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ABSTRACT

The ambiguities of abstraction were at the heart of critical approaches to the problems of modernity. Abstraction, so fundamental to the modernist episteme, was seen to have alienated humanity from itself and from its entangled relations with its environment, constituting a fundamental rift between the subject and the world. This article analyses how the critique of the modernist episteme has increasingly shifted under the auspices of the Anthropocene. Rather than seeking to overcome the ambiguities of abstraction and return the human to the world, approaches that seek to affirm the Anthropocene have emphasized that modernist thought did not take abstraction far enough. Rather than abstraction being problematic for contemporary thought, abstraction is seen to be a facet of the world in its lively, partial and contingent interaction. This article is organized in three sections. The first section introduces the problematic of abstraction in the Anthropocene, highlighting that critical theory approaches tend to see the Anthropocene within a discourse of modernist critique. The second section draws out the importance of understanding the distinct mode of contemporary affirmation, which rather than seeking to return man to the world, emphasizes the impossibility of finding meaning in the world. It is this inverting of critical understandings that enables abstraction to be seen positively rather than problematically. The final section expands on this point to consider how contemporary theoretical approaches articulate the transvaluation of abstraction as the guide to contemporary modes of life.

Introduction

As stated in the introduction to this special issue, abstraction is usually constructed negatively: as the erasure of difference and multiplicity in the reduction of the liveliness of the world to enable its governability. This article seeks to consider the contemporary recovery of abstraction as a positive power of differentiation rather than reduction to uniformity. This article thus focuses on the ambiguity of abstraction in relation to both the contemporary transvaluation of abstraction and the implications which this has for critique. Its particular analytical lens is an examination of the critical affirmation of the Anthropocene as a distinct counterpoint to the problematization of abstraction in critical, neo-Marxist or

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cultural critiques of modernity. Abstraction was understood as ambiguous in modernity, or as a *pharmakon* (Steigler 2018), as a necessary facet of modernist or Enlightenment thought, yet also problematic in its reductionism. However, this ambiguity is transformed in the Anthropocene. The ambiguity of abstraction comes to the fore in the fact that the contemporary critique of modernity is not built on the basis of the problematization of abstraction as potentially dehumanizing, separating man from nature, but its inversion: that abstraction might not yet be abstract or dehumanizing enough. Abstraction can thus play a vital role in the decentring of the human not merely in reflecting and reproducing a human-centred world of modernity.

There is thus a call for abstraction to be seen much more positively as a technique for decentring the human as a subject through its extension or intensification: through its 'ontologisation' as a facet of being itself, rather than merely product and producer of the modernist episteme. In modernity, abstraction was often problematized by critical theorists; seen as a product of a way of thinking which universalized the subject's perspective, separating it from the world, and thereby reducing complex life to representations amenable to imaginaries of regulation and control (for example, Deleuze and Guattari 2014, 433–434). For critical theory, modernist abstraction was a deviation or mistake that needed to be rectified, returning the human subject from its alienated separation from the natural world. Abstraction was thereby an error of thought, a problem of mistaking the conceptualization of the world for the world itself, often understood as a problem of philosophical 'decisionism' (Laruelle 2017) or of direct capitalist manipulation (Kolozova 2015). Very few theorists, critical of modernist thought, sought to rescue abstraction or to see abstraction as playing a role in decentring the human rather than placing the human at the centre of the world. One example was Alfred North Whitehead who forwarded an understanding of abstraction not as a particularly human attribute but rather as a facet of interactive becoming itself. While critiquing modernist abstraction – the conflation of thought of the world with the world itself – as a 'fallacy of misplaced concreteness' (1967, 58), he argued that abstraction was pre-epistemic and not a matter of thought's relation to the world (1985, 20).

Key to the contemporary transvaluation of abstraction is the alleged implication of the shift towards a new epoch of the Anthropocene. The Anthropocene – a concept coined by Eugene Stormer in the 1980s and popularized by Paul Crutzen in the 2000s (Crutzen and Stoermer 2000; Crutzen 2002; Crutzen and Steffen 2003) – is a disputed term, which refers to a new geological epoch, in which human activity is seen to have profound and irreparable effects on the environment. This attention to a new epoch in which humanity appears to have impacted the earth in ways which mean that natural processes can no longer be separated from historical, social, economic and political effects has powerfully challenged the modernist understanding of the nature/culture divide, separating social and natural science, destabilizing the assumptions of both. Nature can no longer be understood as operating on fixed or natural laws, while politics and culture can no longer be understood as operating in a separate sphere of autonomy and freedom (Chakrabarty 2009; Clark 2010; Hamilton, Bonneuil, and Gemenne 2015; Ghosh 2016).

The Anthropocene, in this respect, symbolizes more than the threat of global warming – rather global warming is seen as the harbinger of a new awareness of our more humble position in the world: the end of the reassuring assumptions of liberal modernity. To be more precise, it is held that modernity itself was never how we understood it to be. As

Bruno Latour has pointed out, modernity was a paradoxical condition, in that the more we developed an abstract imaginary of ourselves as subjects separated from the world, developing knowledge of how we could direct and control 'natural' processes, the more humanity grew entangled within these processes. Modernity itself was the midwife to processes that were no longer 'natural' nor amenable to external control or direction by human subjects seen to have all the powers of agency while the rest of the world – of nonhumans – was seen to be merely passive objects of our intentionality (Latour 1993; 2004a). As Timothy Morton argues, the awareness of human-induced climate change and of our dependence upon nonhuman agency has 'done what two and a half decades of postmodernism failed to do, remove humans from the centre of [our] conceptual world' (2013, 181).

The Anthropocene is thus seen to call forth new modes of knowing that are less human-centred or anthropocentric. It is important to realize that these modes challenge the epistemological and ontological framings of modernity, but often from a position which seeks to extend the power of abstraction, rather than romanticize a pre-modern past. For authors, like Latour and Morton, it is held to be the advances of science itself, which have revealed the world to be much more entangled and complex than modernity imagined. Science has itself called a halt to modernity in its recognition of the Anthropocene condition. In this respect, according to Morton, it is 'precisely through our advanced technology and measuring instruments' (2013, 36) that global climate change can now be seen as a 'saving power' or a candidate for Heidegger's 'last god', enabling humanity to come back to the world after realizing the terrible errors of modernist assumptions (2013, 21). However, this return to the world deprives us of our human-centred understandings. For Ray Brassier it is science itself that has 'uncovered the objective void of being' (2007, 25). For Morton: ' … our cognitive powers become self-defeating. The more we know about radiation, global warming, and the other massive objects that show up on our radar, the more enmeshed in them we realize we are … Increasing science is not increasing demystification' (2013, 160–161).

The support for science is important as it highlights an important point regarding the ambiguities of abstraction. In contemporary approaches seeking to articulate the new sensitivities of the Anthropocene it is possible to read more than merely a criticial rejection of modernity. For an increasing number of affirmative theorists (see Alt 2019; Bargues-Pedreny 2019) this rejection transvalues the ambiguities of abstraction (see also McCormack 2012). Unlike earlier critiques of modernity (Bennett 2011), the affirmative political framings of the Anthropocene do not seek to return the human to the world, to 're-enchant' the world after modernity's passing. It is for this reason that abstraction – the separation of the human from the world, understood as an alienated condition of being in which the world cannot be a 'home' to us – is understood as positive rather than negative. Authors that affirm the Anthropocene (rather than seeing it as a problem to be solved) thus seek to take the power of abstraction further than modernist conceptions of abstraction (which posit man as the knowing subject at the centre of a universal or 'one world' world, Law 2011; De le Cadena and Blaser 2018; Haraway 1988). For modernist constructions of the 'good Anthropocene', science and technology can still operate on the basis of modernist approaches to abstraction, piloting 'spaceship Earth' via Earth system science and the management of planetary boundaries to a return to the stability of the Holocene (Rockstrom et al. 2009). This article thus focuses upon the ambiguity

of abstraction: as not only an epistemological grounding of modernist thought but also as an ontological gambit for decentring the human as subject.

For the theorists at the centre of this article, abstraction needs to go much further but is also transformed from a question of epistemology to one of ontology. Abstraction – or the impossibility of grasping reality without reductionism – is not a product merely of the Western episteme or the Enlightenment, but an ontological aspect of being itself: 'This reduction belongs to any relation between objects in the universe, no matter what they may be' (Harman 2010, 124). Rather than becoming 'at home' in the Anthropocene, the opposite movement is at play: the earth is understood to be more alien to us, more inaccessible and stranger than we could have imagined. Counterintuitively, it is this alienation from the world, the world as lacking in meaning for man (the world as a 'desert' in Arendtian terms, see Arendt 2005, 201–204), which provides the affirmation of the Anthropocene and distinguishes it from alternative critiques of the modernist paradigm. The Anthropocene is not merely the recognition of the importance of climate change or global warming; but neither is it merely a critique of modernity: it is affirmed as a new framework for understanding and acting in a world, which can never be considered a 'home'. Acting in a world in which abstraction is not an epistemological problem of modernist thought (to be overcome) but an ontological facet of being itself.

This article is organized in three sections. The next section introduces the problematic of abstraction in the Anthropocene, highlighting that traditional critical theory approaches tend to see the Anthropocene within a discourse of modernist critique. The second section draws out the importance of understanding the distinct mode of contemporary critique, which rather than seeking to return man to the world, emphasizes the impossibility of finding meaning in the world. It is this inverting of critical understandings that enables abstraction to be seen affirmatively rather than problematically. The third section expands on this point to consider how contemporary theoretical approaches articulate the transvaluation of abstraction as the guide to contemporary modes of life.

Abstraction and the Anthropocene

For the modernist world, especially for the Marxist Left, there was always the possibility a 'happy ending', through the development and extension of the productive forces, with the removal of capitalist forms of exploitation and oppression, instituting an alternative future based on reason and technological development (Pachter 1974). This level of confidence in the promise of modernist progress increasingly dwindled throughout the twentieth century, with the experience of fascism, the purges of Stalin's Russia, world war, the Holocaust and the atomic bombings of Hiroshima and Nagasaki. This critical disillusionment was expressed well in the critical theory of the neo-Marxist Frankfurt School, whose approach was much more pessimistic than the Marxism of the late nineteenth and early twentieth century, shifting focus to (psycho)analytical problems of the instrumentalization of knowledge and social construction of meaning (e.g. Jeffries 2016).

The new epoch of the Anthropocene can be seen as a continuation of a trend towards a more pessimistic view of the possibility of progress on behalf of radical or critical theorists and commentators (e.g. Wark 2015; Bonneuil and Fressoz 2016; Chakrabarty 2009; Ghosh 2016). To the point where, today, it is no longer necessary for critical approaches to promise even the possibility of an alternative 'happy ending' (Tsing 2015). This radical

malaise is captured well in Fredric Jameson's often cited observation 'that the end of the world is more easily imaginable than the end of capitalism' (Jameson 2003, 73). Thus to analyse the transvaluation of abstraction and the affirmative political assumptions of the Anthropocene it is necessary to understand how this observation could have been turned from a negative into a positive. As far as there is a shift from a critical focus on capitalism as a specific system of social relations to the problem of reflection upon human forms of social existence more generally, the affirmation of the Anthropocene seems both to build on and, importantly, to differ from the critical theory tradition of the Frankfurt School.

To illustrate the distinctive nature of contemporary approaches to abstraction, they could be contrasted to one of the more traditionally framed 'critical' approaches to the Anthropocene: that of Bonneuil and Fressoz's *Shock of the Anthropocene* (2016), in which they argue precisely that the problem is that of modernist reductive thinking, driven by the power of abstraction. Thus, they argue that the development of abstract rationalist approaches to problem-solve climate change should be politically opposed: the problematic of the Anthropocene should not be captured by the scientific and technical expertise of eco-modernisers with their conceptions of 'spaceship earth' or 'interplanetary boundaries'. The Anthropocene is understood to be a product of centuries of conscious political choices; rather than an accidental or unknowable effect: it has been brought about by specific regimes of power. Bonneuil and Fressoz seek to draw those with Left sensibilities into an appreciation of the need to develop an ecological awareness and to resist the 'technological totalitarianism' of both the Left and the Right (2016, 280). They particularly emphasize the importance of the legacy of the Frankfurt School, who first popularized a Left-leaning and critical understanding that the problem was not capitalism per se but rather the modernist episteme of abstraction itself, in its development of technological and instrumentalist reason at the expense of relational and communal sensitivities (2016, 281). While critical of modernity, Bonneuil and Fressoz seek to follow the critical theorists of the Frankfurt School in overcoming abstraction and returning man to a human-centred world of meaning and progress.

This is a point of fundamental importance as it would appear that, to take a 'Left' approach of critique, the Anthropocene has to be seen as a problem for modernity – one that can be addressed by rejecting abstraction and Enlightenment rationalism and returning the human to the world. The critical contemporary theorists who affirm the Anthropocene, may share some of Bonneuil and Fressoz's distain for modernity and their more psychotherapeutic and cultural critique of hegemonic ideas, but they take a fundamentally different stance towards abstraction. Rather than mourning man's separation from the world, theorists who affirm the Anthropocene, working with speculative frameworks of thought and object-oriented ontologies (Brassier 2007; Mitchell 2017; Fagan 2017; Morton 2013) and critical feminist approaches (Stengers 2015; Haraway 2016; Povinelli 2016a; Tsing 2015; Grosz 2011) celebrate this separation and wish to take this as their ontological starting point. The modernist episteme is critiqued from the opposite aspect today, that it is too humanist or human-centred, not that it is alienating and dehumanizing. It is for this reason that they do not demand for the human to be returned to a world of meaning, allegedly denied it by modernist rationalism, abstraction and instrumentality, but rather for the human to be expunged further.

The work of Bonneuil and Fressoz is important as an example to highlight that while the critique of the modern episteme is a necessary precondition for the affirmation of the

Anthropocene, it is not in itself sufficient. In fact, the implication of the analysis developed here is that contemporary theorists have turned the assumptions of critical theory inside out or transvalued both abstraction and critique. It is not the problematic or dehumanizing nature of the modernist episteme which is central to the contemporary approaches to the Anthropocene. If this were the case, then critical theory and its post-Marxist inheritors would still provide a dominant approach, casting the ambiguities of abstraction in negative terms.

Frankfurt School redux?

Perhaps the classic critical work on the ambiguities of abstraction in modernity is the 1947 book that established the reputation of critical theory and the Frankfurt School, Theodor Adorno and Max Horkheimer's *Dialectic of Enlightenment* (1997). For them, modernist thinking was dehumanizing: the Enlightenment was problematic in denaturalizing the world and the human, and through the development of abstract thinking, reducing, universalizing, and equalizing the experience of the world. For critical theory, the Enlightenment was problematic and oppressive rather than liberating. The Enlightenment view of reason contained its own seeds of destruction. Enlightenment was seen as a history of the separation of humanity from nature through the power of abstraction – based on the subsumption of difference to the rule of equivalences, casting the Enlightenment as a totalitarian project with no inherent limits (1997, 6): 'Bourgeois society is ruled by equivalence. It makes the dissimilar comparable by reducing it to abstract quantities' (1997, 7). For Adorno and Horkheimer:

> What was different is equalized. That is the verdict which critically determines the limits of possible experience. The identity of everything with everything else is paid for in that nothing may at the same time be identical with itself. Enlightenment … excises the incommensurable … [u]nder the levelling domination of abstraction. (1997, 12–13)

Rather than a process of progress and reason, the Enlightenment was seen as a machinic, deadening reduction of the world and of the human individual. For Adorno and Horkheimer, this was a world with no possibility of an outside as everything was subsumed into equivalence through conceptual abstraction (1997, 16). In other words, this meant that nothing new could ever occur as 'the process is always decided from the start'; even unknown values could still be put into equations, dissolving the world into mathematics. Everything new was thus already predetermined, producing a world of 'knowledge without hope' (1997, 27–28).

Thus the history of Western civilization was the attempt to bring the outside under control through the extension of equivalence under the power of abstraction: Mauss's gift economy and pre-modern magic and sacrifice being early versions of the exchange of non-equivalents (Mauss 2002). The performative exchange of non-equivalents then led to the reflection of equivalence in thought – conceptual subsumption – through the ratio, i.e. the proportion of conceptual equivalence. Under capitalism this process was formalized further, in both practice and in thought, through money as the universal equivalent of exchange and through the abstractions of democracy and universal rights and the development of science and the digital (see also Sohn-Rethel 1978). The modernist project was thus one of the extension of the imaginary of control, the dangers of

abstraction evident with the development of subject/object and human/nature binaries. Critical theory and its inheritors thereby sought to challenge the dominance of this modernist imaginary, questioning hierarchies of reason and progress and contesting the validity of abstract thought, through which equivalences and subsumptions of difference were established.

Bonneuil and Fressoz take up the Left approach of critiquing modernist/ Enlightenment thought from within the critical theory tradition, seeing modernity as the failure to appreciate humanity as part of a material, natural world and seek to heal the 'metabolic rift' (Wark 2015) caused by the extraction of 'cheap nature' (Moore 2015), restoring a more holistic framework for politics. For these more traditional 'Left' critical thinkers it is the political struggle against the abstractions of modernist thought, which is the emancipatory aspect of the Anthropocene. The critical approach, which reduces the separation of man from the world to epistemological problems of perception and projection, seeks to resolve the problem of abstraction through bringing man back to the world, through its emphasis on lived experience, the body, affect, ethical entanglements etc. In the words of Rosi Braidotti, developing a posthumanism that can 'actualize the virtual possibilities of an expanded, relational self that functions in a nature-culture continuum', expressing an 'affirmative, ethical dimension of becoming-posthuman' as a community bound 'by the compassionate acknowledgement of their interdependence with multiple others' (2017, 34, 39).

Perhaps, in his more recent work, Bruno Latour could be seen to symbolize the last gasp of the critical attempt to return man to a world of meaning, with his conception of the earth in terms of the complex adaptive system of Gaia, where there is nothing 'natural' about the interactive agencies of the planet, which together produced life (2013, 62–63). For Latour, like Bonneuil and Fressoz, the problem is the divide between culture and nature: a product of modernist human invention (2013, 67). Like other critical theorists, and despite his claim that 'critique has run out of steam' (Latour 2004b), Latour seeks to heal the rift that abstract thought of modernity is held to have opened and restore the 'Earthbound' to their true home (2013).

The contemporary affirmation of the Anthropocene, on the other hand, presupposes the transvaluation of abstraction and thereby should not be confused with neo-Marxist and cultural critiques of classical Enlightenment or modernist thought. Something else is at stake. In order to illustrate this and to draw out the underlying sentiments behind the transvaluation of abstraction it is useful to highlight the role played by the imagination of the end of the world 'for us': the assumption that there can be 'no happy ending' (Tsing 2015; Brassier 2007). To my mind, this provides a clear intimation of the desire to free social and political thought from any human-centred instrumentalism. As long as climate change is viewed as a problem to be mitigated, adapted, managed, controlled or 'solved' in some way, then contemporary theorists argue that the Anthropocene is not properly understood or affirmed (Wakefield 2018; Nelson and Braun 2017; Fagan 2017).

Affirming abstraction: after critique

It is important to emphasize that critical theory and its inheritors highlight the critique of abstraction (at the heart of the modernist episteme) in order to have a happy ending – in order to save humanity and the planet rather than to affirm the Anthropocene (e.g. Burke

et al. 2016). The new relational, embodied and entangled subject of late modernity, is thus increasingly seen as an extension of the modernist will to govern and problem-solve on the basis of intervening, adapting and being resilient in the face of non-linear or complex life, which is seen to set new norms for governance and problem-solving (Colebrook 2014; Fagan 2017; Mitchell 2017). Thus critical theory is seen to be problematic, criticizing modernist abstraction from the wrong perspective and remaining within a modernist ontology of a 'one world' world, reproducing a human-centred framing. While critical theorists problematize modernity as a barrier to reasoning, more affirmative approaches to the Anthropocene argue that we need to establish a way of being in a world that is without meaning 'for us', where what is important is the lack of stable relation and the lack of intentionality. Claire Colebrook would appear to hit the nail on the head:

> Humanism posits an elevated or exceptional 'man' to grant sense to existence, then when 'man' is negated or removed what is left is the human all too human tendency to see the world as one giant anthropomorphic self- organizing living body … When man is destroyed to yield a posthuman world it is the same world minus humans, a world of meaning, sociality and readability yet without any sense of the disjunction, gap or limits of the human. (2014, 163–164)

For Colebrook, these approaches offer a narrative of redemption: after the detour of modernity, man is returned to the world. In which case, the rejection of the foundational assumptions of modernity would enable man to find other modes of reasoning in the world. Colebrook asserts powerfully that:

> The problem with humanism, so it seems, is that it is deemed to be rather inhuman. The Cartesian subject of calculative reason, along with computational theories of mind or representation, including both older humanisms of man as supreme moral animal and posthumanisms envisioning a disembodied world of absolute mastery, cannot cope with the complexity and dynamism of affective life. (2014, 173)

The response to the Anthropocene would, for critical theory, be to learn our lesson and to have a 'second chance' on the basis of overcoming modernity's detachment from entangled and affective life. 'All our talk of mitigation and stability maintains a notion of stabilized nature, a nature that is ideally there for us and cyclically compatible with production' (Colebrook 2017, 18). The affirmation of the Anthropocene is, in this respect, the inverse of critical theory. For affirmative approaches to the Anthropocene, there is no imaginary of second chances or of a return to a stable equilibrium, but a world which no longer privileges the human subject through the inversion or transvaluation of the Frankfurt School's problematization of abstraction. Rather, we must 'stay with the trouble' (Haraway 2016) of our alienated condition, affirming the opportunities for community-building and kin-making across species boundaries but knowing that our speculative experimentation of 'attuning to' and 'becoming with' others is the only way of collectively becoming 'humankind' (Morton 2017).

The Frankfurt School was caught in the trap of modernist thinking, in that they looked for reason in the world rather than looking to the world to critique the possibility of reason. Thus the framing of the affirmation of the Anthropocene as a fulfilment of the aspirations of critical theory would fail to capture the transvaluation of thought which is increasingly at the centre of radical 'post-critical' approaches to the Anthropocene and (as all critical thought must) falls into the trap, increasingly highlighted by alternative

radical approaches, of repeating a subject-centred attempt to 'restore' humanity to a world of meaning. Thus the speculative focus on the world 'without us' (Weisman 2008) in order to imagine, as Mitchell argues, 'the political possibilities of becoming [that] are precluded by the imperative to survive "as we are" at all costs', enabling 'new modes of ethico-political action and forms of life' (2017, 18).

The affirmation of the Anthropocene is an inversion of this focus upon finding reason or meaning in the world, instead of seeking to push or enlarge the rift between the human and the world. Isabelle Stengers, for example, in her framing of the Anthropocene as the 'intrusion of Gaia', argues that: 'Struggling against Gaia makes no sense: it is a matter of learning to compose with her' (2015, 53). For Stengers, the modernist discourse of 'progress' and of the possibility of a 'happy ending' is over, which means that if 'emancipation' is to mean anything today it will be a question of our emancipation from modernist illusions of human exceptionalism. Key to this is paying attention to the reality of the world rather than human imaginaries of understanding and control: 'What it is a matter of being wary of are the simplifications that would still ratify a story of progress, including the one that enables us to see the truth of what we are facing' (2015, 67).

Theorists who affirm the Anthropocene state that science itself has now proven that the world is no longer seen to be there for our benefit, to enable humanity to 'progress' in line with the imaginary of the liberal telos. To put this in another way – science reveals that the world does not care about us, that it is not there for us, to provide us with meaning. In which case, the problem no longer lies in the abstraction of modernist thought; on the contrary, modernist thought does not go far enough in distancing the human from 'the world'. The world is not a set of scientific and political puzzles set for us to solve; it is no longer 'all about us' – i.e. about what cultures, beliefs, politics, institutions, policies, education systems etc. are better to access the world of reason and progress.

Without a world that is there for our benefit, problems can no longer be understood as epistemological: problems of the social, cultural, economic or political barriers to our knowing and understanding. The flip side of this is that the modernist or Enlightenment drive to separate the subject from the object of knowledge is revealed to be an error or mistake only in so far as it has not been pushed far enough. There is not enough abstraction: while it is correct to see subjects as separated from the world, this is not because there is no such thing as a subject, agency is widely distributed across all forms of being. It is precisely this distribution of agency which means that there is no such thing as a 'world' existing externally to us as a coherent framework of meaning, which can just be accessed through freeing us from our modernist assumptions. There is no world 'for us', no 'us' as collective subject and no world as object for us, and therefore no possibility of a happy ending. As Ray Brassier puts it: 'Science subtracts nature from experience, the better to uncover the objective void of being' (2007, 25). The only thing certain is the 'necessity' of contingency itself (Meillassoux 2008).

Conclusion

For neo- and post-Marxist critical theory, the Enlightenment or modernist episteme was problematic because through the power of abstract thinking, it alienated man from himself and from the world, opening up a separation between nature and culture, which narrowed and reduced the world (including the vast majority of humanity) to passive objects for

instrumental manipulation. The modernist regime was problematic because its hierarchies of power and knowledge rationalized and reproduced this desire for regulation and control, abstracting from complexity and difference and thereby excluding and oppressing whatever could not be compliantly included. Both man and nature were excluded from realizing their potential and suborned to the rule of technocratic rationality. This critical perspective, of 'rehumanising' critique, problematized the modernist assumptions of the abstract autonomous human subject and of the world as object, external to it.

The affirmative post-critical politics of the Anthropocene seeks to remove the ambiguities of abstraction through moving in the opposite direction: intensifying and putting to productive use the power of abstraction. For post-critical theorists, any imaginary of the return of the human (without the abstractions of the modernist episteme) to the world of entangled interaction seems to be surprisingly like the modernist world, and the 'de-centring of the subject' seems to make little difference. As Elizabeth Povinelli notes, these framings can be seen as extending the sphere of being at home in the world, enabling 'late liberal governmentality' to 'saturate Being with familiar and reassuring qualities' (2016a, 56). Povinelli cautions against the imaginary of removing abstraction, precisely because it makes the world more meaningful rather than stranger for us (2016a, 142). In seeking to 'hear' what the melting icebergs or extreme weather events etc. are 'saying' to us, we return humans to the centre of a world, as if it was made with us in mind (for example, Burke et al. 2016, and, for a critique, Chandler, Cudworth, and Hobden 2018).

Povinelli argues that entangled life or events of the world do not speak to us or act on our behalf to point the way to knowledge and understanding, because abstraction is an ontological facet of the world, not merely a product of the modernist mind: 'And objects do not stay one thing but become other things because of these forces of shaping and shifting and assemblage' (2016b, 119). In attempting to find meaning in the world, critical theorists commit the same anthropocentric error of modernity, reducing the complexity of the world to networked relations accessible to us. It is argued that non-rationalist or non-representational approaches, such as actor-network theory, vitalist materialism and posthumanism – tend to work on the basis of a new set of binaries of what 'man is not', enabling man to then enrol these entities into ever more complete and real time understandings (Colebrook 2014, 161–162).

In contrast, theorists who affirm abstraction ontologically do not seek to argue that 'everything is related' and handily available for use in alternative or 'posthuman' forms of regulatory climate-friendly governance for the Anthropocene. The work has not already been magically undertaken for us by Gaia or some other complex self-adaptive system of self-organization, working external to human consciousness. As noted by Donna Haraway above, there is no choice then but to 'stay with the trouble' (2016). Relational entanglements and interconnections are not a ready-made or 'natural' solution: they do not provide new forms of problem-solving or an additional prop for acquiring new ways of knowing. Viewed from this perspective, critical theory approaches are not problematic because they emphasize relations and interactions rather than rationalism, but the opposite, that they are seen as not taking abstraction and contingency far enough.

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