see P. O'Neill, *The Culture of Curating and the Curating of Culture(s)*, pp. 38-42.

[460] P. O'Neill, *The Culture of Curating and the Curating of Culture(s)*, pp. 2, 46.

[461] Maria Lind, 'The Curatorial', in *Artforum*, vol.68, n.2 (October 2009), p. 103; reprinted in Brian Kuan Wood (ed.), *Selected Maria Lind Writing* (Berlin: Sternberg Press, 2010), pp. 57-66; also see Felix Vogel, 'Resistance to Theory. The Ideology of "The Curatorial" and the History of Exhibitions', in *Revista de História da Arte* n.14, 2019: *The Exhibition: Histories, Practices and Politics*, pp. 64-77. This article, published after I first wrote this chapter, posits that the notion of the Curatorial has so far remained within the realm of the self-legitimation of the academic field of Curatorial Studies, though the ramifications of this act of legitimacy ought to be further investigated. It also laments the lack of a solid 'theory of exhibitions' as a basis for 'The Curatorial' to properly define itself — or indeed what it strives to define itself against.

opposition or at least through some level of semantic friction. In one of the earliest definitions of 'the curatorial', Maria Lind defines the latter by establishing a parallel with Chantal Mouffe's formulation of the notion of 'the political' in its differentiation from 'politics', including the emphasis on antagonistic dynamics as a defining feature of the former:

> "The political" is an aspect of life that cannot be distinguished from divergence and dissent — the antithesis of consensus. For Mouffe, "politics" is is the formal side of practices that reproduce certain orders. Seen this way, "curating" would be the technical modality — which we know from art institutions and independent projects — and "the curatorial" a more viral presence consisting of signification processes and relationships between objects, people, places, ideas, and so forth, a presence that strives to create friction and push new ideas.[462]

The distinction expressed by Lind in her 2009 text served as a kind of blueprint for many later definitions, though the article's brevity also left plenty of space for subsequent texts to interpret that distinction and extrapolate from it in significantly different ways. In the introduction to *The Curatorial Conundrum*, Paul O'Neill, Mick Wilson and Lucy Steeds address 'the tension between curating-as-display-making (the exhibitionary) and curating-as-expanded-practice (the curatorial)', positing the definition as a pairing of related-yet-different nominalised adjectives.[463] However, they present this moment of reflection as an evolution of curatorial discourses that aims at understanding the relationship between the two by reading one through the other:

> [Recently] the problematization of the exhibitionary complex — and particularly the development of a substantial new historiography of exhibition-making — has arguably given rise to a less dichotomous construal of the exhibitionary and the curatorial. A notable point of

---

[462] Maria Lind, 'The Curatorial', in Brian Kuan Wood (ed.), *Selected Maria Lind Writing* (Berlin: Sternberg Press, 2010), p. 64. This section is different from the corresponding part of Lind's text as published on *Artforum* in 2009. Vogel, in the aforementioned essay 'Resistance to Theory. The Ideology of "The Curatorial" and the History of Exhibitions' (p. 68 and n. 11), notes that Mouffe's definition itself is based on Heidegger's distinction between 'ontic' and 'ontological', whereby 'ontic' refers to concrete, specific realities of particular beings, simply manifesting through being, and 'ontological' to a more complex understanding of the structures of reality that requires a level of theoretical abstraction. The term 'ontological' implies additional layers of meaning enabled by relations between entities and by their ability to reflect upon themselves, and in this sense Heidegger's distinction can be seen as a meaningful parallel for the intention behind the attempts to define 'the curatorial' as distinct from 'curating' under examination here. However, this is where the link to Heidegger's lexicon ends: both 'politics' and 'curating' already operate at a highly relational and abstract level, making their relation to the notion of 'ontic' somewhat spurious, and the Heideggerian reference best limited to its linguistic structure.

[463] Paul O'Neill, Mick Wilson and Lucy Steeds, 'The Curatorial Conundrum Introduction', in P. O'Neill, M. Wilson and L. Steeds (eds.), *The Curatorial Conundrum* (Feldmeilen / Annandale-on-Hudson, NY and Cambridge, MA: Luma Foundation / Centre for Curatorial Studies, Bard College / the MIT Press, 2016), p. 7.

> interchange emerges around thinking through exhibition-making, and the interrogation of curatorial knowledges — made manifest in the increased profile given to questions of curatorial labor or exhibition-making when this work is broadly understood, for instance, as actions or practical inquiry congruent with, but not reducible to, other modes of scholarship and experimental research.[464]

For others, the dichotomy remains fundamental to an understanding of the curatorial as working precisely *against* exhibitionary dispositifs as received modes of knowledge production, and against the exhibition-as-end-product vs. the curatorial-as-process. These two distinct interpretations of the 'curating-curatorial relationship' are exemplified by the positions held by Beatrice von Bismark — initiator of a postgraduate programme titled 'Cultures of the Curatorial' at the Academy of Visual Arts in Leipzig and editor of a related series of anthologies — and Irit Rogoff — head of the 'Curatorial/Knowledge' doctoral programme at Goldsmiths, University of London —, as expressed in an interview included in the 2012 book *Cultures of the Curatorial* (co-edited by von Bismark). And even here, the two positions appear less opposed the more the two read them against one another. In this dialogue, Rogoff explains her insistence on the dichotomy as 'a strategic differentiation', 'because they operate in different ways and can highlight each other's limitations and potentials. […] I aspired to a situation in which the discussion on the curatorial would chase around after curating and make it uncomfortable, and therefore make it more ambitious and more self-aware.'[465] Beatrice von Bismarck's position is not very dissimilar to Rogoff's, but puts the emphasis on the connection and imbrication between the two in a way that is possibly inspired by Latour's Actor-Network Theory, and that she calls a 'constellational' mode:

> For me, curating has to do with what […] I would call […] techniques. They encompass all of the activities taking place in order to allow an exhibition to come into the world. […] Curating is a constellational activity. […] By comparison, the curatorial is the dynamic field where the constellational condition comes into being. It is constituted by the curating techniques that come together as well as by the participants […] and finally by the material and discursive framings […]. For me, the gap [between curating and the curatorial] is something that can come up between the ambition and the actualization of an exhibition, but the exhibition itself

---

[464] *Ibid*.

[465] Irit Rogoff in 'Curating/Curatorial. A Conversation between Irit Rogoff and Beatrice von Bismarck', in Beatrice von Bismarck, Jorn Schafaff, Thomas Weski (eds.), *Cultures of the Curatorial* (Berlin: Sternberg Press, 2012), p. 26.

> is a participant in this exchange that takes on a life of its own and can phrase an argument as an intermediary.[466]

Another constant of debates around the curatorial seems to be the need to operate beyond the sphere of Art, in spite (or possibly *because*) of how this has historically dominated related discourses. Expanding its remit outwards from (post-conceptual) Art by appealing to a versatile, open-ended and transdisciplinary notion of practice, the curatorial thus tends to be framed in relation to 'knowledge production' at large, whereas 'curating' is where academic and institutional specificities are at play in practice. For instance, Rogoff defines the curatorial very explicitly as 'an epistemic structure' that operates beyond disciplinary bounds:

> It is a series of existing knowledges that come together momentarily to produce what we are calling the event of knowledge; a moment in which different knowledges interacting with one another produce something that transcends their position as knowledge. […] It is this double movement, which […] is also exhibitions constantly making provocative proposals toward the field of knowledge to reorganize itself, to re-singularize itself to have different interfaces with publics than it normally does.[467]

In this sense, understood in relation to 'events of knowledge' at large, the curatorial is not limited to the field of action of the professional curator, and certainly not limited to the curation of Art, whose understanding in isolation from other forms of sapient knowledge expression — non-Art artefacts, or what I have been referring to in this chapter as 'art at large' — is, as I argued, fundamentally impossible.

However, Rogoff still appears to point to *existing* methodologies as the main material that the curatorial works with and sets in motion: an epistemic structure building new knowledge from prefabricated blocks, which can then sometimes lead to rethinking the initial parameter and develop novel methodologies and materials. Conversely, I find it useful to think of the curatorial as a function of cultural exchanges that essentially *precedes* methodologies and *triggers their adoption,* including the exhibitionary apparatuses of professional curating and/or the theoretical framing of curating as an academic field of enquiry.

Though definitions such as Rogoff's and von Bismarck's have been helpful in my theoretical understanding of what the curatorial can be, I sometimes still find them limited

---

[466] *Ibid*., pp. 24-5.

[467] *Ibid*., pp. 27, 32.

and limiting, as they ultimately seem difficult to apply outside of the realm of curatorial practices *senso strictu*, of exhibition-making and similar 'editorial' platforms as a professional field, whose formal possibilities and critical potentialities remain constrained by existing academic boundaries on the one hand and socio-economic circumstances on the other (e.g. the culture industries under the obligate ecosystem of late capitalism in its various geographically situated guises).[468] Even Rogoff's theoretical-critical extension of the terminology around curatorial practices remains implicitly tied to these predetermined structures, despite its valiant attempt at pushing against disciplinary territoriality and opening up to methodologically hybrid collaborations and experimentations. At its core, as Beatrice von Bismark hinted at, Rogoff's understanding of the curatorial still takes curat*ing* as a starting point and a seemingly necessary term of reference: it essentially posits the exhibitionary as the discursive context against which the curatorial must be read and understood.

What would it mean to try and rethink the curatorial as a function that can truly transcend established, codified dispositifs of artefacts' selection and display? What if the curatorial as a purely theoretical concept (i.e. a complete semantic abstraction) can exist independently of all techniques, of all institutions and structures that, when cynically boiled down to their 'real-world' manifestations, can ultimately be defined as forms of project management?

The curatorial as an Anthroposemiotic function

Though I think there is value in engaging in exhibitionary activities in spite of their compromised practical premises (and not only because that is how I earn my wage), I just find myself craving a better definition of the curatorial, one that can be of even wider theoretical use. Importantly, I also long for a definition that would be easier to communicate to those operating outside the professionalised realm of exhibition-making and thus believing they lack experience of *applied* curatorial knowledge, including philosophers and art theorists with no outward interest in the nitty-gritty of curatorial techniques — if not displaying an explicit distrust of 'curatorial theory' precisely as a disingenuous symptom of neoliberal ideologies, instrumentalising culture by reducing it to a service industry economically tied to the

[468] Theodor Adorno and Max Horkheimer, 'The Culture Industry: Enlightenment as Mass Deception' (1944), in *Dialectic of Enlightenment* (New York, NY: The Seabury Press, 1972; orig, 1947, 2nd ed. 1969), pp. 120-67.

'experience economy'.[469] *Is it possible then to formulate such a notion of 'the curatorial' in a way that is independent of the current hegemonic politics shaping the ways in which we share culture?*

To be clear, my intent here is very much not to transcend historical, real-world conditions and arrive at a kind of universal definition of the curatorial. I see no use in assuming a perspective 'from nowhere' on matters of knowledge production; in fact, I find Beatrice von Bismarck's understanding of the curatorial as ultimately related to the 'constellations' of real-world conditions to be a very sound matter-realist anchor. What I am about to propose is rather a *knowingly partial perspective*, a conjectural reformulation that does not intend to negate, correct or replace all existing definitions — though it can be read as a critical riposte to what I see as a kind of resignation to existing epistemologies, even when trying very hard to assert the opposite.

For now, let us tentatively posit that 'the curatorial' *can* have value as a purely theoretical category, one with the potential to be used in a more generalised sense in philosophical discourse, independently of the trappings of curating/the exhibitionary. In order to clarify what this potential may be, I will temporarily shelve all existing definitions — *especially* those developed in relation to Art history and theory — and start 'from scratch', as it were, limiting my arsenal to the terminology and approach I have established in this chapter and the previous. I shall attempt to reset my understanding of the curatorial by defining it as *a mode of knowledge production based on the context constructed for and around the conveyance of meaning through objects and artefacts*.

Thinking of the curatorial in terms of 'conveying meaning' suggests to me that it might be useful to re-interpret the notion as a kind of generic *semiotic* function, following an understanding of semiosis that extends to non-anthropogenic, non-sapient, non-intentional forms of signification, in a way that can be reconciled with the ontoepistemological narrative of agential realism. This way the term can be demystified on the one end, and emancipated from its origins in the practicalities of the 'cultural-industrial-exhibitionary complex' on the other, by taking it back to basics — and not just of 'curating' as a way of interpreting human cultural forms, but *of the mediation of processes of signification in matter at large*. Thus, even when restricted to practices that specialise on sapient forms of expression only (i.e. forms of curating limited to art/Art), the notion of the curatorial can become a useful way to reframe these as *species-specific* forms of semiosis: *intraspecies communication through artefacts*, or what some non-anthropocentrically-minded semioticists, taking their cue from C. S. Peirce

---

[469] See B. Joseph Pine II, and James Gilmore, *The Experience Economy* (Boston, MA: Harvard Business School Press, 1999).

rather than de Saussure, call *Anthroposemiosis* precisely in order to highlight its partiality in a cosmos where all matter constantly *signifies*.[470] However, this is not to say that the curatorial function is *exclusive* to human communication: in a sense, it can apply just as much to *inter*species exchanges as well, and to cultural exchanges within members of other groupings of sentient beings. It might be more correct to say that this notion *helps* to better understand Anthroposemiosis as the way in which culture works *when humans are involved* — i.e. in the overwhelming majority of discourses around culture traditionally happening within the so-called humanities.

This is also a crucial point in my argument: as a function of intentional human mediation, *the curatorial always necessarily translates even non-anthropogenic phenomena into sapient forms*, as it attempts to communicate the knowledge derived from them through complex interpretations that are built upon layers of existing knowledges (it can then translate it back, too, as a kind of reverse engineering we use on a daily basis to interact with all manners of non-sentient matter). The curatorial thus also co-opts assemblages not of human origin as raw materials for narrative artefacts: *it has the task of interpreting matter/objects through existing human culture*; at the same time it makes it possible to turn matter/objects into new knowledges by allowing for new (or renewed) forms of access, fresh ways of observing and experiencing given fragments of reality. In other words, the curatorial can be understood as a function of the transmission of knowledge that is the very basis of the sapient culture cumulatively built by this particular species of primates.

I should stress once again that the products of scientific and philosophical methodologies themselves count as artefacts too, according to this schema: they constitute existing 'layers' in the accumulation of human culture, formalised into epistemological fields that are nonetheless fluid and capable of evolving and hybridising. For instance, returning to practical curat*ing* examples, STEM-centric exhibitions constructed around 'specimens' from the field of 'natural history' (tellingly named as if to prove the point of necessary translation of all knowledge for and among humans into anthropocentric or even anthropomorphic forms) traditionally tend to replicate the theoretical structures of established scientific disciplines: they borrow their curatorial approaches from those existing epistemological apparatuses and often simply translate them into narratives that are organised into an immersive, four-

---

[470] John Deely, *The Human Use of Signs: Or Elements of Anthroposemiosis* (Lanham, MD: Rowman & Littlefield 1993); John Deely & with the editorial assistance of Mr Stephen Sparks (2015), 'Objective reality and the physical world: relation as key to understanding semiosis', *Green Letters*, vol. 19:, no.3, 267-279. Also see Peirce Edition Project (ed.), *The Writings of Charles S. Peirce: A Chronological Edition* (Bloomington: Indiana University Press, 1986).

dimensional space of (aesthesic) experience. However, *the curatorial function is not bound to any one specific kind of translation*, even though it may manifest in different ways depending on the methodological approach: at its core, *the curatorial corresponds to the production of artefacts of knowledge interpretation and transmission, whichever form these may take*.

From this definition stems another fundamental observation: *all curatorial narratives are themselves artefacts*. And just as artefactual signs, when not perceived as *intentional* utterances, can be misunderstood for phatic expressions, indexical traces or even non-anthropogenic phenomena altogether, *a given narrative cannot be understood as a curatorial form if it is not perceived as a kind of sapient communication* (e.g. objects arranged in a certain way by an aleatory or organic process — say, bits of paper scattered by a gust of wind — rather than a collection of items deliberately organised as such by a human being for the purpose of communicating something — such as cut-out illustrations and notes organised into a visual atlas). In other words, in a sense *the curatorial can be redefined as the communication of sapient knowledge production*, in any form whatsoever, and even when its subject matter is a set of phenomena of entirely non-sapient origins. For us human animals, the curatorial is thus inexorably bound to 'human access', to knowledge as formulated or translated by *H. sapiens*.

Having established that the curatorial is a species-specific function that translates knowledge — even knowledge of non-anthropogenic phenomena — into sapient artefacts, I can try and explain how the curatorial works as knowledge transmission via 'sapient utterances', a move which leads me to borrow a few more familiar term from the field of semiotics. To wit: all artefacts, when posited as acts of utterance, have an origin point, a 'sender' or 'transmitter', and an encoded potential for its *accurate* transmission as an intentional expression, which I shall call the *vector of intentionality*.[471] The curatorial gives form to this vector of intentionality as the utterance is conveyed by an interpreter or mediator. It is important to note that the curatorial 'interpreter' may or may not coincide with the 'sender' themself; after all, humans constantly mediate their own thoughts with every intentional act of speech. For instance, in the case of Art, an Artwork-as-utterance is expressed curatorially by its authors themselves, beginning with the intent of transmitting it to others: its

[471] I am borrowing the term 'vector' partly from mathematics and physics (Euclidean vectors, vector space), partly from biology (vehicles for pathogens and genetic material) rather that from semiotics, though in its meaning of 'carrier' the word vector also lends itself to a semiotic interpretation. There is indeed a theory called 'vector semantics' (see Daniel Jurafsky and James H. Martin, *Speech and Language Processing*, 2019, pp. 96-126), but this is unconnected to my argument. Here I intend vector simply to indicate a variable function, distinct from both code and channel: a sort of *potential* for social-semiotic transmission. The vector of intentionality has a particular direction and magnitude, encoded in an artefact at the point of utterance, which sets it functioning as a sign in motion, but also remains latent until interpreted — a process which can alter that originally intended path and the intensity of its potential to transmit.

being made for dissemination or 'display' (or, occasionally, kept private, as a purely solipsistic exercise) and thus *curatorially encoded*. Also important to note is that a focus on intentionality should not obscure that the curatorial can also interpret and transmit *unintentional* aspects or facilitate *open interpretations* of a given utterance; for now, I want to concentrate on the communication of explicit intent as a well understood curatorial principle, before returning to openness, incidents and affects later.

Next, let us consider the *way* in which the curatorial is meant to convey a set of meanings — or, sometimes, partially hide or dissimulate them. For instance, returning to Art, Tino Sehgal's consistent refusal to allow visual documentation of his performances is a clear curatorial act. An Artwork's 'display specifications' explicitly contain indications of how to best convey its 'in-built' curatorial intent, which are then adapted or negotiated by the exhibition-makers according to their own distinct mediation strategies and practical constraints. The curatorial is also clearly other than both an Artwork's content (its signifier or *representamen*, in Peirce's lingo) and its eventual interpretation by the viewer (its *interpretant*): it is a *function* in the construction and transmission of meaning through Artworks, a function that focuses on its reception by a viewer as an active — and always *embodied*, *aisthesis*-dependent — receiver.

The process can then take a number of forking paths as the distance between the moment of utterance and its receiver grows, paths whereby the curatorial function can attempt to interpret and closely follow the original vector of intentionality or strategically diverge from it for different purposes. Note that a curatorial intent does not by default *coincide* with the vector of intentionality: remaining within the sphere of Art, Artists themselves can and do modify the expression of that vector when addressing the transmission or display of their work, for instance by concealing, confounding, withdrawing and warping information about their own practice.[472] These, too, are curatorial strategies (and I should stress that acts of concealment, deliberate confusion, withdrawal and warping of information obviously apply to all kinds of knowledge transmission, because even outside Art, the basic steps and components of the curatorial function remain the same).

Shifts in the context of reception, including those due to the sheer passage of time, also distort and diffract the vector of intentionality: consider ancient artefacts/utterances whose original intent is difficult to understand due to radical changes in cultural milieus, or has been

---

[472] Cfr. Maria Lind, 'Notes on the Curatorial. Formalitism and Other Transatlantic Differences', in B. von Bismark, J. Schafaff and T. Weski (eds.), *Cultures of the Curatorial* (Berlin: Sternberg Press, 2012), p. 82: in what Lind terms 'post-functionalist curating', or — tentatively — 'formalitist' curating, 'transparency is not necessarily the privileged critical paradigm. Abstraction in general and opacity in particular are consciously engaged as agents.'

lost to history altogether. The function of the curatorial can therefore also be defined as, in essence, a kind of hermeneutic investigation: a combination of modes of interpretation as well as transmission of the knowledge encoded in objects and artefacts, gathered in order to produce *new* knowledge as a kind of synthesis, whereby curatorial practices generate *new knowledge-carrying artefacts*. The fact that objects and even intangible artefacts accrete meanings and generate affects and effects that were not intended or predicted by their original utterers, as they travel in time and space through chaotic flows of material entanglements, should be proof enough that the curatorial is *always* far more complex that the straightforward mediation of a message from sender A to receiver B.[473]

In other words, the curatorial, *like all other semiotic processes*, does not and cannot operate in isolation: an utterance can be said to have a curatorial function, but even utterances whose primary function is to convey knowledge can have other parallel intentional functions (say, to entertain, to demonstrate one's storytelling skills and/or to promote something for financial gain), and end up accumulating extraneous connotations, exceeding the original chains of representation as particular meanings are transmitted across individuals as well as across different points in time and space. The curatorial must not only take the possibilities of accidental and diffracted readings into account, but where possible point to and play with the 'margin of errors' and the possible open-endedness of a message, in order to put it to use as a lens for generating knowledge *beyond the vector of intentionality*.

Moreover, just like the existing phenomena through which it communicates, a curatorial utterance *creates* ontoepistemological difference, in that it is already *other than* the aspects of reality which it intends to convey, and *always produces its own reality in the process*. As such, the curatorial operates in ways that cannot be fully controlled or predicted, through practices that produce effects (and affects) *before* and *outside* the consciousness of the people originating a particular utterance — and of those perceiving it. The curatorial too generates *open works*.[474]

To summarise: when channelling human artefacts, *the curatorial is partly guided by the intents of their makers*, *partly channelling meanings and 'side effects' that were not intended by the original 'sender', and partly contributing to the constitution of a new utterance* which, for all intents and purposes, is a distinct artefact with its own meanings, both intentional and unintentional. The curatorial function is therefore in a sense *already encoded within the*

---

[473] I generally subscribe to Umberto Eco's reading of the 'open work' as a process that exceeds authorial intentionality; see Umberto Eco, *The Open Work* (Cambridge, MA: Harvard University Press, 1989), esp. pp. 84-104.

[474] *Ibid*.

artefacts themselves at their points of origin: every author is also inherently a curator of their own poietic acts.

In light of all this, one can conversely rephrase the verb 'to curate' to refer to activities pertaining to the interpretation and communication of meaning, understood in the most general sense (i.e. as the mechanisms of ethico-onto-epistemological differentiation that characterises *all* material phenomena according to agential realism), though something 'curates' in the sense described above only when a measure of consciousness and intentionality intervenes in these processes of mediation. When the phenomena being interpreted are themselves of sapient origins, curating becomes the articulation of the content and context of those artefacts *in a way that channels or diffracts the intentions of their authors*. Here the curatorial function refers more explicitly to the *transmission of an intent,* along with the other possible knowledges that can be conveyed through an artefact. And intent is in itself a marker of sapience: an *awareness of one's agency*, of one's ability to make different choices (different cuts) in certain poietic acts.

This is where the role of ethics in an agential realist reading of the curatorial as a mode or component of *ethico*-onto-epistemology comes more sharply into focus. Like all forms of communication, curatorial utterances can also mislead and hurt; they can be misunderstood and generate collateral damages. The curatorial function, however, necessarily has the recipient in mind: it implies *an awareness of the effects an utterance can have on its addressees*. It is also guided by notions of truth-value: the curatorial expresses truth by *opting to* aim for 'accuracy' and minimise the possibility of the intended meaning being misunderstood; conversely it can 'betray' that truth by intentionally distorting or misrepresenting it. It can also 'repurpose' it by using it to build distinct expressive or discursive purposes, such as critiquing an author's intent or turning it into part of a wider narrative. In a sense, all curatorial narratives necessarily co-opt existing messages as they create new ones: they can strive for accuracy/truthfulness but — it bears repeating — remain *other than* the given phenomena they try to convey.

It is my contention that this particular reading of the category of the curatorial, considered in this expanded sense as a constitutive part of *all* forms of human culture (understood here as 'forms of culture that happen to involve humans'), all attempts to communicate our experiences and our understanding (and *mis*understandings) of reality, is key in thinking about knowledge in a matter-realist sense. Understanding the curatorial in this light could help frame discussions on knowledge production in general, as well as Art in particular, in relation to NM/NR, because it is through this function that human culture and

its mediations can be reframed in relation to both sense perception and reality outside the mind. As I have described it, the curatorial is a fundamental part of any act of translation of *aestheta* into sapient *noeta* (the latter still understood as fully material and embodied, of course), and especially of the construction of culture as a process not just of accumulation of knowledge, but of its *diffusion through sharing*: of the self-conscious expansion of the possibilities of thought by building upon *knowledge transmission as a social process*. I argue that it is the function of the curatorial that can make an Artwork operate as a device for 'knowing differently' and stressing the material nature of processes of signification and representation — and that this potential is not limited to those instances when that is the *explicit* intent of its author. The curatorial sets in motion a series of material effects and affects, catalysed alongside (and partly in function of) intentional knowledge transmission: it is, at its core, a guided translation of knowledge through *aisthesis* (because no matter the medium or channel or genre or epistemological form, *embodied sensual prehension is always necessary for knowledge transmission to happen*). As such, the curatorial also allows Art to complicate the boundary between object and subject, to make perception and thought processes reflect upon themselves as they happen in relation to one's body — and, by extension, the material entanglements that tie it to the cosmos at large.

Moreover, since the category of the curatorial transcends the specificities of particular academic or professional fields, *it is an inherently transdisciplinary category*: in fact it is the function of the curatorial that makes it possible to make and communicate philosophy via Art — and Art via philosophy, science via both, and so on.

Though this leaning into a semiotic understanding of the curatorial may seem at odds with my avowedly anti-anthropocentric, non-logocentric matter-realist approach, I see this as an opportunity to analyse the particular phenomenon of human communication diffractively and in relation to non-sapient forms of meaning production. In order to do so, one has to recognise the field of Anthroposemiotics as an inherently flawed heuristic methodology that tends to isolate human agency and to downplay or outright ignore the non-human aspects of cultural expression, along with the myriad other intra-actions that contribute to the co-constitution of meaning. Nevertheless, I think that there is a use for non-rigid analyses of language and communication (especially via Peirce's semiotics) as ways to understand certain apparatuses that are of special significance for 'phenomena that involve humans', provided that there is an awareness of their anthropocentric baggage and an attempt at recalibrating their discursive mechanisms along the way, so that they can be understood as, in Baradian terms,

'part of the larger material configuration of the world'.[475] From an agential realist perspective, the category of Art is such an apparatus, an open-ended practice 'always in the process of intra-acting with other apparatuses.'[476] As Barad repeatedly warns in *Meeting the Universe Halfway*, 'humans do not merely assemble different apparatuses for satisfying particular knowledge projects; they themselves are part of the ongoing reconfiguring of the world. […] Which is not to say that human practices have no role to play; we just have to be clear about the nature of that role.'[477]

Understanding processes of signification in relation to Anthroposemiosis is but one of the myriad heuristic simplifications we have to use in order to build our partial, embodied knowledge of the cosmos, block by block, layer upon layer. And the communication of this knowledge between individuals, gradually accumulated and organised into the cultural forms that enabled the emergence of sapience, relies on curatorial processes that can be understood as the result of the genetically encoded behaviours of *H. sapiens* as (a kind of material assemblage that has evolved into) a social animal.

However, I also admit that this definition of the curatorial ends up being somewhat reductive (or perhaps over-inflated) when compared to others more rooted in knowledges generated through specific forms of curatorial praxis and discourse. For instance: curatorial practices tied to Art-centric curating — the kind of discourse against which I have strategically elaborated my own definition of the curatorial — can generate dialogues between artists/authors, curators and their publics which are responsive to real-world contingencies and pick up the differences between the curatorial of the 'original utterer' and the derivations and interpretations based on that vector of intentionality in ways that the explanation above fails to register. There are materially transformative aspects in the processes through which knowledge is channeled which would require further investigation, and are indeed crucial to certain understandings of the category of the curatorial in relation to curat*ing* as a critical practice (as one such *situated* channel): this is indeed what Beatrice von Bismarck points at with her emphasis on the constellational. And, perhaps most importantly, I am aware that to focus on the notion of sapient *intentionality* downplays the unwitting, affective nature of communication in a way that is potentially misleading and puts the dimension of human logos back in the centre. In any case, I consider this definition to be but *a* way of looking at the

---

[475] K. Barad, *Meeting the Universe Halfway*, p.171.

[476] *Ibid.*

[477] *Ibid.*

notion of the curatorial afresh, one that holds the potential to be expanded in light of further diffractive readings.

The Art function as a tool for curatorial diffraction

So far in the last two chapters, I have mostly written about Artworks (and related curatorial practices) as catalysts or vectors for *rational* thought processes: carriers of intentional forms of semiosis, like most artefacts primarily meant to function as vessels for a certain content (i.e. as 'messages'). This still holds even when considering the possibility of uncertain and open interpretations, or to the Artistic practices being the moment of content/knowledge generation in itself.

However, one of Art's distinctive advantages is that it can provide a uniquely 'safe' space to transpose, process and experiment with aspects of reality perceived to be *ir*rational or *pre*-rational, including *aisthesis* itself, and certain aspects of human cognition that don't seem to 'make sense' — paradoxical emotions, altered states of mind, logical lapses, anything *not yet rationally understood —*, *while at the same time still being an expression of sapience* (as opposed to, say, an involuntary or unacknowledged absence of reason). Again, Art is not the *only* space to do so, as science and philosophy (among other forms of knowledge production) also do their best to fulfil this role through their own methodologies, which however are themselves constructed primarily through rational means. Conversely, because of the fact that the apparatus of Art practically demands the triggering of non-rational, affective reactions due to its partial yet inescapable reliance on *aisthesis*, it is in essence irreducible to the understanding of these very reactions via *purely rational* epistemological schemas. It requires reason to sense its bodily abilities and limits *in order to be both prehended and understood*.

Art's license to be irrational also includes the exercise of the most rigorous forms of rationality, those capable of expanding our heuristic methods by pushing them beyond, if not *against*, what we perceive as 'common sense' (the manifest image, to reprise Sellars' terminology), and sometimes stretching reason to the point where science and philosophy seemingly reach their limits: hypothesising what lies beyond rational/human knowledge and its possibilities is, for example, the essence of science/speculative fiction as well as a recurring horror trope.[478] It is not a coincidence that scientists themselves make extensive use of metaphorical language and visual representations (including diagrams and mathematical

[478] Eugene Thacker, *In the Dust of This Planet. Horrors of Philosophy vol.1* (Winchester: Zero Books), 2011.

formulae) to get to grips with reality, in a way not dissimilar to the way philosophers use linguistic and schematic *analoga* of thought. One could argue that, as situated human practices, philosophy and science (for instance) can only exist via the formulation of such *analoga* — and I contend that what shapes these *analoga* is precisely their *curatorial* function: ways of communicating which can channel, refract or diffract the thinkers'/authors' intents.

The *analoga* used as part of the methods of science and philosophy are not however necessarily 'Art' (though they can *also* be), because their primary curatorial aims and strategies are fundamentally different. Conversely, and precisely because of its foregrounding of cognition and affect, Art does not strictly speaking *need* to be read through scientific or philosophical lenses in order to fulfil its own communicative/curatorial functions. Art does not *need* to conform to 'logic' and 'external truths' beyond the reality of the aesthesic effects it generates or channels: in other words, it does not need to make (*rational*) sense in order to make (*aesthesic*) sense. However, *if* Art is used to communicate or attempt to grasp reality in a neomaterialist key, then it should be framed as a way to understand the role *aisthesis* and affects play as material conditions for knowledge at large, *including* the kinds of epistemological methods we understand as rational and approximating objectivity. Which is to say: if sense-perception and affects are inescapable, then avowedly matter-realist forms of curating via Art can take on the task of revealing these human thought processes *as embodied cognition*: Art as a way of pointing out the intrinsic 'impurity' of reason as a materially-bound apparatus interconnected with, dependent on and afforded by unfathomably complex chains of phenomena — which themselves can be understood as the result of mutual prehension, of ontoepistemological dynamics.

In his essay for the landmark anthology *Carnal Knowledge. Towards a 'New Materialism' through the Arts*, Jondi Keane has proposed a way of explaining how Art can complicate processes of cognition by introducing the notion of *Æffect*, an attempt 'to correlate two historical modes of information capture and research value: affect in the arts and effect in the science[s]. This approach […] invites a multimodality assessment of the plastic potential of thought, feeling and sensation to be reconfigured.'[479] According to Keane, the role of the environment in the co-constitution of meaning — the complexity of the immeasurably vast tapestries of entangled matter that we find ourself navigating by prehending — is routinely ignored in favour of an arbitrary set of identity boundaries and relationships that only *appear to us* (*qua* culturally situated human animals) to be essential features of the phenomena

[479] Jondi Keane, 'Æffect: Initiating Heuristic Life', in E. Barrett and B. Bolt (eds.), *Carnal Knowledge. Towards a 'New Materialism' through the Arts* (London: I.B. Tauris, 2013), pp. 43-4.

observed. *Æffect* is what enables these heuristic mechanisms, summarised in a compound neologism that acknowledges the role affect can play *alongside* scientific ways of describing embodied forms of cognition, as complementary and irreducible to one another. To identify those interpretive devices for what they are can in itself become a heuristic strategy highlighting the embodied nature of cognition, and Keane proposes that Art is an especially useful training ground for this interpretive shift: 'an attentiveness to the qualities of experience within processes of rigorous activities, such as can be the case in […] art production, leads us toward the more omnidirectional *Æffectivity* of an heuristic life.'[480]

The foregrounding of aesthesic effects often plays precisely with in-between states, ambiguities and paradoxes of perception and cognition, as if to test the limits of 'common sense', forcing us to face the fact that our material relationship with the world is far more complicated than our brain unwittingly takes it to be — at least when it can't be bothered to peer underneath the surface of the manifest image. This kind of ambiguity is not the same thing as the non-committal naive relativism of certain anti-realist philosophical viewpoints: the intent is not that of presenting phenomena as open to interpretation because 'there are no objective truths'. Rather, it is a way of pointing at what it actually means to prehend from an obligate subject position, by drawing attention to the sensorial oversimplifications needed for humans to make practical decisions and parse information: the cognitive shortcuts imposing identity-forming boundaries between a particular entity and its environment, X and not-X, true and false — *according to my cognitive abilities at this particular moment and for this particular purpose*. In fact, ambiguity is precisely what makes it necessary to clarify what can be proven to be objectively true, by intentionally suspending certain innate cognitive habits and allowing sapience to change our perspective in light of accumulated knowledges (e.g. by adopting a scientific optics). Aesthesic ambiguity scratches the surface of perception so that we may be able to access what lies underneath — and in this sense, some such Artwork-generated scratches reach far deeper than others.

Here the Artwork's purported 'lack of utilitarian purpose', as identified in Kantian aesthetics, can be reinterpreted as a shift in the general purpose of *perception itself*: a way to 'disturb' its flow — the flow of manifest images — by redirecting our senses and intellect towards our *relationship* with external reality, in a way which can lead to questioning the trickery of 'common sense', of heuristics led by cognitive biases. Like in Heidegger's notorious example of the broken hammer, shifting one's relationship to the tool from an immediate ('ready-to-hand' or *zuhanden*) one to one of theoretical understanding ('present-at-hand' or

480 *Ibid*., p.51.

vorhanden), the function of Art is to *break or damage* reality, interfering with our perception of it, so that perception itself can become 'present-at-hand'.[481]

One of the roles of the curatorial with respect to Art is to enable a context for this shift, to shape the conditions of reception of certain narratives and ideas via Art, where this is involved, so that cognition and reason, their trajectories and priorities, are deflected or diffracted enough that they can become visible to themselves, betraying their role as filters and sorters of otherwise undifferentiated stimuli or meaningless phenomena (as in unintelligible *to us*). If Art can 'make you look at things differently', as the trite adage goes, that is because it can strategically emphasise the role of *aisthesis* in cognition, leading our intellectual faculties astray on their way to work (their labour being secretly decoding the world for our brains to handle) and 'distracting' us with mirrored surfaces that catch out attention and point it back at our senses. Those self-reflections also play with our cognitive-heuristic depth of field, complicating the relationship between what constitutes the 'ground' or the 'figure' by revealing what we readily interpret as identity boundaries to be arbitrary, incomplete, sometimes fallacious translations: reality only as given to us and filtered through our limited capabilities to interface with the cosmos.

This, to be clear, does not mean that nothing else can or should be accomplished by an Artwork, that it cannot share this purpose shift with other more immediate, mundane or practical pursues: an artwork can *also* represent, mimic, carry information, signify, incite, induce certain chemicals reactions in our bodies, have a specific use-value and exchange-value, etc. I consider this to be a key aspect of the curatorial in relation to Art: to enable that cognitive shift *as well as* whatever else a certain narrative is meant to accomplish, often as an interplay between these effects from which *further* effects emerge.

In general, curatorial practices weave several distinct curatorial commitments together into temporarily constituted material networks (what von Bismark calls 'the constellational') that can take countless forms.[482] The structural integrity of the resulting net, its ability to hold together, to read as a coherent whole and/or to be put to practical use as knowledge carriers, can vary wildly depending on the quality of its curatorial weaving. From a neomaterialist perspective, the recurring metaphor of the network is here as useful as ever: curatorial forms are well suited to representing the networked, entangled nature of tangible matter, social

---

[481] M. Heidegger, *Being and Time*, trans. J. Macquarrie and E. Robinson (Oxford: Blackwell, 1962-78, orig. 1927), pp. 135-8 (par. 1.3, section 22).

[482] Besides the cited conversation between Beatrice von Bismarck and Irit Rogoff cited above (see my pp. 233-5), cfr. Beatrice von Bismarck and Benjamin Meyer-Krahmer, 'Curatorial Things. An Introduction', in B. von Bismark, and B. Meyer-Krahmer (eds.), *Cultures of the Curatorial: Curatorial Things* (Berlin: Sternberg Press, 2019), pp. 7-15.

relations, cultural phenomena and the realities they co-produce. Curatorial forms such as (and not limited to) 'the exhibition' can be interpreted as networks of entangled objects which include the matter of the exhibits themselves, the infrastructure of their display, the audience and all contingent matter and phenomena in-between, the affects they produce, the ideas they represent, their after-effects as memories and the discourses and associations they catalyse (the same is of course equally true of, say, physical publications, digital outputs and events series, where the material relationships are different but tangible nonetheless).

Finally, it is crucial to clarify that Art, in its direct connection to human imagination and reliance on affects, can emerge in forms that know no moral bounds: it can be deceitful, dangerous and cruel, indeed it can be everything human animals and their thoughts and feelings can be, because it relies on mechanisms that are pre-rational and thus also inherently *pre-ethical*. The curatorial keeps the potentially harmful aspects of human creativity in check by tethering the sensorial stimulation from which it stems to external reality and filtering the resulting poietic drive through sapient faculties, including the reason that comes from self-awareness and compassion: is the gesture I intend to perform potentially detrimental to those it may reach? Is the particular aesthesic effect I wish to engender worth the real damage it may cause? This is one of the areas where the curatorial circles back onto its etymology to take on an additional dimension of *care*. It allows us to counter our species' potentially irrepressible curiosity to experience, to feel, with compassion for one's fellow beings and consideration for the worlds they dwell.[483] Without the curatorial, which is a function of the *relational* nature of sapience and therefore works in parallel with an individual's empathy, Artistic poiesis would be inherently irresponsible. And there always remains a vast spectrum of possibilities for that filter to inadvertently fail, as those doing the curatorial work are imperfect individuals who can be naive, ignorant, lazy and so forth — even when acting in good faith.

Looking beyond the scope of the 'Art function' and considering the accumulated histories told by millennia of human artefacts, our unevenly shared archives of cultural heritage are riddled with falsehoods, misunderstandings, profoundly unjust stances and irresponsible choices that we have learned (or are still learning) to question and put into perspective. From obsolete worldviews to ecocidal practices, from disproven theories to unethical experiments, from distorted accounts of historical facts to public monuments promoting xenophobic myths and glorifying white supremacy, curators (as in anyone involved in any kind of mediation) of the noxious and misguided 'vectors of intentionality' we have

---

[483] Cfr. Simon Sheikh, 'Curation and Futurity', in in P. O'Neill, M. Wilson and L. Steeds (eds.), *The Curatorial Conundrum*, pp. 152-60.

inherited from the past have an *ethical* responsibility to intervene by providing an interpretive frame that ensures those intents are revealed for what they are and prevented from doing any further harm. And far from being limited to the function of transmitting sapient, rational knowledge, the curatorial actively participates in a chain of phenomena that have *material* consequences, from the immediate effects and affects an utterance or signifying gesture can have on human bodies to its wider, long-term, holistic worldly reverberations.

Conclusion:
Foregrounding transdisciplinarity in curatorial practices

NM's holistic views on the interconnectedness of worldly phenomena means that to try and curatorially isolate Art from other forms of knowledge production is pointless and counterproductive. Even when trying to make a point about how Art functions 'in itself', it is still necessary for the recipient to refer to notions of non-art/non-Art as points of comparison for that message to come through in any meaningful way. I maintain that curatorial strategies advocating for Art's autonomy, even just implicitly — e.g. by secluding Artworks from other kinds of objects and artefacts simply because of inherited museological apparatuses —, do Artistic practices a fundamental disservice by obfuscating their aims and limiting their potential for producing knowledge.

To wit: the specificity of Art, its practical and ontoepistemological difference from scientific and philosophical methods, may lie in its unique relationship to *aisthesis* and capacity to reveal its role in complex cognition, but this does not mean that the curatorial practices that include Art as part of their narrative methodologies have to be overwhelmingly dominated by attention to sensual stimuli and affects. On the contrary, curatorial aims are ultimately what allows forms of knowledge co-constitution whose aims and methods seem to be irreconcilably at odds to interact and translate into one another: vectors of intentionality with radically different origin points can still be made to intersect and run parallel. Curatorial practices can therefore take complex and hybrid forms, with the intent of constructing narratives or demonstrating arguments using strategies found in different forms of knowledge production: the deployment of Artistic forms can lead to *aisthesis* playing a key supporting role, not necessarily that of the 'main character'.

If Art is to be considered complementary to science and philosophy, then curatorial practices that aim to tell stories about the complexity of our material reality should avoid *privileging* the particular features of Art and rather concentrate on facilitating and demystifying *aisthesis* as a *partial* aspect of sapient prehension, spotlighting its role in cognition's capacity to intervene on reality through the implementation of ontoepistemological cuts. Importantly, one can very much still do so while telling a narrative that is Art historical at its core or limits itself to communicating predominantly through Artworks, because that disciplinary 'limit' is in any case an illusion: all such narratives necessarily include several layers that are extraneous to each Artwork *in order to contextualise it*, or even simply display it

as differentiated from its surroundings (think at the basic level of plinths, frames, vitrines, rooms, etc. literally functioning as 'non-Art').[484] The curatorial relies on precisely this point of interface with heterogeneity: *all that is extraneous to the thing that is being conveyed* — albeit only temporarily and contingently for the purposes of human cognition. I believe that it is important to highlight this heterogeneity, and to stress how the aims of the narrative necessarily differ from those of the Artworks it contains: *to make the curatorial intelligible, not invisible*. In the end it is precisely this friction, this difference, that generates curatorial knowledge — whether it is conveyed mostly 'between the lines' of a curatorial narrative or made very explicit in its spatio-temporal construction.

Despite the enduring tendency of 'Art institutions' to protect the relative autonomy of Art and lean into its distinguishing features (i.e. to privilege aesthesic stimulation over Art's equally fundamental reliance on sapient thought processes), the category of postconceptual Art itself and related curatorial activities do increasingly gesture towards unconstrained transdisciplinary dialogues — bridging the gap between art, science, philosophy, etc. — as a fundamental condition for their ways of producing knowledge. However at present, due to Art's purportedly exceptional status remaining mostly unquestioned, artists and curators are usually allowed to treat this free crossing of disciplinary boundaries as perks of their status as privileged tourists (or, at worst, full-on colonisers believing that to trespass is their inalienable right): usually only engaging short-term with local specificities and problems, exploiting infrastructures, extracting and appropriating resources along the way for their own purposes, while giving disproportionately little in return (a common criticism of fixed-term artist's residencies in scientific laboratories).[485] Conversely, scientists and philosophers rarely engage with Artistic methodologies on their own terms (as opposed to dealing with art/Art as the subject of their analyses, which of course happens on a regular basis), as this tends to put their own investigations at risk of being perceived as spurious projects derailed by formal concerns, at the expense of 'rigour', and academically demoted at best as 'extracurricular activities' —

---

[484] Cfr. of course Brian O'Doherty, *Inside the White Cube. The Ideology of the Gallery Space* (Berkeley / Los Angeles / London: University of California Press, 1986, expanded ed. 1999).

[485] This criticism is tellingly similar to the way half-hearted forms of 'local engagement' used to justify site-specific projects have been contested since the parallel emergence of new genre public art and relational aesthetics in the 1990s. See for instance Miwon Kwon, *One Place After Another. Site Specific Art and Locational Identity*, (Cambridge, MA: The MIT Press, 2002).

that is unless, of course, a formally proper, disciplinarily sound, peer-reviewed paper can eventually be extracted from the experience.[486]

A solid transdisciplinary approach should not simply aim at completely ignoring or blurring methodological gaps. Rather, it is a way of recognising and understanding disciplinary and methodological boundaries and the possibility of discursive exchanges as ways of pushing them in all directions and complicating them: it is a way of treating those topological boundaries as functionally elastic. It is not the wholesale rejection of methodological differences but the attempt to make different methods communicate in a shared language, perhaps to create new hybrid ones in the process: *a diffractive method*.[487]

Thinking of the curatorial as inherently transdisciplinary mediation also helps going beyond purely 'illustrative' juxtapositions: it makes it possible to understand the complementarity and mutual interpenetration of different forms of knowledge production, to

Fig. 46. The former London gallery and headquarters of Arts Catalyst, an organisation dedicated to transdisciplinary experiments crossing the fields art, science and technology since 1994. Installation view during the *Dreamed Native Ancestry [DNA]* exhibition, 2017.

---

[486] For some UK-centric examples and exceptions in the realm of Artistic practices, consider the activities and publications produced by London-founded, now Sheffield-based organisation Arts Catalyst, and the case studies published in Bergit Arends and Davina Thackara (eds.), *Experiment: Conversations in Art and Science* (London: The Wellcome Trust, 2003).

[487] Cfr. Peter Osborne, 'Problematizing Disciplinarity, Transdisciplinary Problematics', in *Theory, Culture & Society*, 2015, vol. 32 (5–6). pp. 3–35.

make the most of the specificities of each as they enable, amplify and hybridise one another, to convey and signify aspects of a material reality to which semantic boundaries *fundamentally* don't apply (other than as cognitive shortcuts humans create in order to organise knowledge).[488] In this sense, curatorial middle grounds can also allow aspects of reality that fall in between disciplinary bounds, that can only be observed askew and stretched from fixed viewpoints, to be articulated differently: a kind of mediation of anamorphic phenomena that appear to be too strange to be meaningful when looked at head-on, through familiar frames of reference. Sometimes you need a radical change of perspective to make sense of them.

Perhaps the curatorial can traverse disciplinary boundaries in academically unorthodox ways because it operates at a different level altogether: it is like a subterranean or aerial shortcut attempting to connect ideas directly, ignoring the practical constraints of the surface. However, while in theory the category of the curatorial per se may attempt direct connections between ideas, curatorial *activities* tend to take place 'on the surface' and therefore to have to deal with existing boundaries and infrastructures. Anchored to taxonomies and cataloguing systems, institutions and academic fields, each with its own funding streams, management teams and related agendas, instances of cultural production simply *cannot* pretend disciplinary boundaries aren't there, and the way they are communicated and debated has to face them and question them, implicitly or explicitly.

Irit Rogoff has proposed the notion of 'epistemological crisis' as an alternative to the overly-simplistic model of multidisciplinarity, with its flattening multiplicity and false pluralism:

> the problem with this infinitely expandable model is that it promises no change whatsoever, simply expansion and inflation. So an epistemological crisis seems a much more fertile ground from which to think the notion of an emergent field. An epistemological crisis would allow us to think not competing interests but absent knowledges'.[489]

---

[488] Conversations around *inter*disciplinarity in Art history that began to gain steam the 1990s interestingly pointed out that existing levels of methodological hybridisation, for example through material analysis in conservation and related diagnostics, have often been ignored or downplayed in the interest of painting a picture of the humanities as methodologically uninterested in hard science; see for instance Carlo Ginzburg, James D. Herbert, W. J. T. Mitchell, Thomas F. Reese and Ellen Handler Spitz, 'Inter/disciplinarity', in *The Art Bulletin*, Vol. 77, No. 4 (Dec. 1995), pp. 534-552.

[489] Irit Rogoff, 'The Expanding Field', in Jean-Paul Martinon (ed.), *The Curatorial. A Philosophy of Curating* (Bloomsbury, 2013), pp.44-5.

The nature of curatorial practices as gatherings of ideas, each with their own poietic and speculative potential, naturally lends itself to the kind of multiplicities leading to productive epistemological frictions:

> this [notion of] epistemological crisis allows us not to choose between different definitions, but to make the curatorial the staging ground of the development of an idea or an insight. Ideas in the process of development but subject to a different set of demands than they might bear in an academic or in an activist context — not to conclude or to act, but rather to speculate and to draw a new set of relations. To some extent that has resulted in an understanding that it is not that the curatorial needs bolstering by theory, philosophy or history, but rather that these arenas could greatly benefit from the modes of assemblage which make up the curatorial at its best, when it is attempting to enact the *event of knowledge* rather than to illustrate those knowledges.[490]

When thought of as *events of knowledge*, curatorial practices can precede disciplinary boundaries even when they refer to discipline-specific cultural products: they can constitute their own experiences of reality, evoked as complex and irreducible phenomena exceeding preconstituted schemas. At the same time they can return to the utterances and present them anew, reflected in a convex mirror where their initial context and background blurs and fades and a previously unrecognisable form emerges, if only for a fleeting, artificially constructed moment: that mode of presentation may not function as well, methodologically speaking, outside a given hybrid curatorial context. But then, the discourse generated by that artificially constructed epistemological crisis may eventually crystallise into a methodology of its own.

In this thesis, I set myself the task of analysing the point of intersection of anti-anthropocentric philosophies, which I have associated with NM/NR philosophies, and curatorial practices, particularly those that focus on post-conceptual Art but also adopting varied transdisciplinary strategies. In practice, this meant writing two distinct but closely connected narratives, one of a historical nature, looking at the particular period when that intersection first emerged as a specific and time-bound cultural phenomenon, which I have done by analysing a number of relevant exhibitions and related literature; the other of a theoretical nature, with the intent of redefining my understanding of the category of the Curatorial, at large and in relation to Art, through the lens of NM/NR.

---

[490] *Ibid.*, pp.45-6.

My impetus for writing such a 'split' thesis was the lack of systematic literature on the subject: the fact that the main publications on the points of encounter between (Art-centric) curation and NM/NR philosophies have all taken the form of anthologies means that there was no precedent of a sustained attempt to formulate the nature and recurring characteristics of that relationship, despite the fact that the 2010s saw a surge of interest on these subjects and an explosion of fragmentary and contradictory opinion pieces from both the Art and the philosophy side of the equation.

Part of the task was to identify a meaningful trajectory for my historical narrative: this thesis would need to sketch a map charting as many NM/NR preoccupations and commitments as possible, and to generate a network of thematic connections capable of explaining why and how the 'NM/NR nexus' emerged in ways that make it impossible to completely disentangle the two. I set to tell this story starting with the case of dOCUMENTA (13) as a watershed moment encapsulating many of the preoccupations of NM/NR and demonstrating an approach to transdisciplinary curation that emphasised the production of events of knowledge between disciplines. The following chapter moved back in time to the historical precedents of *Les Immatériaux* and Bruno Latour's exhibition projects, thematic exhibitions co-curated by philosophers who approached their task with a strong interest in the methods of science and in juxtaposing Artworks with objects and artefacts of extremely diverse origins. I then discussed the rise of SR and a range of curatorial projects directly inspired by NM/NR, followed by notable examples of critical responses to the influence of NM/NR on curatorial practices, published between 2013 and 2016. Overall, this survey can thus be considered as a case study in the relationship between curatorial practices and philosophical discourses in the making at the time of heightened interest in new materialisms and speculative realism.

I also realised early on that thinking through NM/NR's philosophical approaches and commitments would require a thorough redefinition of each of the terms I used to circumscribe and describe the subject of my thesis. That is when I realised the true significance of my study: *to think about the influence of anti-anthropocentric, new materialist and new realist philosophies on curatorial practices means fundamentally rethinking the curatorial itself as an inherently transdisciplinary mode of knowledge production*. New questions thus emerged: can the application of NM and NR ideas to exhibition-making practices help reshape parallel (and equally nebulous) conversations about 'the curatorial'? If NM/NR complicate the relationship between ontology and epistemology, between subjectivity and objectivity, how does the

curatorial operate in relation to each of those arenas? How can these discursive methodologies be made to work together and generate diffractive patterns?

I dedicated the last two chapters to answering these questions, and to rethink the relationship between the curatorial and Art by dissecting both using an avowedly neomaterialist approach. Applying such a filter means first of all thinking across and between the boundaries between knowledges — and indeed, thinking about the mechanisms constituting those boundaries. I therefore decided to go back to the very definition of Art as a kind of artefact, as a human activity, as a way of communicating existing knowledges and of creating new ones. Having established what gives certain artefacts their capital A as the products of Artistic practices, the next step was to read this mechanism — which I defined as the 'Art function' — in relation to the curatorial function, in order to pinpoint the role Artworks can play in NM-inflected curatorial narratives.

There is much I would have loved to be able to include in this text, particularly in order to counteract the very partial perspective I have assumed, which betrays a bias towards a certain Anglophone and inherently Eurocentric narrative. The vast majority of the exhibitions and events discussed as case studies took place in Europe, and the thinkers referenced in these pages are or were based almost entirely in Europe, North America and Australia. This was a deliberate choice on my part, as I have elected to tell this story not only from a particular — which is to say historically and geographically situated — perspective, but also through a knowingly limited range of key textual sources. My first suggestion for further expansions of the premises of my research would therefore be to take an approach that is more explicitly guided by postcolonial, decolonial and indigenous viewpoints, as many new materialists (particularly on the ecofeminist side) have already been vocally advocating for years.[491]

Despite its limitations, I believe that this text has made a strong case for rethinking the meaning and role of the curatorial function (including but not limited to its forming the basis for curat*ing* / 'the exhibitionary'), and for deploying transdisciplinary curatorial approaches as vehicles for magnifying the cultural impact of the gradual anti-anthropocentric paradigm shift we are currently experiencing. Recalibrating the idea of curating as a way of showing how human knowledge production is an embodied, situated, emergent and distributed network of phenomena, deeply entangled with the continuum of our material reality, can help demonstrate a paradox of sapience: namely, that *what is special about our species is our ability to understand that our species is, at the same time, not so special after all.*

---

[491] Besides Haraway, my first reference point would be Mel Y. Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham, N.C.: Duke University Press, 2012); other authors coming to mind are Eduardo Viveiros de Castro and Achille Mbembe.

Bibliography

Adorno, Theodor W., *Aesthetic Theory*, ed. by Gretel Adorno and Rolf Tiedemann (London: Continuum, 1997; orig. 1970)

Adorno, Theodor W., and Max Horkheimer, 'The Culture Industry: Enlightenment as Mass Deception' (1944), in *Dialectic of Enlightenment* (New York, NY: The Seabury Press, 1972; orig, 1947, 2nd ed. 1969), pp. 120-67

Ahmed, Sarah, 'Open Forum Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the 'New Materialism." *European Journal of Women's Studies*, vol. 15, n.1 (2008), pp. 23-39

Allwood, Jens, Lars-Gunnar Andersson and Osten Dahl (eds.), *Logic in Linguistics* (Cambridge: Cambridge University Press, 1977)

Althusser, L., 'The Underground Current if the Materialism of the Encounter', 1986, in *The Philosophy of the Encounter*, London and New York: Verso, 2006

Altshuler, Bruce, *The Avant-garde in Exhibition: New Art in the 20th Century* (New York, NY: Harry N. Abrams, 1994)

——, *Biennials and Beyond: Exhibitions That Made Art History. Vol. 2: 1962-2002* (London: Phaidon, 2013)

——, *Salon to Biennial: Exhibitions That Made Art History. Vol. 1: 1863-1959* (London: Phaidon, 2008)

Alvanson, Kristen, 'Elysian Space in the Middle-East', in R. Mackay (ed.), *Collapse Volume II: Speculative Realism* (Falmouth: Urbanomic, 2007), pp. 257–272

Alvanson, Kristen, et al., 'The Real and the Sublime' (UFD005), *Urbanomic.com,* <https://www.urbanomic.com/document/the-real-thing-the-real-and-the-sublime/> [accessed 25 Nov. 2018]

Ambrozic, Mara and Angela Vettese, (eds.), *Art as a Thinking Process: Visual Forms of Knowledge Production* (Venice and Berlin: Iuav and Sternberg Press, 2013)

Andrews, Jorella, and Simon O'Sullivan, *Visual Cultures as Objects and Affects* (Berlin: Sternberg Press, 2013)

Appadurai, Arjun, 'Commodities and the Politics of Value', in A. Appadurai (ed.), *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge: University of Cambridge, 1986)

Arends, Bergit, and Davina Thackara (eds.), *Experiment: Conversations in Art and Science* (London: The Wellcome Trust, 2003)

Arnheim, Rudolf, 'Art Among the Objects', *Critical inquiry*, n. 13 (1987), pp. 677–685

Arvatov, Boris, *Art & Production*, ed. by J. Roberts and A. Penzin, trans. by S. Avagyan (London: Pluto Press, 2017; orig. 1926)

Askin, Ridvan, et al. (eds.), *Speculations V: Aesthetics in the 21st Century* (New York, NY: punctum books, 2013)

Austin, Michael, 'The Inner Life of Objects: Immanent Realism and Speculative Philosophy', *Analecta Hermeneutica*, n. 3 (2011) <http://journals.library.mun.ca/ojs/index.php/analecta/article/viewFile/329/205> [accessed 15 July 2013]

Austin, Michael, et al. (eds.), *Speculations II* (New York, NY: punctum books, 2011)

——, *Speculations III* (New York, NY: punctum books, 2012)

——, *Speculations IV* (New York, NY: punctum books, 2013)

Avanessian, Armin, *Overwrite. Ethics of Knowledge — Poetics of Existence*, trans. by N. F. Schott (Berlin: Sternberg Press, 2017)

Avanessian, Armin, and Robin Mackay (eds.), *#ACCELERATE: the Accelerationist Reader* (Falmouth: Urbanomic, 2015)

Avanessian, Armin, and Suhail Malik (eds.), *Genealogies of Speculation. Materialism and Subjectivity since Structuralism* (London and New York: Bloomsbury, 2016)

Avanessian, Armin, and Andreas Töpfer, *Speculative Drawing: 2011-2014* (Berlin: Sternberg Press, 2014)

Ayache, Elie, *The Blank Swan: The End of Probability* (Chichester: Wiley, 2010)

Badiou, Alain, *Being and Event*, trans. O. Feltham (London: Continuum, 2005; orig. 1988)

——, *Alain, Deleuze. The Clamor of Being* (Minneapolis: University of Minnesota Press, 1999)

——, *Handbook of Inaesthetics*, trans. by A. Toscano (Stanford, CA: Stanford University Press, 2005; orig. 1998)

——, *Infinite Thought. Truth and the Return to Philosophy*, trans. O. Feltham and J. Clemens (London: Continuum, 2003)

Balzer, David, *Curationism. How Curating Took Over the Art World and Everything Else* (London: Pluto Press, 2014)

Barad, Karen Michelle, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007)

——, Barad, Karan Michelle., 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter', *Signs: Journal of Women in Culture and Society*, vol. 28, no. 3 (2003)

Barrett, Estelle, and Barbara Bolt (eds.), *Carnal Knowledge. Towards a New Materialism Through the Arts* (London: I.B. Tauris, 2013)

Barker, Emma, (ed.), *Contemporary Cultures of Display* (New Haven / London: Yale University Press / The Open University, 1999)

Basu, Paul, and Sharon Macdonald (eds.), Exhibition Experiments (London: Blackwell, 2007)

Bateson, Gregory, *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology* (Chicago, IL / Chichester: University of Chicago Press/ Wiley, 1999)

Baudrillard, Jean, 'The Beaubourg Effect: Implosion and Deterrence', in *Simulacra and Simulations*, trans. by Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994; orig. 1977), pp. 61-73

——, *The System of Objects*, trans. by J. Benedict (London / New York, NY: Verso, 1996; orig. 1972)

Beech, Amanda, and Mikko Canini, Mark Fisher, Iain Hamilton Grant, Robin Mackay, 'The Real Thing: Panel Discussion', *Urbanomic.com* (Urbanomic/Document UFD004), <https://www.urbanomic.com/document/the-real-thing-panel-discussion/> [accessed 25 Nov. 2018]

Behar, Katherine and Emmy Mikelson (eds.), *And Another Thing: Nonanthropocentrism and Art* (New York, NY: punctum books, 2016)

Benjamin, Walter, *The Arcades Project*, ed. Rolf Tiedemann, trans. by H. Eiland and K. McLaughlin (Cambridge, MA: Belknap Press, 1999; orig. 1927-40, 1st ed. 1982)

——, 'The Work of Art in the Age of Mechanical Reproduction', in *Illuminations*, ed. by Hannah Arendt, trans. by Harry Zohn (New York, NY: Schocken, 1969), pp. 217–71

Bennett, Jane, *Vibrant Matter. A Political Ecology of Things* (Durham: Duke University Press, 2010)

——, 'Systems and Things: A Response to Graham Harman and Timothy Morton', New Literary History, vol. 43, no. 2, 2012, pp. 225–233, <www.jstor.org/stable/23259373> [accessed 15 October 2021]

Berghaus, Günter, ed., *Futurism and the Technological Imagination* (Amsterdam / New York, NY: Rodopi, 2009)

Berman, Marshall, *All that is Solid Melts Into Air. The Experience of Modernity* (London: Penguin, 1982-88)

Berry, David M., and Michael Dieter (eds.), *Postdigital Aesthetics: Art, Computation, and Design* (Basingstoke: Palgrave Macmillan, 2015)

Beshty, Walead, Ellen Mara De Wachter and Elizabeth Neilson, *Material Presence*, exh. cat. (London: 176, 2008)

Bennett, Jill, *Living in the Anthropocene* (dOCUMENTA (13): 100 Notes - 100 Thoughts series n. 053) (Ostfildern: Hatje Cantz, 2011)

Bennett, Tony, 'The Exhibitionary Complex', in *New Formations*, n. 4, Spring 1988, pp. 73-102

——, *The Birth of the Museum. History, Theory, Politics* (London: Routledge, 1995)

Bhaskar, Roy, *A Realist Theory of Science* (London: Routledge, 2008)

Birkett, Richard, and Sam Lewitt (eds.), *and Materials and Money and Crisis*, exh. cat. (Vienna/ Cologne: MUMOK/Walther König, 2013)

Birnbaum, Daniel, *Chronology* (New York, NY: Lukas & Sternberg, 2005)

——, 'Review: Documenta 13', *Artforum*, vol. 51, no. 2 (October 2012), pp. 254–55

Birnbaum, Daniel and Sven-Olov Wallenstein, *Spacing Philosophy: Lyotard and the Idea of the Exhibition* (Berlin: Sternberg Press, 2019)

Bishop, Claire, *Radical Museology or, What's 'Contemporary' in Museums of Contemporary Art?* (Koenig Books, 2013)

von Bismarck, Beatrice, Jorn Schafaff and Thomas Weski (eds.), *Cultures of the Curatorial* (Berlin: Sternberg Press, 2012)

von Bismark, Beatrice, and Benjamin Meyer-Krahmer (eds.), *Cultures of the Curatorial: Curatorial Thing*s (Berlin: Sternberg Press, 2019)

Blistène, Bernard, 'A Conversation with Jean-François Lyotard', *Flash Art*, n.121 (March 1985), pp. 32–39

Blom, Ina, *On the Style Site: Art, Sociality, and Media Culture* (Berlin: Sternberg Press, 2007)

Bogost, Ian, *Alien Phenomenology, or What it's like to be a thing* (Minneapolis: University of Minnesota Press, 2012)

Bois, Yve-Alain, and Rosalind Krauss, *Formless: A User's Guide* (Cambridge, MA: The MIT Press, 1997; orig. 1996)

Bonnet, François J., *The Infra-World* (Falmouth: Urbanomic, 2017)

Bourdieu, Pierre, *Distinction: A Social Critique of the Judgement of Taste* (Cambridge, MA and London: Harvard University Press and Routledge, 1984; orig. 1979)

Braidotti, Rosi in 'Borrowed Energy. Timotheus Vermeulen talks to philosopher Rosi Braidotti about the pitfalls of speculative realism', in *Frieze*, no.165, September 2014, pp.130-3; online on *Frieze.com*, published 12 August 2014, <https://frieze.com/article/borrowed-energy> [accessed 21 May 2020]

Braidotti, Rosi, *The Posthuman* (Cambridge: Polity, 2013)

Braidotti, Rosi, 'Teratologies', in I. Buchanan and C. Colebrook (eds.), *Deleuze and Feminist Theory* (Edinburgh: Edinburgh University Press, 2000), pp. 156–72

Brandom, Robert, *Making It Explicit: Reasoning, Representing & Discursive Commitment* (Cambridge, MA: Harvard University Press, 1994)

Brassier, Ray, 'Against an Aesthetics of Noise' (2009), <https://www.ny-web.be/artikels/against-aesthetics-noise/> [accessed 15 October 2021]

——, 'Deleveling: Against "Flat Ontologies."', in: V. Dijk, et al. (eds.), *Under Influence - Philosophical Festival Drift (2014)* (Antwerp: Omnia, 2015), pp. 64-80

——, *Nihil Unbound. Enlightenment and Extinction* (Basingstoke: Palgrave Macmillan, 2009)

——, 'Postscript: Speculative Autopsy', in P. Wolfendale, *Object-Oriented Philosophy. The Noumenon's New Clothes*, pp. 407-421

Brassier, Ray, Iain Hamilton Grant, Graham Harman and Quentin Meillassoux, 'Speculative Realism', in *Collapse* Volume III, pp. 306-449

Breton, André, 'Introduction to the Discourse on the Paucity of Reality', trans. by R. Sieburth and J. Gordon, *October*, 69 (1994), pp. 133–44

Broeckmann, Andreas, 'Revisiting the Network of Les Immatériaux', in Oliver Grau (ed.), *Museum and Archive on the Move. Changing Cultural Institutions in the Digital Era* (Berlin: De Gruyter, 2017), pp. 234-47

Bromberg, Svenja, 'The Anti-Political Aesthetics of Objects and Worlds Beyond', *Mute*, 2013 <http://www.metamute.org/editorial/articles/anti-political-aesthetics-objects-and-worlds-beyond> [accessed 15 August 2013]

——, 'Vacillations of Affect: How to Reclaim 'Affect' for a Feminist-Materialist Critique of Capitalist Social Relations?', in Brooke, Alice, Giulia Smith and Rózsa Farkas (eds.), *Re-Materialising Feminism* (London: Arcadia Missa, 2014)

Brown, Bill, *Other Things* (Chicago: Chicago University Press, 2015)

——, 'Thing Theory', in *Critical Inquiry*, Vol. 28, No. 1, Things (Autumn, 2001), pp.1-22

—— (ed.), *Things* (Chicago: University of Chicago Press, 2004)

Bryant, Levi, 'A Logic of Multiplicities: Deleuze, Immanence, and Onticology', *Analecta Hermeneutica*, vol. 3 (2011) <http://journals.library.mun.ca/ojs/index.php/analecta/article/viewFile/328/202> [accessed 15 July 2013]

——, 'Onticology–A Manifesto for Object-Oriented Ontology, Part 1'. *Larval Subjects* blog, <https://larvalsubjects.wordpress.com/2010/01/12/object-oriented-ontology-a-manifesto-part-i/>, published 12 January 2010 [accessed 15 February 2021]

——, *Onto-Cartography: An Ontology of Machines and Media* (Edinburgh: Edinburgh University Press, 2014)

——, *The Democracy of Objects* (Ann Arbor, MI: Open Humanities Press, 2011)

Bryant, Levi R., Nick Srnicek and Graham Harman (eds.), *The Speculative Turn: Continental Materialism and Realism* (Melbourne: re.press, 2011)

Burrows, David, and Simon O'Sullivan, *Fictioning: The Myth-Functions of Contemporary Art and Philosophy* (Edinburgh: Edinburgh University Press, 2019)

Buskirk, Martha, *The Contingent Object of Contemporary Art* (Cambridge, MA: The MIT Press, 2003)

Chen, Mel Y., *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham, NC: Duke University Press, 2012)

Christov-Bakargiev, Carolyn (ed.), *dOCUMENTA (13) catalog 1/3: The Book of Books*, exh. cat. (Ostfildern: Hatje Cantz, 2012)

——, *dOCUMENTA (13) catalog 2/3: The Logbook*, exh. cat. (Ostfildern: Hatje Cantz, 2012)

——, *dOCUMENTA (13) catalog 3/3: The Guidebook*, exh. cat. (Ostfildern: Hatje Cantz, 2012)

——, 'Revolutions Forms That Turn: the Impulse to Revolt', in *2008 Biennale of Sydney: Revolutions – Forms That Turn*, exh. cat. (Fishermans Bend: Thames and Hudson Australia, 2008)

Butler, Judith, *Bodies That Matter. On the Discursive Limits of Sex* (New York & London: Routledge, 1993)

Campagna, Federico, *Technic and Magic. The Reconstruction of Reality* (London: Bloomsbury, 2018)

Cantor, Lou and Clemens Jahn (eds.), *Turning Inward* (Berlin: Sternberg Press, 2015)

Cascone, Kim, 'The Aesthetics of Failure: 'Post-Digital' Tendencies in Contemporary Computer Music', *Computer Music Journal*, 24 (2000), 12–18

Catren, Gabriel, 'Can Classical Description of Physical Reality Be Considered Complete?', in *Constituting Objectivity. Transcendental Perspectives on Modern Physics*, ed. by Michael Bitbol, Pierre Kerszberg, and Jean Petitot (Heidelberg: Springer, 2009), pp. 375–386

Cesarale, Giorgio, 'The 'Not' of Speculative Realism', *Mute*, 19 February 2014, <http://www.metamute.org/editorial/articles/%E2%80%98not%E2%80%99-speculative-realism> [accessed 15 October 2021]

Cestelli Guidi, Anna, *La "documenta" di Kassel. Percorsi dell'Arte Contemporanea* (Milano: Costa & Nolan, 1997)

Charlesworth, JJ and James Heartfield, 'Subjects vs Objects', *Art Monthly*, n. 374, March 2014, pp. 1-4

Chaput, Thierry, 'Entrée en matière', in *Les Immatériaux*, exh. cat., *Album et Inventaire* volume, p. 6

——, 'Entrée en matière,' *Petit Journal*, 28 March–15 July 1985, Paris, p. 2

Cloninger, Curt, 'Manifesto for a Theory of the "New Aesthetic"', *Mute*, 4: 'Slave to the Algorhythm', 3 (Spring 2013)

Cohen, Jeffrey J., *Animal, Vegetable, Mineral: Ethics and Objects* (Washington, DC: Oliphaunt Books, 2012)

Cole, Andrew, response to G. Harman, 'Object Lesson', *Artforum*, September 2015, p.40.

——, 'The Call of Things: A Critique of Object-Oriented Ontologies', Minnesota Review, vol. 80, 2013, pp. 106-118. Project MUSE, <muse.jhu.edu/article/506394> [accessed 15 October 2021]

——, 'Those Obscure Objects of Desire: the Uses and Abuses of Object-Oriented Ontology and Speculative Realism', *Artforum*, Summer 2015, pp.318-23

Colman, Felicity, 'Digital Feminicity: Predication and Measurement, Materialist Informatics and Images', *Artnodes: Journal of Art, Science, and Technology*, no. 14 (2014), pp. 7-17

——, 'Feminising politics: notes on material and temporal feminist modal logics in action, *Matter: Journal of New Materialist Research*, vol. 1, no. 1 (2020), pp. 1-22

Comisso, Francesca, Luisa Perlo, Marianna Vecellio, NERO (eds.), *COMP(H)OST. Immaginari Interspecie* (Roma / Torino: NERO / Castello di Rivoli, 2021)

Connor, Steven, 'Thinking Things', *Textual Practice*, 24 (2010), 1-20

Coole, Diana and Samantha Frost (eds.), *New Materialisms: Ontology, Agency, and Politics* (Durham / London: Duke University Press, 2010),

Cornell, Lauren and Ed Halter (eds.), *Mass Effect: Art and the Internet in the Twenty-First Century* (Cambridge, MA: The MIT Press, 2015)

Cottom, Daniel, *Unhuman Culture* (Philadelphia, PA: University of Pennsylvania Press, 2006)

Cox, Christoph, Jenny Jaskey and Suhail Malik, *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015)

Cramer, Florian 'What is Post-Digital?', in *APRJA*, Vol.3, Issue 1, 2014, 'Post-Digital Research' (ed. by Christian Ulrik Andersen, Geoff Cox and Georgios Papadopoulos), <http://www.aprja.net/what-is-post-digital/> [accessed 27 January 2019]

Crick, Francis, *Life Itself: Its Origin and Nature* (New York, NY: Simon & Schuster, 1981)

Crimp, Douglas, 'On the museum's ruins', in Hal Foster (ed.), *The Anti-Aesthetic. Essays on Postmodern Culture* (Washington: Bay Press, 1985), pp. 43-56

Cummings, Neil (ed.), *Reading Things* (London: Chance Books, 1993)

Cummings, Neil, and Marysia Lewandowska, *The Value of Things* (London / Basel: August / Birkhäuser, 2000)

Danto, Arthur C., *The Philosophical Disenfranchisement of Art* (New York, NY: Columbia University Press, 1986)

——, *The Transfiguration of the Commonplace* (Cambridge, MA: Harvard University Press, 1981)

Daston, Lorraine, (ed.), *Things that Talk. Object Lessons from Art and Science* (New York, NY / Cambridge, MA: Zone Books, 2008)

Daston, Lorraine, and Peter Galison, *Objectivity* (New York, NY / Cambridge, MA: Zone Books, 2007)

David, Bruno, and Ian J. McNiven (eds.), *The Oxford Handbook of the Archaeology and Anthropology of Rock Art* (Oxford: Oxford University Press, 2018); online at *Oxford Handbooks Online*, <https://

www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190607357.001.0001/oxfordhb-9780190607357-e-57> [accessed 19 September 2021]

Davis, Erik, *TechGnosis: Myth, Magic and Mysticism in the Age of Information* (New York: Harmony Books, Crown Publishers, 1998)

Davis, Heather, and Etienne Turpin (eds.), *Art in the Anthropocene. Encounters Among Aesthetics, Politics, Environments and Epistemologies* (London: Open Humanities Press, 2015)

de Bruyn, Eric C. H., and Sven Lütticken, *Futurity Report* (Berlin: Sternberg Press, 2020)

De Certeau, Michel, *The Practice of Everyday Life*, trans. by S. Rendall (Berkeley and Los Angeles: University of California Press, 1984; orig. 1980)

de Duve, Thierry, *Kant after Duchamp* (Cambridge, MA / London: The MIT Press, 1996)

Deely, John, *The Human Use of Signs: Or Elements of Anthroposemiosis* (Lanham, MD: Rowman & Littlefield 1993)

Deely, John and Stephen Sparks (2015), 'Objective reality and the physical world: relation as key to understanding semiosis', *Green Letters*, vol. 19, no. 3, pp. 267-279

DeLanda, Manuel, *A New Philosophy of Society: Assemblage Theory and Social Complexity* (London: Bloomsbury, 2013)

——, *A Thousand Years of Nonlinear History* (New York: Zone Books, 1997)

——, 'Deleuze, Diagrams, and the Open-ended Becoming of the World', in Elizabeth Grosz (ed.), *Becomings. Explorations in Time, Memory and Futures* (Ithaca and London: Cornell University Press, 1999)

——, 'The Geology of Morals, A Neo-Materialist Interpretation', 1996, <http://www.t0.or.at/delanda/geology.htm> [accessed 14 October 2021]

——, *Intensive Science and Virtual Philosophy* (London: Continuum, 2002)

——, *Philosophy and Simulation: The Emergence of Synthetic Reason* (London: Continuum, 2011)

Deleuze, Gilles, *Difference and Repetition*, trans. by Paul Patton (New York, NY: Columbia University Press, 1994; orig. 1968)

——, *Logic of Sense*, trans. by M. Lester with C. Stivale (London: The Athlone Press, 1990)

——, *Spinoza: Practical Philosophy*, trans. by R. Hurley (San Francisco, CA: City Lights, 1988; orig. 1970, 1981)

Deleuze, Gilles and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (London/New York: Continuum, 1983; orig. 1972)

——, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. by B. Massumi (London/New York: Continuum, 1987; orig. 1980)

——, *What Is Philosophy?*, trans. by H. Tomlinson and G. Burchell III (New York, NY: Columbia University Press, 1996; orig. 1991)

Demos, T.J., *Against the Anthropocene. Visual Culture and Environment Today* (Berlin: Sternberg Press, 2017)

——, *Decolonizing Nature. Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016)

Déotte, Jean-Louis, 'Les Immatériaux de Lyotard (1985): un programme figural', in *Appareil*, n. 10, special issue: 'Lyotard et la surface d'inscription numérique', 2012

de Queiroz, Kevin, 'Ernst Mayr and the modern concept of species', *Proceedings of the National Academy of Sciences*, May 2005, vol. 102, n. suppl. 1, pp. 6600-6607; online at <https://www.pnas.org/content/102/suppl_1/6600> (DOI: 10.1073/pnas.0502030102) [accessed 8 October 2021]

de Saussure, Ferdinand, *Course in General Linguistics*, trans. by R. Harris, (La Salle, IL: Open Court, 1983; orig. 1916

Descola, Philippe, *Beyond Nature and Culture*, trans. by J. Lloyd (Chicago: University of Chicago Press, 2013)

——, *The Ecology of Others*, trans. by G. Godbout and B. P. Luley (Chicago, IL: Prickly Paradigm Press, 2013)

Dewey, John, *Art as Experience* (New York, NY: Perigee Books, 1980; orig. 1932)

Dezeuze, Anna, 'Assemblage, Bricolage, and the Practice of Everyday Life', in *Art Journal*, 67 (2008), pp. 31–37

—— (ed.), *The 'Do-It-Yourself' Artwork: Participation from Fluxus to New Media* (Manchester: Manchester University Press, 2010)

Daghini, Giairo, 'Babel-Métropole', *Change International*, no. 1 (December 1983)

Diederichsen, Diedrich, 'Animation, De-reification, and the New Charm of the Inanimate', *e-flux journal* n.36, July 2012, <https://www.e-flux.com/journal/36/61253/animation-de-reification-and-the-new-charm-of-the-inanimate/> [accessed 15 October 2021]

——, 'Is Marxism a Correlationism?', in C. Cox, J. Jaskey and S. Malik (eds.), *Realism Materialism Art* (Annandale-on-Hudson, NY / Berlin: CCS Bard College / Sternberg Press, 2015), pp. 61-69

Diederichsen, Diedrich, and Anselm Franke, *The Whole Earth: California and the Disappearance of the Outside* (Berlin: Sternberg Press, 2013)

Dolphijn, Rick, and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Ann Arbor, MI: Open Humanities Press, 2012)

Droit, Roger-Pol, *How Are Things? A Philosophical Experiment*, (London: Faber and Faber, 2005)

Dufrêne, Bernadette, 'La série des expositions internationales du Centre Georges Pompidou: pour un nouveau modèle', *Publics et Musées*, n. 8, 1995, p. 75-101

Duzer, Clémentine and Laura Gozlan, 'Nevertheless Empire', in R. Mackay (ed.), *Collapse Volume II: Speculative Realism* (Falmouth: Urbanomic, 2007), pp. 235–256

Eco, Umberto, *The Open Work* (Cambridge, MA: Harvard University Press, 1989)

Ebner, Martin, and Florian Zeyfang, *Poor Man's Expression: Technology, Experimental Film, Conceptual Art* (Berlin: Sternberg Press, 2011)

Egenhofer, Sebastian, *Towards and Aesthetics of Production* (Zurich / Berlin: Diaphanes, 2017)

Ellegood, Anne, and Johanna Burton, *The Uncertainty of Objects and Ideas: Recent Sculpture*, exh. cat. (Washington, DC: Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, 2007)

Ellis, Erle, Kees Klein Goldewijk, Marie-José Gaillard, Jed O. Kaplan, Alexa Thornton, Jeremy Powell, Santiago Munevar Garcia, Ella Beaudoin and Andrea Zerboni, 'Archaeological assessment reveals Earth's early transformation through land use', in *Science*, vol. 365, no. 6456 (30 August 2019), pp. 897-902

Ennis, Paul J., *Continental Realism* (Winchester: Zero Books, 2011)

—— (ed.), *Post-Continental Voices* (Winchester: Zero Books, 2010)

—— (ed.), *Speculations I* (New York, NY: punctum books, 2010)

Federici, Silvia, *Beyond the periphery of the skin: Rethinking, Remaking, Reclaiming the Body in Contemporary Capitalism* (Oakland, CA: PM Press, 2020)

——, *Caliban and the Witch: Women, the Body and Primitive Accumulation* (Brooklyn, NY: Autonomedia, 2004)

——, *Re-Enchanting the World. Feminism and the Politics of the Commons* (Oakland, CA: PM Press, 2019)

Filipovic, Elena, and Adam Szymczyk (eds.), *When Things Cast No Shadow: 5th Berlin Biennale for Contemporary Art*, exh. cat. (Zurich: JP|Ringier, 2008)

Filipovic, Elena, and Marieke van Hal and Solveig Øvstebø, The Biennial Reader (Bergen / Ostfildern: Bergen Kunsthall / Hatje Cantz, 2010)

Fisher, Mark, 'Books: Kant, Whitehead, Deleuze and Aesthetics; Prince of Networks: Bruno Latour and Metaphysics', in *Frieze*, n. 125, September 2009, p. 35; online: <https://frieze.com/article/without-criteria-prince-networks> [accessed 25 Nov. 2018]

——, *Capitalist Realism: Is There No Alternative?* (Winchester: Zero Books, 2009)

——, 'Clearing the Air', *frieze.com*, 20 February 2008 <https://frieze.com/article/clearing-air> [accessed 15 October 2021]

Flood, Richard, et al., *Unmonumental. The Object in the 21st Century*, exh. cat. (New York, NY / London: Phaidon, 2007)

Foster, Hal, *Bad New Days: Art, Criticism, Emergency* (London: Verso, 2015)

——, *Prosthetic Gods*(Cambridge, MA: The MIT Press, 2004-06)

——, *The Return of the Real* (Cambridge, MA: The MIT Press, 1996)

Foster, Jay, 'Ontologies Without Metaphysics: Latour, Harman and the Philosophy of Things', *Analecta Hermeneutica*, 3 (2011) <http://journals.library.mun.ca/ojs/index.php/analecta/article/download/332/204> [accessed 15 July 2013]

Foucault, Michel, *The Archaeology of Knowledge* (London: Routledge, 2002; orig. 1969)

——, *The Birth of Biopolitics. Lectures at the Collège de France, 1978–79*, ed. by M. Senellart, trans. by G. Burchell (Basingstoke: Palgrave Macmillan, 2008; orig. French ed. 2004)

——, *The Birth of The Clinic. An Archaeology of Medical Perception*, trans. by A. M. Sheridan (London: Routledge, 1973; orig. 1963)

——, *Discipline and Punish. The Birth of the Prison*, trans. by A. M. Sheridan (New York, NY: Vintage, 1977, 1995; orig. 1975)

——, *The History of Sexuality, Vol. 1, An Introduction*, trans. by R. Hurley (New York: Pantheon, 1978; orig. 1976)

——, *The Order of Things: an Archaeology of the Human Sciences* (London: Routledge, 1970-2002; orig. 1966)

Franke, Anselm, 'Animism: Notes on an Exhibition', *e-flux Journal* n.36, July 2012, <https://www.e-flux.com/journal/36/61258/animism-notes-on-an-exhibition/> [accessed 18 February 2019]

——, (ed.), Animism. Volume I (Berlin: Sternberg Press, 2010)

——, (ed.), Animism. Modernity through the Looking Glass (Vienna: Generali Foundation / Cologne: Walther Konig, 2011)

Fried, Michael, 'Art and Objecthood', *Artforum*, Vol. 5, No. 10 (June 1967), pp. 12-23

Fuller, Matthew, *Media Ecologies: Materialist Energies in Art and Technoculture*, new ed. (Cambridge, MA: The MIT Press, 2007)

Fukuyama, Francis, T*he End of History and the Last Man* (London: Penguin, 1992)

——, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Straus and Giroux, 2002)

Gallo, Francesca, *Les Immatériaux: Un Percorso di Jean-François Lyotard nell'Arte Contemporanea* (Rome: Aracne, 2008)

Galloway, Alexander R., 'The Poverty of Philosophy: Realism and Post-Fordism', *Critical Inquiry* , Vol. 39, No. 2 (Winter 2013), published by The University of Chicago Press, pp. 347-366

Gamble, Lee and Robin Mackay, 'Sound and Concept' (UFD007), *urbanomic.com*, <https://www.urbanomic.com/document/sound-and-concept/> [accessed 15 October 2021]

Garcia, Tristan, *Form and Object: A Treatise on Things* (2011), trans. by M. A. Ohm and J. Cogburn (Edinburgh: Edinburgh University Press, 2014)

——, 'Crossing Ways of Thinking: on Graham Harman's System and My Own', trans. by M. A. Ohm, *Parrhesia*, 16 (2013), pp. 14–25 <http://www.parrhesiajournal.org/parrhesia16/parrhesia16_garcia.pdf> [accessed 15 July 2013]

Garcia, Tristan, and Vincent Normand (eds.), *Theater, Garden, Bestiary. A Materialist History of Exhibitions* (Lausanne / Berlin: ECAL-University of Art and Design Lausanne / Sternberg Press, 2019)

Gilligan, Melanie, and Marina Vishmidt, 'Economic Subjectivities in Crisis', in R. Birkett and S. Lewitt (eds.), *and Materials and Money and Crisis*, exh. cat. (Vienna/Cologne: MUMOK/Walther König, 2013)

Gironi, Fabio, Michael Austin and Robert Jackson (eds.), *Speculations VI* (New York, NY: punctum books, 2015)

Gioni, Massimiliano, *The Encyclopedic Palace: 55th International Art Exhibition. La Biennale Di Venezia*, exh. cat., 2 vols. (Venezia: Marsilio, 2013)

Gioni, Massimiliano, and Gary Carrion-Murayari, *Ghosts in the Machine*, exh. cat. (New York, NY: Skira Rizzoli / The New Museum, 2012)

Ginzburg, Carlo, James D. Herbert, W. J. T. Mitchell, Thomas F. Reese and Ellen Handler Spitz, 'Inter/disciplinarity', in The Art Bulletin, Vol. 77, No. 4 (Dec. 1995)

Jérôme Glicenstein, 'Les Immatériaux', in Françoise Coblence and Michel Enaudeau (eds.), *Lyotard et les Arts* (Paris: Klincksieck, 2014), pp. 102-114

Grant, Iain Hamilton, 'Movements of the World: The Sources of Transcendental Philosophy', *Analecta Hermeneutica*, 3 (2011) <http://journals.library.mun.ca/ojs/index.php/analecta/article/download/326/200> [accessed 15 July 2013]

——, *Philosophies of Nature after Schelling* (London: Continuum, 2008)

Gratton, Peter, and Paul J. Ennis (eds.), *The Meillassoux Dictionary* (Edinburgh: Edinburgh University Press, 2014)

Gorz, André, *Ecology as Politics* (1980: Boston: South End Press; orig. 1975, 1977)

Grosz, Elizabeth, *The Nick of Time: Politics, Evolution and the Untimely* (Durham, NC / London: Duke University Press, 2004)

——, *Time Travels: Feminism, Nature, Power* (Durham, NC / London: Duke University Press, 2005)

——, (ed.), *Becomings. Explorations in Time, Memory and Futures* (Ithaca and London: Cornell University Press, 1999)

Green, David, Joanna Lowry, and Nicholas De Ville, *Makeshift*, exh. cat. (Brighton: University of Brighton, 2001)

Green, Richard E., et al., 'A Draft Sequence of the Neanderthal Genome', *Science*, vol. 328, n. 5979 (7 May 2010), pp. 710–722

Greenberg, Reesa, Bruce W. Ferguson and Sandy Nairne (eds.), *Thinking about Exhibitions* (London: Routledge, 1996)

Gregg, Melissa, and Gregory J. Seigworth (eds.), *The Affect Theory Reader* (Durham, NC / London: Duke University Press, 2010)

Grigely, Joseph, Hans Ulrich Obrist and Zak Kyes, *Exhibition Prosthetics* (London: Bedford Press, 2010)

Grusin, Richard, *The Nonhuman Turn* (Minneapolis: University of Minnesota Press, 2015)

Hansen, Rikke, 'Things v Objects', *Art Monthly*, Jul-Aug 2008, pp. 15-18

Heinich, Nathalie:, 'Les Immatériaux Revisited: Innovation in Innovations', *Tate Papers* 12, ('The Landmark Exhibitions Issue'), Autumn 2009, <https://www.tate.org.uk/research/publications/tate-papers/12/les-immateriaux-revisited-innovation-in-innovations> [accessed 15 October 2021]

Haraway, Donna J., 'Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin', in *Environmental Humanities*, vol. 6, 2015, pp. 159-165

——, *The Companion Species Manifesto. Dogs, People, and Significant Others* (Chicago, IL: Prickly Paradigm Press, 2003)

——, *Modest_Witness@Second_Millennium.FemaleMan© Meets OncoMouseTM. Feminism and Technoscience* (New York: Routledge, 1997)

——, 'The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others', in L. Grossberg, C. Nelson, and P. Treichler (eds.), *Cultural Studies* (New York: Routledge, 1992), pp. 295-337

——, *Simians, Cyborgs and Women: The Reinvention of Nature* (London: Free Association, 1991)

——, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist studies*, n. 14 (1988), 575–99

——, 'SF: Science Fiction, Speculative Fabulation, String Figures, So Far', *Ada: A Journal of Gender, New Media, and Technology*, No. 3, 2013, <http://dx.doi.org/10.7264/N3KH0K81> [accessed 14 October 2021]

——, *Staying with the Trouble. Making Kin in the Chthulucene* (Durham, NC / London: Duke University Press, 2016)

——, *When Species Meet* (Minneapolis, MN: University of Minnesota Press, 2008)

Haraway, Donna, Noboru Ishikawa, Scott F. Gilbert, Kenneth Olwig, Anna L. Tsing and Nils Bubandt, 'Anthropologists Are Talking – About the Anthropocene', in *Ethnos*, Volume 81, Issue 3, 2016, pp. 535-564

Harman, Graham, *Art and Objects* (Cambridge: Polity, 2020)

——, *Guerrilla Metaphysics. Phenomenology and the Carpentry of Things* (Chicago and La Salle, IL: Open Court, 2005)

——, *Immaterialism* (Cambridge: Polity, 2016)

——, 'Materialism is Not the Solution. On Matter, Form, and Mimesis', *The Nordic Journal of Aesthetics*, n. 47, 2014, pp. 94-110

——, 'Object Lesson', *Artforum*, Vol. 54, No. 1, September 2015, pp. 38-40

——, 'Object-Oriented France: The Philosophy of Tristan Garcia', *continent.,* 2.1 (2012) 6–21 <http://www.continentcontinent.com/index.php/continent/article/viewArticle/74> [accessed 15 July 2013]

——, 'On Vicarious Causation', in R. Mackay (ed.), *Collapse: Philosophical Research and Development. Volume II: Speculative Realism* (Falmouth: Urbanomic, 2007), pp. 171–206

——, *Prince of Network. Bruno Latour and Metaphysics* (Melbourne: re.press, 2009)

——, *The Quadruple Object* (Winchester: Zero Books, 2011)

——, *Quentin Meillassoux: Philosophy in the Making* (Edinburgh: Edinburgh University Press, 2011)

——, 'Technology, Objects and Things in Heidegger', *Cambridge Journal of Economics*, 34 (2009), 17–25

——, *Tool-Being. Heidegger and the Metaphysics of Objects* (Chicago and La Salle, IL: Open Court, 2002)

——, *Towards Speculative Realism* (Winchester: Zero Books, 2010)

——, 'Tristan Garcia and the Thing-in-Itself', *Parrhesia*, 16 (2013), 26-34 <http://www.parrhesiajournal.org/parrhesia16/parrhesia16_harman.pdf> [accessed 15 July 2013]

——, *Weird Realism: Lovecraft and Philosophy* (Winchester: Zero Books, 2012)

Harper, Douglas, 'aesthetic', *Online Etymology Dictionary*, <https://www.etymonline.com/word/aesthetic> [accessed 20 September 2020].

Haworth, Michael, 'Genius Is What Happens: Derrida and Kant on Genius, Rule-Following and the Event', in *The British Journal of Aesthetics*, Volume 54, Issue 3, July 2014, pp. 323–337

Hayles, N. Katherine, *How We Became Posthuman. Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago and London: University of Chicago Press, 1999)

Hecker, Florian, *Speculative Solution*, audio CD with book ed. by Robin Mackay, (Falmouth / Vienna: Urbanomics / Editions Mego [CD: eMEGO 118], 2011)

Hecker, Florian, and Reza Negarestani, *Florian Hecker: Chimerizations* (New York, NY: Primary Information, 2013)

Hegel, Georg Wilhelm Friedrich, *The Phenomenology of Spirit*, trans. and ed. T. Pinkard (Cambridge: Cambridge University Press, 2018; orig. 1807)

Heidegger, Martin, *Being and Time*, trans. by J. Macquarrie and E. Robinson (Oxford: Blackwell, 1962-78; orig. 1927)

——, 'The Origin of the Work of Art' and 'What is a thing?', in *Poetry, Language, Thought*, trans. by A. Hofstadter, (New York, NY: Harper & Row, 1975; orig. 1935-36 and 1935)

——, 'The Question Concerning Technology', in *The Question Concerning Technology and Other Essays*, trans. by William Lovitt (New York, NY: Harper & Row, 1977)

Heiser, Jörg, 'Against Speculation. Philosophical manoeuvrings and political realities', *Frieze d/e*, n. 15, Jun.-Aug. 2014, p. 4; online on *frieze.com,* <https://www.frieze.com/article/against-speculation> [accessed 17 March 2019]

Henderson, Linda Dalrymple, *The Fourth Dimension and Non-Euclidean Geometry in Modern Art*, new ed. (Cambridge, MA: The MIT Press, 1983-2013)

Hlavajova, Maria, Jill Winder, and Binna Choi, eds., *On Knowledge Production: a Critical Reader in Contemporary Art* (Utrecht: BAK, 2008)

Hodder, Ian, *Entangled. An Archaeology of the Relationships between Humans and Things* (Chichester: Wiley-Blackwell, 2012)

Holder, Will, and Anthony Huberman, *For the Blind Man in the Dark Room Looking for the Black Cat That Isn't There*, exh. cat. (Saint Louis, MO / Lisbon: Contemporary Art Museum St. Louis / Culturgest, 2009)

Holert, Tom, *Knowledge Beside Itself. Contemporary Art's Epistemic Politics* (Berlin: Sternberg Press, 2020)

Hoffman, Jens, *Show Time: The Most Influential Exhibitions of Contemporary Art* (London: Thames and Hudson, 2nd edition 2017)

Hoffman, Jens (ed.), *The Ten Fundamental Questions of Curating* (Milan: Mousse Publishing, 2013)

Hudek, Anthony, 'From Over- to Sub-Exposure: The Anamnesis of Les Immatériaux', in *Tate Papers* 12 ('The Landmark Exhibitions Issue'), Autumn 2009, <https://www.tate.org.uk/research/publications/tate-papers/12/from-over-to-sub-exposure-the-anamnesis-of-les-immateriaux> [accessed 13 February 2018]

Hui, Yuk, *Art and Cosmotechnics* (Minneapolis, MN: University of Minnesota Press, 2020)

Hui, Yuk and Andreas Broeckmann (eds.), *30 Years after* Les Immatériaux*: Art, Science, and Theory* (Lüneburg: Meson Press, 2015)

Jackson, Robert, 'Demonstration and Description', in K. Behar and E. Mikelson (eds.), *And Another Thing: Nonanthropocentrism and Art* (New York, NY: punctum books, 2016), pp. 71-5

——, 'If Materialism Is Not The Solution, Then What Was The Problem?', *The Nordic Journal of Aesthetics*, n.47, 2014, pp. 111-24

——, 'The Anxiousness of Objects and Artworks: Michael Fried, Object Oriented Ontology and Aesthetic Absorption', in M. Austin, et al. (eds.), *Speculations II* (New York, NY: punctum books, 2011), pp. 135-68

——, 'The Anxiousness of Objects and Artworks 2: (Iso)Morphism, Anti-Literalism and Presentness', in R. Askin, et al. (eds.), *Speculations V: Aesthetics in the 21st Century* (New York, NY: punctum books, 2013), pp. 311-58

Johnstone, Stephen, (ed.), *The Everyday* (Documents of Contemporary Art) (London / Cambridge, MA: Whitechapel / The MIT Press, 2008)

Joselit, David 'Body Bags', in Susanne Pfeffer (ed.), *Speculations on Anonymous Materials. nature after nature. Inhuman*, exh. cat. (Cologne: Koenig Books, 2018), pp. 117-22

Joselit, David, and Carrie Lambert-Beatty and Hal Foster (eds.), 'A Questionnaire On Materialisms', *October*, Issue 155, Winter 2016, pp. 3-110

Kant, Immanuel, *Critique of Judgment*, trans. W. S. Pluhar (Indianapolis, IN: Hackett, 1987; orig. 1790)

——, *Critique of Pure Reason*, 1st ed. (1781), trans. Paul Guyer and Allen W. Wood (Cambridge: Cambridge University Press, 1998)

Kapur, Geeta, 'Politics of Translation or Political Translations: Curating as a Critique of Transculturalism', notes for a lecture given as part of the *In Transit* conference, *In Transit*, House of World Cultures, Berlin, 2002; available online on the Asia Art Archive website, <https://cdn.aaa.org.hk/_source/digital_collection/fedora_extracted/20809.pdf> [accessed 10 February 2021]

Kholeif, Omar, *You are Here: Art After the Internet* (Manchester/London: Cornerhouse/SPACE, 2014)

Kolozova, Katerina, and Eileen A. Joy, *After the 'Speculative Turn': Realism, Philosophy, and Feminism* (New York, NY: punctum books, 2013)

Koonin, Eugene V., and Petro Starokadomskyy. 'Are viruses alive? The replicator paradigm sheds decisive light on an old but misguided question', Studies in History and Philosophy of Biological and Biomedical Sciences, Vol. 59 (2016), pp. 125-34; online at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5406846/>{accessed 2 October 2021] (doi:10.1016/j.shpsc.2016.02.016);

Kosuth, Joseph, 'Art after Philosophy', *Studio International*, 178 (Oct. 1969), p. 135; republished in *Idea Art: A Critical Anthology*, ed. by G. Battcock (New York, NY: Dutton, 1973), pp. 70-101

Krauss, Rosalind E., 'Notes on the Index: Seventies Art in America', *October*, 3 (1977), 68–81

——, 'Notes on the Index: Seventies Art in America. Part 2', *October*, 4 (1977), 58–67

——, *Passages in Modern Sculpture* (Cambridge, MA: The MIT Press, 1981)

——, 'Reinventing the Medium', *Critical Inquiry*, 25 (1999), 289–305

——, 'Sculpture in the expanded field', in *October*, 8 (Spring 1979), 30-44

——, '"Specific" Objects', *RES: Anthropology and Aesthetics*, 46 (2004), 221–24

——, *'A Voyage on the North Sea': Art in the Age of the Post-medium Condition* (London: Thames & Hudson, 2000)

Kubler, George, *The Shape of Time. Remarks on the History of Things* (New Haven, MA: Yale University Press, 1962)

Kultermann, Udo, *The History of Art History* (New York: Abaris Books, 1993, orig. 1966)

Kwon, Miwon, *One Place After Another. Site Specific Art and Locational Identity* (Cambridge, MA: The MIT Press, 2002)

Lamarck, Jean-Baptiste, *Zoological Philosophy* (Chicago: University of Chicago Press, 1984; orig. 1809)

Laruelle, François, *The Concept of Non-Photography* (Falmouth: Urbanomic x Sequence Press, 2nd ed. 2015, orig. 2011)

——, *From Decision to Heresy. Experiments in Non-Standard Thought*, ed. Robin Mackay (Falmouth / New York, NY: Urbanomic / Sequence Press, 2012)

——, *Photo-Fiction, a Non-Standard Aesthetics* (Minneapolis, MN: Univocal, 2012)

——, *Principles of Non-Philosophy*, (London: Bloomsbury, 2013; orig. 1996)

Lasswell, Harold, 'The Structure and Function of Communication in Society', in Lyman Bryson (ed.), *The Communication of Ideas* (New York: Institute for Religious and Social Studies, 1948), pp. 37-51

Latour, Bruno, *An Inquiry into Modes of Existence: An Anthropology of the Moderns*, trans. C. Porter (Harvard University Press, 2013; orig. 2012)

——, *Down to Earth. Politics in the New Climactic Regime* (Cambridge: Polity, 2018; orig. 2017)

——, 'From Realpolitik to Dingpolitik or How to Make Things Public', in B. Latour and P. Weibel (eds.), *Making Things Public. Atmospheres of Democracy*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2005), pp. 14-41

——, On the Modern Cult of the Factish Gods (Durham, NC / London: Duke University Press, 2010)

——, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999)

——, *Politics of Nature: How to Bring the Sciences Into Democracy* (Cambridge, MA / London: Harvard University Press, 2004; orig. 1999)

——, *Reassembling the Social. An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005)

——, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, MA: Harvard University Press, 1987)

——, 'Some Experiments in Art and Science', *e-flux*, 23 (March 2011) <http://www.e-flux.com/journal/some-experiments-in-art-and-politics/> [accessed 15 July 2013]

——, 'Technology Is Society Made Durable', in *A Sociology of Monsters: Essays on Power, Technology and Domination*, ed. by John Law (London: Routledge, 1991), pp. 103–31

——, 'The Theater of Proof: A Series of Demonstrations' (1999), in H.U. Obrist and B. Vanderlinden (eds.), *Laboratorium*, exh. cat. (Zurich: JP|Ringier, 2001), pp. 185-7

——, *We Have Never Been Modern*, trans. C. Porter (Cambridge, MA: Harvard University Press, 1993; orig. 1991)

Latour, Bruno, Graham Harman, and Peter Erdély, *The Prince and the Wolf: Latour and Harman at the LSE* (Winchester: Zero Books, 2011)

Latour, Bruno, with Christophe Leclerq (eds.), *Reset Modernity!* (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2016)

Latour, Bruno, and Peter Weibel (eds.), *Critical Zones. The Science and Politics of Landing on Earth* (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2020)

—— (eds.), *Iconoclash: Beyond the Image Wars in Science, Religion, and Art*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2002)

—— (eds.), *Making Things Public. Atmospheres of Democracy*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2005)

Lawrence, Eleanor, *Henderson's Dictionary of Biology* (Pearson/Prentice Hall, 2005).

Leckey, Mark, *The Universal Addressability of Dumb Things*, exh. cat. (London: Hayward Publishing, 2013)

Lefebvre, Henri, *Critique of everyday life*, 3 vols., trans. J. Moore and G. Elliott (London: Verso, 1991-2008; orig. 1947 (vol.I), 1961 (vol.II), 1981 (vol.III))

Lévi-Strauss, Claude, *The Savage Mind*, trans. J. and D. Weightman (London: Weidenfeld & Nicolson, 1966; orig. 1962)

Lind, Maria 'The Curatorial', in *Artforum*, vol.68, n.2 (October 2009), p. 103; reprinted in Brian Kuan Wood (ed.), Selected Maria Lind Writing (Berlin: Sternberg Press, 2010), pp. 57-66

—— (ed.), *Performing the Curatorial: Within and Beyond Art* (Berlin: Sternberg Press, 2012)

Lippard, Lucy, *Six Years: The Dematerialization of the Art Object from 1966 to 1972* (Berkeley and Los Angeles: University of California Press, 1997, orig. 1973)

Lovegrove, Thomas, 'Speculative Realism', in *Sleek*, 36 (Winter 2012), pp. 138-41

Lunstrum, Elizabeth , et al., 'More-Than-Human and Deeply Human Perspectives on COVID-19', Antipode, Vol. 53, Issue 5, September 2021 (first published online 30 Mar. 2021), pp. 1–23 (doi:10.1111/anti.12730); online at <https://onlinelibrary.wiley.com/doi/10.1111/anti.12730> [accessed 2 October 2021]

Lyotard, Jean-François, 'After Six Months of Work... (1984)', in Y. Hui and A. Broeckmann (eds.), *30 Years after* Les Immatériaux*: Art, Science, and Theory* (Lüneburg: Meson Press, 2015), pp.32-3.

——, *The Differend: Phrases in Dispute* (Manchester: Manchester University Press, 1988; orig. 1983)

——, *Discourse, Figure*, trans. by A. Hudek and M. Lydon (Minneapolis: University of Minnesota Press, 2011)

——, *The Inhuman. Reflections on Time* (Cambridge: Polity Press, 1991; orig. 1988)

——, *The Postmodern Condition: a Report on Knowledge*, trans. by G. Bennington and B. Massumi (Manchester: Manchester University Press, 1984)

——, 'Les Immatériaux. Un entretien avec Jean-Francois Lyotard' (with Jacques Saur and Philippe Bidaine), *CNAC Magazine*, n.26, 1985, pp. 13-16

——, 'Les Immatériaux', in Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne (eds.), *Thinking about Exhibitions* (London: Routledge, 1996), pp. 159-73

Lyotard, Jean-François, and Thierry Chaput (eds.), *Les Immatériaux*, exh. cat. (Paris: Centre Georges Pompidou, 1985)

Lysaker, John, 'Heidegger's Absolute Music, or What Are Poets for When the End of Metaphysics Is at Hand?', *Research in phenomenology*, 30 (2000), pp. 180–211

Mackay, Robin (ed.), '5 Symposium: Speculations on Anonymous Materials - Robin Mackay' (4 January 2014), youtube.com ('Fridericianum' YouTube channel), pub. 18 January 2018, <https://youtu.be/tsPOTOLBe4o> [accessed 4 February 2019]

—— (ed.), *Collapse: Philosophical Research and Development. Volume II: Speculative Realism* (Falmouth: Urbanomic, 2007)

—— (ed.), *Collapse: Philosophical Research and Development. Volume III: Unknown Deleuze [+Speculative Realism]* (Falmouth: Urbanomic, 2007)

—— (ed.), *Collapse: Philosophical Research and Development. Volume IV: Concept Horror* (Falmouth: Urbanomic, 2008)

—— (ed.), *Hydroplutonic Kernow* (Falmouth: Urbanomic, 2020)

—— (ed.), *The Medium of Contingency* (Falmouth / London: Urbanomic / Ridinghouse, 2011)

——, 'Immaterials, Exhibition, Acceleration', in Y. Hui, and A. Broeckmann (eds.), *30 Years after* Les Immatériaux*: Art, Science, and Theory* (Lüneburg: Meson Press, 2015), pp. 216-43

Mackay, Robin, and Reza Negarestani, *Unboxing the Machines. Toy Model AGI Playset,* UF045 (Falmouth: Urbanomic, 2018)

Mackay, Robin, Luke Pendrell and James Trafford (eds.), *Speculative Aesthetics* (Falmouth: Urbanomic, 2014)

Mackay, Robin, et al., *The Medium of Contingency*, video documentation of discussion held at Thomas Dane Gallery, 19 January 2011, *vimeo.com*, <https://vimeo.com/20285681> [accessed 15 October 2021]

Malik, Suhail, 'Hegemonic Neomaterialism and its Limitations', published (German only) in Springerin: Hefte für Gegennwartskunst, January 2016: 'New Materialisms', <http://research.gold.ac.uk/21510/1/1511-Springerin-FINAL.pdf> [accessed 15 October 2021]

——, 'Dispossed and Watered-Down. Hegemonic Neomaterialism and its Limitations', Springerin: Hefte für Gegennwartskunst, n.22, January 2016, pp. 48-50

——, 'Reasons to Destroy Contemporary Art', *Spike Art Quarterly* no. 37 (2013), pp. 130-33

Malm, Magdalena, and Annika Vik (eds.), *Imagining the Audience: Viewing Positions in Curatorial and Artistic Practice* (Stockholm: Art and Theory Publishing, 2012)

Margulis, Lynn (then Lynn Sagan), 'On the Origin of Mitosing Cells', in Journal of Theoretical Biology, vol. 14, no. 3 (1967)

Margulis, Lynn, and Dorion Sagan, *Microcosmos: Four Billion Years of Evolution from our Microbial Ancestors* (Berkeley and Los Angeles, CA: University of California Press, 1997; orig. 1985)

——, *What Is Life?* (New York, NY: Simon & Schuster, 1995)

Martinon, Jean-Paul (ed.), *The Curatorial. A Philosophy of Curating* (London: Bloomsbury, 2013)

Marx, Karl and Friedrich Engels, *The German Ideology. Part one: with selections from parts two and three, together with Marx's 'Introduction to a critique of political economy'* (2nd ed., London: Lawrence and Wishart, 1974; orig. c.1846)

Massumi, Brian, *Parables for the Virtual: Movement, Affect, Sensation* (Durham, NC / London: Duke University Press, 2002)

——, *Politics of Affect* (Cambridge: Polity, 2015)

——, *Semblance and Event: Activist Philosophy and the Occurrent Arts* (Cambridge, MA: The MIT Press, 2011)

——, *What Animals Teach Us about Politics* (Durham, NC / London: Duke University Press, 2014)

McPhee, John, *Basin and Range* (New York: Farrar, Straus and Giroux, 1981)

McLean-Ferris, Laura, 'Indifferent Objects', *Art Monthly*, no. 368 (July-August 2013), pp. 7-10

Meillassoux, Quentin, *After Finitude. An Essay on the Necessity of Contingency*, trans. by R. Brassier (London: Continuum, 2008; orig. 2006)

——, 'Iteration, Reiteration, Repetition: A Speculative Materialist Analysis of the Sign Devoid of Meaning' (orig. 2012), in A. Avanessian and S. Malik (eds.), *Genealogies of Speculation. Materialism and Subjectivity since Structuralism* (London and New York: Bloomsbury, 2016), pp. 117-197

——, *The Number and the Siren. A Decipherment of Mallarmé's* Coup de Dés (Falmouth / New York: Urbanomic / Sequence Press, 2012)

——, 'Time without Becoming', paper delivered at the Centre for Research in Modern European Philosophy, Middlesex University, May 2008; online at <https://speculativeheresy.files.wordpress.com/2008/07/3729-time_without_becoming.pdf> [accessed 11 May 2020]; reprinted in *Spike Art Quarterly* no. 35 (2013), pp. 91-105

Meltzer, Eve, *Systems We Have Loved: Conceptual Art, Affect, and the Antihumanist Turn* (Chicago, IL: University of Chicago Press, 2013)

Merleau-Ponty, Maurice, *Phenomenology of Perception*, trans. by C. Smith (London: Routledge & K. Paul, 1962-2002; orig. 1945)

Miller, Arthur I., *Colliding Worlds. How Cutting-Edge Science Is Redefining Contemporary Art* (New York, NY / London: Norton, 2014)

Miller, Daniel, *Materiality* (Durham, NC: Duke University Press, 2005)

Miyake, Akiko, and Hans Ulrich Obrist, *Bridge the Gap?* (Kitakyushu / Köln: Centre for Contemporary Art, CCA / Wather König, 2002)

Molesworth, Helen Anne, *Part Object Part Sculpture*, exh. cat. (Columbus, OH / University Park, PA: Wexner Center for the Arts, The Ohio State University / Pennsylvania State University Press, 2005)

Mondloch, Kate, *A Capsule Aesthetic. Feminist Materialism in New Media Art* (Minneapolis, MN: University of Minnesota Press, 2018)

Moore, Jason W. (ed.), *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism* (Oakland, CA: PM Press, 2016)

Morton, Timothy, *Hyperobjects: Philosophy and Ecology After the End of the World* (Minneapolis, MN: University of Minnesota Press, 2013)

——, *Realist Magic: Objects, Ontology, Causality* (Ann Arbor, MI: Open Humanities Press, 2013)

Mullarkey, John, *Post-Continental Philosophy: An Outline* (London: Continuum, 2006)

Munster, Anna, *An Aesthesia of Networks: Conjunctive Experience in Art and Technology* (Cambridge, MA: The MIT Press, 2013)

Nagel, Thomas, *Mortal Questions* (Cambridge: Cambridge University Press, 1979)

Negarestani, Reza, '6 Symposium: Speculations on Anonymous Materials - Reza Negarestani', (4 January 2014), youtube.com ('Fridericianum' YouTube channel), pub. 18 January 2018 <https://youtu.be/Fg0lMebGt9I> [accessed 4 February 2019]

——, *Cyclonopedia. Complicity with Anonymous Materials* (Melbourne: re.press, 2008)

——, Intelligence and Spirit (Falmouth: Urbanomic, 2018)

——, 'The Labor of the Inhuman, Part I: Human', in *e-flux Journal* #52, February 2014, <https://www.e-flux.com/journal/52/59920/the-labor-of-the-inhuman-part-i-human/> [accessed 21 May 2020]

Noys, Benjamin, *Malign Velocities: Accelerationism and Capitalism* (Zero Books, 2014)

——, *The Persistence of the Negative* (Edinburgh University Press, 2010)

Obrist, Hans Ulrich, *A Brief History of Curating* (Zurich / Dijon: JRP Ringier / Les Presses du Réel, 2008)

Obrist, Hans Ulrich and Olafur Eliasson (eds., with E. Ridgway), *Experiment Marathon* (Reykjavik / London: Reykjavik Art Museum / Koenig Books, 2009)

Obrist, Hans-Ulrich, and Barbara Vanderlinden (eds.), *Laboratorium*, exh. cat. (Zurich: JP|Ringier, 2001)

O'Doherty, Brian, *Inside the White Cube. The Ideology of the Gallery Space* (Berkeley / Los Angeles / London: University of Califormia Press, 1986, exp. ed. 1999)

O'Neill, Paul (ed.), *The Culture of Curating and the Curating of Culture(s)* (Cambridge, MA / London: the MIT Press, 2012)

——, *Curating Subjects* (London: Open Editions, 2007)

O'Neill, Paul, and Mick Wilson (eds.), *Curating Research* (London: Open Editions, 2015)

O'Neill, Paul, Mick Wilson and Lucy Steeds (eds.), *The Curatorial Conundrum* (Feldmeilen / Annandale-on-Hudson, NY and Cambridge, MA: Luma Foundation / Centre for Curatorial Studies, Bard College / the MIT Press, 2016)

——, 'The Dehumanization of Art' (1925), in *The Dehumanization of Art, and Other Essays on Art, Culture and Literature* (Princeton, NJ: Princeton University Press, 1968)

Osborne, Peter, *Anywhere or Not at All. Philosophy of Contemporary Art* (London / New York: Verso, 2013)

——, *The Postconceptual Condition. Critical Essays* (London: Verso, 2017)

——, Osborne, Peter, 'Problematizing Disciplinarity, Transdisciplinary Problematics', in *Theory, Culture & Society*, 2015, vol. 32 (5–6). pp. 3–35

O'Sullivan, Simon, *Art Encounters Deleuze and Guattari* (New York: Palgrave Macmillan, 2006)

——, *On the Production of Subjectivity. Five Diagrams of the Finite-Infinite Relation* (New York: Palgrave Macmillan, 2012)

——, 'The Missing Subject of Accelerationism', in *Mute* (posted 12 September 2014), <https://www.metamute.org/editorial/articles/missing-subject-accelerationism> [accessed 15 May 2020]

Panel discussion, '7 Symposium: Speculations on Anonymous Materials - Podiumsdiskussion', *youtube.com*, *Fridericianum* YouTube channel, pub. 17 January 2018, <https://www.youtube.com/watch?v=cKdb9ZBHF9E> [accessed 4 February 2019]

Papapetros, Spyros, *On the Animation of the Inorganic. Art, Architecture, and the Extension of Life* (Chicago and London: University of Chicago Press, 2012)

Parisi, Luciana, *Contagious Architecture: Computation, Aesthetics and Space* (Cambridge, MA: The MIT Press, 2013)

Parikka, Jussi '21st Century Theory', in *Spike Art Quarterly* no. 41 (Autumn 2014), pp. 130-7

——, *The Anthrobscene* (Minneapolis, MN: University of Minnesota Press, 2014)

——, *A Geology of Media* (Minneapolis, MN: University of Minnesota Press, 2015)

Parkinson, Gavin, *Surrealism, Art, and Modern Science: Relativity, Quantum Mechanics, Epistemology* (New Haven, MA: Yale University Press, 2008)

Parr, Adrian (ed.), *The Deleuze Dictionary - Revised Edition* (Edinburgh: Edinburgh University Press, 2010)

Parry, Joseph D. (ed.), *Art and Phenomenology* (London: Routledge, 2010)

Parry, Richard, 'Episteme and Techne', Stanford Encyclopedia of Philosophy, first published 11 April 2003, revised 27 March 2020, <https://plato.stanford.edu/entries/episteme-techne/> [accessed 4 July 2020]

Peirce, Charles Sanders, *Collected Papers of Charles Sanders Peirce*, 8 vols., ed. by Charles Hartshorne, Paul Weiss, and Arthur W Burks (Cambridge, MA: Belknap Press, 1974)

Penrose, Roger, *The Emperor's New Mind: Concerning Computers, Minds and The Laws of Physics* (Oxford: Oxford University Press, 1989)

Peters, Michael A., 'Anti-scientism, technoscience and philosophy of technology: Wittgenstein and Lyotard', *Educational Philosophy and Theory*, Published Online: 20 Aug 2019, <https://www.tandfonline.com/doi/full/10.1080/00131857.2019.1654371> [accessed 4 May 2020]

Pfeffer, Susanne, 'SUSANNE PFEFFER: How Art's POST-HUMAN TURN Began in Kassel,' *032c.com*, published 20 January 2016, <https://032c.com/how-arts-post-human-turn-began-in-kassel/> [accessed 27 January 2019]

——, (ed.), *Speculations on Anonymous Materials. nature after nature. Inhuman*, exh. cat. (Cologne: Koenig Books, 2018)

Pine, B. Joseph II, and James Gilmore, *The Experience Economy* (Boston, MA: Harvard Business School Press, 1999)

Pinto, Ana Teixeira, 'Speculative Realism in Germany', *frieze.com*, May 2013, <https://frieze.com/article/real-deal> [accessed 3 March 2019]

Plotz, John, 'Can the Sofa Speak? A Look at Thing Theory', *Criticism*, no. 47 (2005), pp. 109–18

Prince, Mark, 'New Realism', *Art Monthly*, May 2014, pp. 6-9

Quack, Gregor, 'Materials beside Themselves', in Susanne Pfeffer (ed.), *Speculations on Anonymous Materials. nature after nature. Inhuman*, exh. cat., (Cologne: Koenig Books, 2018), pp. 131-35

Ran, Faye, *A History of Installation Art and the Development of New Art Forms: Technology and the Hermeneutics of Time and Space in Modern and Postmodern Art from Cubism to Installation* (New York, NY: Peter Lang, 2009)

Rancière, Jacques, 'The Aesthetic Revolution and Its Outcomes: Emplotments of Autonomy and Heteronomy', *New Left Review*, 14 (March-April 2002), 133-51

——, *Aisthesis: Scenes from the Aesthetic Regime of Art*, trans. by P. Zakir (London: Verso, 2013)

——, *Disagreement*, trans. by J. Rose (Minneapolis: University of Minnesota Press, 1999; orig. 1995)

——, *Aesthetics and Its Discontents* (Cambridge/Malden, MA: Polity, 2009, orig. 2004)

——, *The Emancipated Spectator*, trans. by G. Elliott (London: Verso, 2009; orig. 2008)

——, *The Future of the Image*, trans. by G. Elliott (London: Verso, 2007; orig. 2003)

——, *The Politics of Aesthetics: The Distribution of the Sensible*, trans. by G. Rockhill (London: Continuum, 2004; orig. 2000)

——, 'Thinking Between Disciplines: An Aesthetics of Knowledge', *Parrhesia*, 1 (2006), pp. 1–12

Rattemeyer, Christian (ed.), *Exhibiting the New Art: 'Op Losse Schroeven' and 'When Attitudes Become Form' 1969* (Köln / London: König / Afterall Books, 2010)

Ravaglia, Valentina, 'On Cybernetic Serendipity, Nove Tendencije and the Myth of Computer Art', in Valentino Catricalà (ed.), *Media Art. Towards a New Definition of Arts in the Age of Technology* (Pistoia: Gli Ori, 2015), pp. 105-11

Rebentisch, Juliane, *Aesthetics of Installation Art* (Berlin: Sternberg Press, 2012)

Recchia, Francesca, 'Aftermaths?: dOCUMENTA (13) in Kabul', *Afterall: A Journal of Art, Context and Enquiry*, Issue 40 (Autumn/Winter 2015), pp. 66-75

Rhomberg, Kathrin (ed.), *Was draußen wartet / What is Waiting Out There: 6. Berlin Biennale für zeitgenössische Kunst / 6th Berlin Biennale for Contemporary Art. Reader*, exh. cat. (Köln: DuMont, 2010)

Roberts, John, *The Intangibilities of Form. Skill and Deskilling in Art after the Readymade* (London: Verso, 2007)

——, *Philosophizing the Everyday: Revolutionary Praxis and the Fate of Cultural Theory* (London: Pluto Press, 2006)

Robinson, Julia (ed.), *New Realisms: 1957-1962. Object Strategies Between Readymade and Spectacle*, exh. cat. (Cambridge, MA: The MIT Press, 2010)

Roelstraete, Dieter (ed.), *All That Is Solid Melts Into Air: Five Reflections on Materialist Spirituality in Contemporary Art*, exh. cat. (Antwerp / Tielt: MuHKA / Lannoo, 2009)

——, 'Art as Object Attachment. Thoughts on Thingness', in Filipovic and Szymczyk (eds.), 5th Berlin Biennale for Contemporary Art: When Things Cast No Shadow, exh. cat. (Zurich: JP|Ringier, 2008), pp. 444-45

Rosen, Margit, *A Little-Known Story about a Movement, a Magazine, and the Computer's Arrival in Art. New Tendencies and Bit International, 1961–1973*, exh. cat. (Karlsruhe / Cambridge, MA: ZKM / The MIT Press, 2011)

Rosenbaum, Steven, *Curation Nation: How to Win in a World Where Consumers Are Creators* (New York: McGraw-Hill, 2011)

Rotman, Brian, Becoming Beside Ourselves: The Alphabet, Ghosts, and Distributed Human Being (Durham, NC: Duke University Press, 2008)

Ryan, Paul, *Video Mind, Earth Mind: Art, Communications, and Ecology* (New York, NY: Peter Lang, 1993)

Schrödinger, Erwin, *What is Life?* and *Mind and Matter* (Cambridge: Cambridge University Press, 1967; orig. 1944, 1958)

Sellars, Wilfrid, Empiricism and the Philosophy of Mind (Cambridge, MA: Harvard University Press, 1997).

——, 'Philosophy and the Scientific Image of Man', in *Science, Perception and Reality* (London: Routledge and Kegan Paul, 1963), pp. 1–40;

Sassen, Saskia, *Territory Authority Rights: From Medieval to Global Assemblages* (Princeton, NJ: Princeton University Press, 2006)

Schwenger, Peter, *The Tears of Things: Melancholy And Physical Objects* (Minneapolis, MN: University of Minnesota Press, 2006)

Shaviro, Steven, *Discognition* (Repeater, 2017)

——, *The Universe of Things. On Speculative Realism* (Minneapolis, MN: University of Minnesota Press, 2014)

——, *Whitout Criteria: Kant, Whitehead, Deleuze, and Aesthetics* (Cambridge, MA: The MIT Press, 2009)

Sheikh, Simon . 2013. 'Articulation: On the Position of the Curator', in Ann Demester, Edna van Duyn and Hendrik Folkerts (eds.), *The Shadowfiles 3 - Curatorial Education* (Amsterdam: Appel, 2013)

——, 'Constitutive Effects: The Techniques of the Curator', in Zoya Kocur, ed., *Global Visual Cultures* (Oxford: Wiley-Blackwell, 2011), pp. 48-56

——, 'Curation and Futurity', in in P. O'Neill, M. Wilson and L. Steeds (eds.), *The Curatorial Conundrum*, pp. 152-60

Shiner, Larry, *The Invention of Art: A Cultural History* (Chicago: University of Chicago Press, 2003)

Siegel, Katy, 'Worlds with Us', *The Brooklyn Rail*, 15 July 2013 <http://www.brooklynrail.org/2013/07/art/words-with-us> [accessed 10 August 2013]

Simon, Joshua, *Neomaterialism* (Berlin: Sternberg Press, 2013)

Slater, Barry Hartley, 'Aesthetics', *Internet Encyclopedia of Philosophy*, <https://iep.utm.edu/aestheti/> [accessed 20 September 2020]

Sutela, Jenna (ed.), ADD Metaphysics (Espoo: Aalto University, 2013

Smith, Terry, *Thinking Contemporary Curating* (New York: Independent Curators International, 2012)

Si-Qin, Timur 'Axe Effect, 2011–2013', *timursiqin.com*, <http://timursiqin.com/axe-effect> [accessed 4 February 2019]

——, 'Aesthetics of Contingency: Materialism, Evolution, Art', *Stream 04 — The Paradoxes of the Living*, November 2017. Online on pca-stream.com, <https://www.pca-stream.com/en/articles/timur-si-qin-aesthetics-of-contingency-materialism-evolution-art-108>

Smolik, Naomi 'Kassel. Speculations on Anonymous Materials, Fridericianum', *Artforum*, Vol. 52, No. 9 (May 2014), pp. 334-5

Spinoza, Benedict de (Baruch), *A Spinoza Reader. The Ethics and Other Works*, ed. and trans. by E. Curley (Princeton, NJ: Princeton University Press, 1994)

Stadler, Robert, and Alexis Vaillant (eds.), *On Things as Ideas* (Berlin: Sternberg Press, 2016)

Stakemaier, Kerstin 'Prosthetic Productions. The Art of Digital Bodies: on Speculations on Anonymous Materials at Fridericianum, Kassel', in *Texte zur Kunst* no. 93 (March 2014), 'Spekulation/Speculation', pp. 166-180

Stallabrass, Julian, 'Radical Camouflage at dOCUMENTA 13', *New Left Review* no. 77 (Sept.-Oct. 2012), pp. 123-33

Staniszewski, Mary Anne, *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art* (Cambridge, MA: The MIT Press, 1998)

Steffen, Will, et al, 'The Anthropocene: Conceptual and Historical Perspectives', *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, n. 369 (2011), <doi:10.1098/rsta.2010.0327> [accessed 15 October 2021], pp. 842–867

Stengers, Isabelle, *The Invention of Modern Science*, (Minneapolis: University of Minnesota Press, 2000; orig. 1993)

——, *Cosmopolitics I* (Minneapolis: University of Minnesota Press, 2010; orig. 1997-2003)

——, *Cosmopolitics II* (Minneapolis: University of Minnesota Press, 2011; orig. 1997-2003)

Stengers, Isabelle, and Michael Chase, *Thinking with Whitehead: a Free and Wild Creation of Concepts* (Cambridge, MA: Harvard University Press, 2011)

Sternfeld, Nora, 'What Can the Curatorial Learn from the Educational?', in B. von Bismark, J. Schafaff and T. Weski (eds.), *Cultures of the Curatorial* (Berlin: Sternberg Press, 2012), pp. 333-43

Taleb, Nassim, *The Black Swan: The Impact of the Highly Improbable* (London: Penguin, 2007)

Thacker, Eugene, *After Life* (Chicago, IL: University of Chicago Press, 2010)

——, *Biomedia* (Minneapolis, MN: University of Minnesota Press, 2004)

——, *Cosmic Pessimism* (Minneapolis, MN: Univocal, 2015)

——, *The Global Genome: Biotechnology, Politics and Culture* (Cambridge, MA: The MIT Press, 2005)

——, *In the Dust of This Planet: Horror of Philosophy, Vol. 1* (Winchester: Zero Books, 2011)

——, *Starry Speculative Corpse: Horror of Philosophy, Vol. 2* (Winchester: Zero Books, 2015)

——, *Tentacles Longer Than Night: Horror of Philosophy, Vol. 3* (Winchester: Zero Books, 2015)

Thompson, Nato, and Gregory Sholette (eds.), *The Interventionists: Users' Manual for the Creative Disruption of Everyday Life*, exh. cat. (North Adams, MA: Mass MoCA, 2004)

Toscano, Alberto, 'Against Speculation, or, a Critique of the Critique of Critique', in L. Bryant, N. Srnicek and G. Harman (eds.), *The Speculative Turn: Continental Materialism and Realism* (Melbourne: re.press, 2011), pp. 84-91

Tsing, Anna Lowenhaupt, *The Mushroom at the End of the World. On the Possibility of Life in Capitalist Ruins* (Princeton, NJ/ Oxford: Princeton University Press, 2015)

Tsing, Anna Lowenhaupt, Heather Anne Swanson, Elaine Gan, and Nils Bubandt (eds.), *Arts of Living on a Damaged Planet. Ghosts and Monsters of the Anthropocene* (Minneapolis, MN: University of Minnesota Press, 2017)

Turkle, Sherry (ed.), *Evocative Objects: Things We Think With* (Cambridge, MA: MIT Press, 2007)

von Uexküll, Jakob, *A Foray into the Worlds of Animals and Humans, with A Theory of Meaning*, trans. by J. D. O'Neil (Minneapolis, MN: University of Minnesota Press, 2010, orig. 1934)

Ursprung, Philip, *Allan Kaprow, Robert Smithson, and the Limits to Art* (Berkeley and Los Angeles, CA: University of California Press, 2013)

Valéry, Paul, 'The Conquest of Ubiquity', in *Aesthetics*, trans. by Ralph Manheim (New York, NY: Pantheon Books, 1964)

Vaneigem, Raoul, *The Revolution of Everyday Life*, trans. by D. Nicholson-Smith (London: Rebel Press, 1983-2001; orig. 1967)

van der Tuin, Iris, 'Deflationary Logic: Response to Sara Ahmed's 'Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the "New Materialism"', *European Journal of Women's Studies*, Vol. 15, Issue 4, pp. 411-6

van Tuinen, Sjoerd, 'Deleuze: Speculative and Practical Philosophy', in A. Avanessian and S. Malik (eds.), *Genealogies of Speculation. Materialism and Subjectivity since Structuralism*, (London and New York: Bloomsbury, 2016), pp. 93-114

—— (ed.), *Speculative Art Histories. Analysis at the Limits* (Edinburgh: Edinburgh University Press, 2017)

Verwoert, Jan, 'Show Me What You Got', *Frieze*, no. 159 (Nov. 2013), <https://www.frieze.com/article/show-me-what-you%E2%80%99ve-got> [accessed 15 October 2021]

Virilio, Paul, 'Une ville surexposée', *Change International*, no. 1 (December 1983), pp. 19–22; 'The Overexposed City', in *Zone 1–2*, trans. by A. Hustvedt (New York: Urzone, 1986), pp. 540–550

Vogel, Felix, 'Notes on exhibition history in curatorial discourse', in *On Curating*, issue 21 - *(New) Institution(alism)*, Dec. 2013, pp. 46-54

——, 'Resistance to Theory. The Ideology of "The Curatorial" and the History of Exhibitions', in *Revista de História da Arte* n.14, 2019: *The Exhibition: Histories, Practices and Politics*, pp. 64-77

Voorhies, James, *Beyond Objecthood. The Exhibition as Critical Form Since 1968* (Cambridge, MA: The MIT Press, 2017)

Walsh, Maria, 'I Object', *Art Monthly*, no. 371 (Nov. 2013), pp. 9-12

Whitehead, Alfred North, *Process and Reality: An Essay in Cosmology. Corrected Edition*, ed. by David Ray Griffin and Donald W. Sherburne (London / New York, NY: The Free Press, 1978; 1st ed. 1929)

Whiteley, Gillian, *Junk: Art and the Politics of Trash* (London: I. B. Tauris, 2011)

Wiener, Norbert, *Cybernetics: Or, Control and Communication in the Animal and the Machine* (Cambridge, MA: The MIT Press, 1965)

——, *The Human Use of Human Beings: Cybernetics and Society* (New York, NY: Da Capo, 1988)

Williams, Raymond, 'Dominant, Residual, and Emergent', in Marxism and Literature (Oxford: Oxford University Press, 1986), pp. 121-26

Wilson, Alexander, *Aesthesis and Perceptronium: On the Entanglement of Sensation, Cognition, and Matter* (Minneapolis, MN: University of Minnesota Press, 2019)

Wolfendale, Peter , 'The Ends of Beauty: On Sinead Murphy's The Art Kettle', *Pli: The Warwick Journal of Philosophy* no. 24, 2013, pp. 215-29

——, *Object-Oriented Philosophy. The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014)

——, 'The Reformatting of Homo Sapiens', in *Angelaki*, vol. 24, no. 1 (February 2019), pp. 55-66

Woodard, Ben, *On an Ungrounded Earth: Towards a New Geophilosophy* (New York, NY: punctum books, 2013)

Wunderlich, Antonia, *Der Philosoph im Museum: Die Ausstellung Les Immatériaux von Jean-François Lyotard* (Bielefeld: Transcript, 2008)

Žerovc, Beti, *When Attitudes Become the Norm. The Contemporary Curator and Institutional Art* (Ljubljana / Berlin: Igor Zabel Association for Culture and Theory / Archive Books, 2015)

Unattributed texts:

'dOCUMENTA (13) announces curatorial team and process', press release, 29 October 2010, dOCUMENTA (13) website, <http://d13.documenta.de/#/press/news-archive/press-single-view/?tx_ttnews%5Btt_news%5D=75&cHash=bc6b812c82b2c6c9da56c83a4f8d867d> [accessed 16 April 2013]

'Fundamental Physical Constants', NIST website, <https://www.nist.gov/pml/fundamental-physical-constants> [accessed 24 June 2020]

'Les Immatériaux. Lumière matière et matériau', *«leurs lumières»* website, <http://www.ednm.fr/leurslumieres/?page_id=608> [accessed 13 October 2021]

'Late at Tate: The Real Thing' Facebook event page, <https://www.facebook.com/events/969131083098361/> [accessed 26 Nov. 2018]

'Lomewki' entry, Wikipedia, <https://en.wikipedia.org/wiki/Lomekwi#Artifacts> (accessed 5 September 2020)

'The Power 100' 2013, no. 81, 'Quentin Meillassoux, Graham Harman, Ray Brassier & Iain Hamilton Grant / Speculative Realism' in *Art Review*, November 2013, p.164 and <https://artreview.com/power_100/quentin_meillassoux_graham_harman_ray_brassier_iain_hamilton_grant_speculative_realism/> [accessed 10 January 2018]

'The Power 100' 2014, no. 68, 'Quentin Meillassoux, Graham Harman, Ray Brassier & Iain Hamilton Grant', *Art Review*, November 2014, p.166 and <https://artreview.com/power_100/quentin_meillassoux_graham_harman_ray_brassier_iain_hamilton_grant/> [accessed 10 January 2018]

'The Power 100' 2016, no. 75, 'Graham Harman', *Art Review*, November 2016, p.157 and <https://artreview.com/power_100/graham_harman/> [accessed 10 January 2018]

'The Power 100' 2016, no. 43, 'Donna Haraway', in 'The Power 100', Art Review, November 2016, p.121 and <https://artreview.com/artist/donna-haraway/?year=2016> [accessed 15 October 2021]

'The Power 100' 2017, no. 9, 'Bruno Latour' in 'The Power 100', Art Review, November 2017, p. 109 and <https://artreview.com/power-100?year=2017&artist=Bruno%20Latour> [accessed 15 October 2021]

'The Power 100' 2017, no. 3, 'Donna Haraway', in 'The Power 100', Art Review, November 2017, p. 103 and <https://artreview.com/artist/donna-haraway/?year=2017> [accessed 15 October 2021]

'Speculations on Anonymous Materials', *e-flux.com*, published 13 September 2013, <https://www.e-flux.com/announcements/32203/speculations-on-anonymous-materials/> [accessed 4 February 2019]