CHAPTER 6

Seeing Like a Cyborg? The Innocence of Posthuman Knowledge

Paul Rekret

1. Introduction

Posing a connection between philosophy and biography is an exercise fraught with predicaments, not least of which is the determinist connection one risks between life and thought.¹ Keeping this proviso in mind, if we can nevertheless assume that ontological statements are somehow associated with the subject positions of their authors, then it bears insisting that assessments of theoretical paradigms not forego analysis of authors' motivations. Appraisals of theory ought not shrink from examining the desires a theory expresses, the cognitive or analytical needs it aims to fulfil, and the reasons it might pursue certain lines of inquiry and not others. Where theory seeks to formulate judgements about its own present, such questions are especially instructive since the political stakes are all the more immediate. It is with this in mind that I'd like to examine what counts among the more prominent delineations of the current epoch: those accounts of the 'posthuman' which look primarily to contemporary technological developments as the basis for articulations of a fundamental

How to cite this book chapter:

Rekret, P. 2019. Seeing Like a Cyborg? The Innocence of Posthuman Knowledge. In: Chandler, D. and Fuchs, C. (eds.) Digital Objects, Digital Subjects: Interdisciplinary Perspectives on Capitalism, Labour and Politics in the Age of Big Data. Pp. 81–94. London: University of Westminster Press. DOI: https://doi.org/10.16997/book29.f License: CC-BY-NC-ND 4.0

transformation of existential experience.² My choice of focus is motivated by a belief that such theories tend to neglect the entrenched global divisions in access to the rewards, and exposure to the perils, that recent technological advancements imply, along with the continuity of historical structures of inequality this entails. In this context I propose recalling the peculiar conditions from which our conceptions of digital experience are forged, namely contemporary regimes of private property. Not only might this prove valuable for reflection upon the historical horizons of our social theories, but it might also help us to understand the impulses that animate them.

2. Eroding Boundaries

Remaining with the question of history, it is noteworthy that the assembly of theories at issue here cohere around a periodising move. This is a diagnosis of contemporary transformations in subjective experience formulated in terms of the obsolescence of a bounded anthropocentrism that is seen as the hallmark of modern and postmodern philosophising. On this view, ecological crisis is taken to intensify the sense that human existence is entangled with a complex infrastructure, a growing ability to manipulate biological processes at molecular level is taken to challenge distinctions between nature and artifice, while advances in digital knowledge production enable the automation of a growing breadth of cognitive processes. Together these processes are read as evidence against the notion that thought is a discrete property of the human. While transformations at the level of the ecological, biological and digital are seemingly disparate, they are afforded a certain coherence insofar as they coalesce around a figure of 'hybridity', signalling technological mutations of the human species that erode the symbolic binaries constitutive of modern thought. As divisions between the natural and the cultural, the mind and the body, and the human and the technological all grow increasingly difficult to maintain, so too, it follows, do the anthropocentric terms by which social theory tends to operate. The new state of hybridity, the argument goes, has disrupted the modern ideal of an abstract, rational subject, autonomous over and against the world.

Putting the figure of hybridity momentarily aside, it is worth noting that on a theoretical level posthumanism consolidates around what it sees as the exhaustion and inability to respond to the new state of hybridity by an earlier 'linguistic turn' associated with Martin Heidegger, Ludwig Wittgenstein, and more recently, Jacques Derrida and Michel Foucault, amongst others.³ Needless to say, the poststructuralist critique of the subject holds an important place in theories of the posthuman, but its emphasis upon language or discourse is nevertheless regarded as inadequate for reflecting upon the digital mediations by which thinking is increasingly conditioned. In this regard the posthumanist's line of reasoning is relatively straightforward. The poststructuralist critique of modern philosophy can be characterised by its critique of the epistemic violence wrought upon the world by a subject endowed with the capacity for rational thought who excludes all those 'others' he poses as incapable of autonomous reasoning: women, the mad, the subaltern, animals, and so on.⁴ This is an ethical position that, to one degree or another, posthumanist theorists also tend to adopt. Yet they also seek to extend it hyperbolically so that the difference between these standpoints grows rather stark. The postructuralist gesture is centred on undermining the authority and self-certainty of the subject by dispersing it to the unstable media of his knowledge - whether conceived as discourse, différance, or power/knowledge - which precede him and which he can never master. Pivotal to the posthumanist argument, however, is the claim that even this dispersal remains all too anthropocentric a set of claims insofar as it is centred upon the way social constructions condition and mediate subjectivity. Even if poststructuralists posit thought as finite and seek to undermine the mind's mastery over the world, the argument goes, they continue to posit the centrality and ontological autonomy of the human as the medium of thought. This further entails giving methodological and political priority to human actors, a consequence which exhibits the persistence of modern thought's anthropocentric hierarchy.

3. The Claim to Hybridity

In what counts as something of an *ur*-text for such assertions, Donna Haraway's 'A Cyborg Manifesto' (1991) looks to technological developments in synthetic biology, bio-informatics, and cybernetics to articulate the 'cyborg' as reflective of an increasingly prevalent hybrid of machine and organism. Haraway's point is that, as the human body is increasingly structured by its connections with cybernetics or with biotechnology, the boundaries definitive of the human are increasingly dislocated. Hybridity thus triumphs as modern dualisms erode. Or, as she writes, '[h]umans are always congeries of things. We are not self-identical' (Haraway 1991, 181). It would not be overstating Haraway's influence to say that the arguments made in 'A Cyborg Manifesto' have been paradigm forming. Indeed, their impact is rivalled only by a book published two years later by the French anthropologist Bruno Latour. While We Have Never Been Modern generated parallel, if at times distinct, lines of inquiry, Latour (1993, 2) nevertheless echoes Haraway's central argument when he declares the post-Cold War era to be defined by the 'proliferation of hybrids'. In a further resonance, Latour's opening illustration of such hybridity, the freezing of human embryos, is also drawn from biotechnology. The cryopreserved organism can, for both thinkers, stand in for a broader process whereby hybridity undermines the modern critical projection of clear and distinct ontological zones of what counts as human and what does not.

Despite the undeniably heterogeneous and complex research programmes that Haraway and Latour developed from these basic insights, our concern here is with the widespread adoption of the claim that we inhabit an age of hybridity. The view that the subject has been eroded in the current epoch is an ontological contention that increasingly shapes an expansive theoretical paradigm and is, moreover, often taken as self-evident. But it is worth remarking that this is an odd claim - at least where it implies a relation between ontology and history for it insinuates that, in general, while existence itself is defined by hybridity, this only becomes self-evident in an epoch where technological change makes its manifestation undeniable. To twist a well-known phrase, history here becomes the midwife of ontology, where the hybrid entities that emerge from bioand enhancement technologies bear the weight of actualising the ontological assertion that the human never was an integral, autonomous being exercising control over itself or its surroundings in the first place. Yet such a claim so often denotes a move that seeks to rescue technological advancements - which are often the product of destructive capitalist compulsions, if not explicitly militarist impulses - for progressive theoretical ends. It follows that it falls upon the theorist's ontological speculations to salvage and reimagine the technological for emancipatory purposes, a task which can only be accomplished where the deeper truths about existence which these processes harbour can be discerned. It is in this way that the posthumanist can be said to collapse ontological speculation into ethico-political argument, since it is the affirmation of hybridity and concordant critique of anthropocentrism that acts as the starting point for ethical and political thought in this context (Rekret 2016). Besides producing a peculiar oscillation between history and ontology, the critique of anthropocentrism can sometimes effect a sort of theoretical narcissism which places the theorist at the endpoint of an eschatology wherein the true nature of existence is only discernible from the historical instant at which they find themselves.

4. The Head and the Hand

At this point, it is necessary to take a step back to examine the parameters of this figure of hybridity. Putting aside ontological assessments, it is significant that while posthumanist theory's diagnosis of the present is founded upon meticulous consideration of recent social and technological transformations, this tends to come at the expense of an assessment of longer continuities. This is to say that much of what counts as posthumanist theorising tends to forego a thorough accounting of the material conditions for the emergence of the symbolic dualisms (nature/culture, mental/material, mind/body, human/technological) of modernity in the first place.⁵ This lacuna invites a survey of the attempts that have been made to provide just such an account. Taking our cue from a critical theoretical tradition concerned with the ways that the emergence of capitalism has mediated our cognitive categories allows us to situate the dualisms in question as inseparable from processes of dispossession and enclosure.

One of the more emphatic versions of such a claim originates in Alfred Schmidt's (1971) proposal that the dualist conception of man and nature be viewed through the prism of the history of a real interaction. Schmidt here reflects a broader field of scholarship that sees the early generalisation of wage labour as conditioning a perception of 'nature' as an object of conscious and planned human interventions. Once labour is separated from its means so that its relation to production is mediated by the wage, any abstract unity between humanity and nature is severed. This entails that capital ultimately reverses the hierarchy between man and nature so that the latter is no longer conceived as an object prevailing over a subject.

Schmidt's fecund insight into the historical conditions for a 'thought' that takes itself as acting autonomous upon the world can inform our analysis further if we bring it to bear on the history of philosophy more directly. In this context, in her history of the gendered and racialised nature of processes of primitive accumulation, Silvia Federici (2004, 138–40) reads Descartes' institution of an ontological division between purely mental and purely physical domains as inseparable from a mechanical view of the body suitable to the ongoing suppression of pre-capitalist forms of community. A reason that posed the body as an 'intelligible' object, as Federici (2004) has it, could subordinate it to uniform and predictable forms of action, that is, to capital's discipline over labour. Moreover, this separation of the mental and the sensuous went hand in hand with a separation of women from the knowledge of reproduction and their consequent constitution as natural reproducers of labour (Federici 2004; Mies 1998; Merchant 1983).

This reading of the relationship of Cartesian thought to the violent history of the origins of capitalism is not far removed from a line of thought in Michel Foucault's (2013, 45–73) *History of Madness*. It is well known that in that book Foucault relates Descartes' *a priori* exclusion of madness from the process of reasonable thought to the seventeenth-century confinement of the home-less and unemployed in asylums as a means of regulating unemployment. At the very least, not unlike Federici, Foucault understands thought's becoming autonomous – and so the foundations of the modern subject – through the lens of anti-capitalist struggle.

A not dissimilar intuition is also apparent in Alfred Sohn-Rethel's (1978) critique of modern epistemology. Putting aside his main lines of argument around the material sources of cognitive abstraction, in Sohn-Rethel's reading of Descartes the latter's positing of the world-in-itself as *res extensa* is tied directly to the limitations and frictions of capitalist control over artisanal production.⁶ Here the modern philosophical project of grounding thought as autonomous from the world is related to the bourgeois need for a mental labour autonomous from material labour. That is, the separation of the head and the hand is viewed as crucial to capital's ultimate control over artisanry through automation insofar as the latter is grounded upon a form of knowledge whose sources are not sensuous (Sohn-Rethel 1978, 113, 122, 141).

How can these accounts of the history of the mental and sensual dimensions of experience inform our understanding of contemporary concepts of hybridity? At a minimum, they suggest that the conditions for what Latour calls the 'modern constitution' are inseparable from processes associated with capital accumulation. This further implies that any argument for the suspension of the boundary between them must confront the ways by which capital mediates thought. In the balance is a question of whether thought seeks to avow the objective constraints upon it, and whether or not it owns up to the dimensions of historical experience that condition it. Admittedly, this may initially appear a dubious claim, inasmuch as the variety of posthumanist scholarship of interest here is explicitly a politically progressive enterprise centred upon a critique of patriarchy, racial hierarchy, capitalism, and especially the pursuit of profits and war, to which technological innovation tends to be directed.7 But the resignation from an assessment of capital's role in the history of the mediation of our relation to the world not only puts into question contemporary historico-ontological assessments regarding the state of hybridity, it also poses still further questions. For if capital's mediations are patently not only still present, but more intensive and expansive than ever, then it bears interrogating whether the divisions and separations to which capital compels existence might not in fact be fully reflected in the notion of hybridity.

5. Ontological Surgery

It is undeniable that technological developments, whether frozen embryos, the coding of DNA, or the manipulation of biological processes at the level of molecular fragments, erode or undermine boundaries between what is natural and what is artificial. In this sense, the posthumanist's historical narrative grasps an increasingly prevalent aspect of contemporary experience. But it does so at an ontological level that may not offer a picture faithful to the full breadth of contemporary experience. To follow a line of argument proposed by Marilyn Strathern (2005), when examined at another level of practice, namely the epistemology that dominates contemporary regimes of intellectual property - constituting as this does the grounds of much of our knowledge of the world - the boundaries or dualisms in question here are not only seen not to have been breached, but the boundary between them grows ever wider. Strathern's point is that, insofar as contemporary bio-technological and technological development is governed by an expansive process of the enclosure of knowledge, it is premised upon a conceptual relation to the world conceived as a collection of 'natural' phenomena standing apart from an autonomous will that modifies it in order to produce 'inventions'.8

Not unlike claims outlined by theorists of posthumanism, and Haraway (1991) especially, Strathern diagnoses a 'natural' world that is increasingly understood and related to as information or code. But whereas the posthumanist

takes this as evidence of an erosion of the boundary of the natural and technological, from Strathern's perspective it entails the opposite. For not only are 'natural' sources of information transformed into products that come to be governed by intellectual property laws, but these in turn enable the 'discovery' of further potential sources of information, and accordingly, facilitate renewed conceptions of natural processes awaiting transformation and commodification by the labour of the human mind. What is considered 'nature' thus not only grows in scope, but the more it does so, the more extensively is it consumed by an intellectual property regime which makes scientific insights the objects of privatisation (Strathern 2005, 102). This is the case even where agreements such as the 1992 Convention on Biological Diversity seek to protect indigenous practices from patenting by recognising that knowledge may be embedded in practice. Such well-intentioned safeguards do not represent a challenge to contemporary processes of capital accumulation, but instead merely entail, Strathern writes elsewhere, intellectual property's inclusion or 'hybrid embrace' of pre-modern (or alter-modern) practices as further forms of exclusive resources (Strathern 1999, 184).9 It turns out that even sensuous forms of knowledge can be abstracted as objects in the current paradigm. Or, to put it starkly, everything is a commodity or else commodifiable, and this is a stance grounded upon a view of nature as an abstract object manipulated and transformed by autonomous subjects.

Its worth repeating that theorists of posthumanism are not naive to the role that private property plays in knowledge production, nor are they blind to the role that capital plays in the production of the contemporary hybridities they observe.¹⁰ Capitalism is often explicitly considered inseparable from new understandings of life or humanity. However, returning to Strathern's argument, this belies a view of processes associated with capitalism through the lens of ontological speculation. That is, capitalism is said to produce new fields of 'difference', new 'complexity', or non-human or de-individualising abstract conceptions of life (Haraway 1997, 57; Braidotti 2013, 60).¹¹ These sorts of formulations, whereby capital is viewed as reflecting a deeper ontological state of hybridity, overlook what legal theorist Sheila Jasanoff (2012) calls, echoing Strathern, the 'ontological surgery' that intellectual property operates upon the world, and that moreover, is conditional of the boundary erosions in question. This omission refracts our earlier claims about the history of capitalism insofar as the posthumanist neglect of the *a priori* epistemic distinction between nature and artifice is reflected in these theories' bounded view of the subject's relation to the contemporary world.

These claims are partly echoed by other, longstanding criticisms which view valorisations of 'cyborg', hybridity, or posthuman, as disavowing global divisions of labour. The argument here is that bodies hinged to assembly lines, farm tools or brooms have long functioned as machines in exchange for a wage, as indentured labour, or as chattel slaves (Wilkie 2011; Fernandez & Malik 2002). To point this out not only puts in question the posthumanist

periodisation for an epoch of hybridity, but also the sorts of ethics that it tends to occasion. For one thing, it implies that the human relation to the machine has a more complex history than recent attempts to valorise or criticise technological change tend to allow. For another, it suggests that posthumanism offers a politics that speaks to the experience of the consumers of digital and biotechnological advances but not necessarily to its producers. Where consuming subjects might have the meaning and boundaries of their agency troubled by technological change, this refers to a form of autonomy that has never been the property of most of the world's people in the first place. The latter claim is put into stark relief when we consider, as Jessop (2007) shows, that 97% of the world's patents and 80% of R&D funding are located in OECD countries. In this light, contemporary technoscience amounts to the reorganisation of the separation of an autonomous mind exercising authority over a world conceived as separate and natural. Such a division of labour implies the pervasiveness of the modern dualism of mind and world, albeit reorganised by contemporary technoscience upon a global, neo-colonial scale.

6. The Innocence of Knowledge

The insights garnered from Schmidt, Federici, Sohn-Rethel and others imply that when we understand the division of the mental and material or social and natural in purely ontological terms, we overlook the imbrications of social struggle to which our own categories are subjected. Ironically, this tendency to indifference, on the part of ontological speculation, to the material genesis of its categories reproduces the very Cartesian binary it claims has been eroded. This is so not only insofar as the modern dualisms are seen to persist in practice where ongoing global processes of the enclosure of ideas and inventions are concerned, but it further implies, as I have claimed elsewhere, a view of the mind as innocent of any imbrication with those practices (Rekret 2016).

With this in mind, I'd like to return to my opening query to pose the question of what function this posthuman economy of the innocence of knowledge serves. What sort of desire does the now widespread ontological claim to the obsolescence of the modern dualisms in the face of an expansive state of hybridity express? For it's worth pointing out that claims to innocence are themselves never innocent, but always deployed in particular contexts and to particular purposes. To what end then does intellectual postponement of an interrogation of thought's material conditions by an ontology of hybridity function? One conduit to these questions involves looking back to what is likely the initial modern formulation of epistemic innocence in John Locke's theory of knowledge. Reflecting on Locke's epistemology will permit us to glimpse the way in which claims to epistemic innocence are always embedded in a political context, and to begin to set the parameters of a further appraisal of the posthumanist argument.

When he posed the mind as a tabula rasa Locke (2000) did so as a means of grounding a hypothetical process of building reason from experience.¹² On Locke's formulation, epistemic innocence, for which he posited the child as a privileged vessel, offered direct access to objects in the real world, and thus evaded what was most problematic about accrued knowledge and language (Rose 1984). In her incisive assessment of Locke's argument, Joanne Faulkner (2011a) points out that in posing human knowledge as essentially innocent, Locke offered a powerful rejoinder to medieval morality, and the doctrine of original sin in particular. To pose the mind as a blank slate served an early modern middle class need for freedom from the entrenched values of feudal society. Accordingly, Locke's scepticism and the notion of epistemic purity that underlies it amounts, on Faulkner's reading, to a bourgeois imaginary that rejects tradition as a source of authority and hierarchy. In her appraisal Faulkner (2011a) goes on to show how, in posing the child's mind as a privileged instance of the claim that ideas are not innate but the result of intercourse with the world, Locke also exhibits a fundamental tension within any claim to the innocence of thought. On the one hand, the child functions as a source of critical knowledge, one that repudiates superstition and prejudice. On the other hand, Locke makes clear that precisely because it is innocent and thus liable to corruption, the child requires the adult's control and discipline. As such, the child offers an assertion of humanity's essential innocence, while at the same time allowing the loss of control and ignorance that innocence implies to be projected and disowned. In other work Faulkner (2011b, 69-70) relates this unstable inclusion of innocence to liberal political philosophy and to the simultaneous valorisation and repression of the natural that early incarnations of the social contract implied. She explains that Locke permits 'nature' to persist in the polis both as a check on state power and as a fantasy of original enjoyment. But the natural 'childhood of humanity', embodied in the peasant or colonial subject or the child itself, also poses a risk to a mature modern contractual order since it implies the failure to enclose and 'improve' the land and to assume the industrious character demanded of the citizen of civil society. In this sense, Locke's formulation of innocence serves the bourgeois imagination with a narrative accounting for the legitimacy of its power along with a means of disowning the loss of control the quality of innocence risks.

Does Locke's mobilisation of innocence on behalf of an ascendant merchant class shine any light upon posthumanism's own impulses? After all, as we have already affirmed, the posthumanist argument is usually grounded upon speculation as to how largely nefarious technological developments might be repurposed to emancipatory ends. Notwithstanding these commitments, the question here bears on the deeper issue of whether posthumanist theories of hybridity reflect or reduce the historical dimensions of existential experience. On this point the evidence marshalled above suggests, following Strathern and others, that a retraction of reflexivity occurs where thought displaces epistemological reflexivity for ontological speculation. It remains to ask, then, why the claim to hybridity has been so predominant in the humanities and social sciences in recent years.

7. Posthuman Anxieties

Crucially, for feminist scholarship especially, posthumanism addresses a looming anxiety that the poststructuralist critique of the subject, given its emphasis on the social construction of gender, left untouched and unscathed underlying essentialist biological conceptions of sex.¹³ In this context notions of hybridity can be mobilised to challenge received notions of both cultural *and* biological convention. This can be seen as a significant critical intervention where the poststructuralist assessment of the discursive construction of gender circumvents more difficult questions of biology itself. Remaining with the issue of the social theorist's relation to the biological sciences, it is also worth noting that the narrative of 'hybridity', and the focus upon scientific and technical change it implies, proposes renewed engagement with the natural sciences for humanities scholars reeling from the Sokal 'hoax' and the broader delegitimation of continental philosophy this scandal stood in for, as well as broader cultural and institutional attacks upon traditional liberal arts pursuits.¹⁴

While this is all certainly the case, there seems to be a deeper underlying logic to the popularity of the posthumanist paradigm, one which ultimately involves the pose of epistemic innocence these theories imply. Recall that for Locke epistemic purity served to undermine the legitimacy of feudal knowledge and aristocratic power while at the same time projecting the loss of control such a purity implied upon the abject subjects of early modern society. Similarly, in the case of what we have seen of the posthumanist's circumvention of the issue of thought's mediation to the world by private property, the rhetoric of hybridity permits the articulation of a critique of capitalism and commodification that can nevertheless celebrate capital's achievements. It only does so, however, by ignoring a much thornier problem: that capital might direct or subsume those technological developments down to their very core. A full accounting of these questions is not possible here, but suffice it to say that the possibility of extracting emancipatory content from new technological developments is a much more vexing problem than the figure of hybridity permits.¹⁵ Even more disturbing, posthumanism disavows the anxiety that our concepts themselves might also be inseparable from processes associated with contemporary capitalism. Ours is an epoch where concern over capitalist manipulation of cognitive performance is widespread, and where worry and discomfort over the manipulation of what we think and feel, whether by the algorithms organising web platforms or drug therapies designed to increase and extend cognitive performance or prevent mental breakdown, is pervasive. In this context, it would seem that to avoid asking how thought is conditioned and

limited by its social context in the name of an account focused upon the erosion of the hierarchies governed by modern 'man' offers a therapeutic to both theorists and consumers of the products of contemporary capitalism. This is a therapy that permits the expression of critical perspectives on contemporary technological development, all the while *containing* that critique so that it need not look back to its own, possibly compromised, subject-position, or indeed, its own forms of consumption. In this sense, the risk of ontologies of 'hybridity' is that they reproduce the withdrawal from, or delegation of, critical thought that is characteristic of a world increasingly governed by processes of automation and algorithmic organisation.

Notes

- ¹ I would like to thank Nicholas Beuret and Simon Choat for their critical comments on drafts of this essay.
- ² By posthumanist I refer to a particular strand of critical theorising. It is important to distinguish this from theories of the 'posthuman' grounded upon normative critique of the dehumanising effects of technology such as Fukuyama (2002) and Habermas (2003). For an overview of 'critical' posthumanism, see Badmington (2003) and Herbrechter(2013).
- ³ On this point see Coole & Frost (2010); Braun & Whatmore (2010); Bryant, Harman & Srnicek (2011).
- ⁴ On this point see Rekret (2018a).
- ⁵ Latour (1991) is exceptional amongst the thinkers of the ontological or posthuman turn in question here insofar as he attends to the historical origins of what he calls 'the modern constitution'. Drawing on Shapin and Schaffer (1985), it is ironic that Latour presents a mostly discursive story of the separation of the natural and social in the seventeenth century, one that overstates a controversy over the terms of the scientific and the political to the much broader terms of the natural and the social. In doing so, it hyperinflates the relative importance of historical personae, in this case Boyle and Hobbes. For a convincing critique of Latour's history of modernity see Pels (1995), Jacob (1995) & Choat (2017).
- ⁶ For a broader accounting of Sohn-Rethel's argument see Rekret and Choat (2016). The argument in this section is developed more extensively in Rekret (2016; 2018c).
- ⁷ It ought to be noted that Latour is an exception here insofar as his own politics can be characterised as anti-socialist liberal pragmatism. Much of the ontological speculation that takes inspiration from his work is more explicitly concerned with an emancipatory politics. For a critical assessment of Latour in this regard see Noys (2011).
- ⁸ Ian Hacking's (1998) critique of Haraway parallels Strathern's. Hacking argues that as developments in medical technology imply that we increasingly

treat bodies as assemblages of replaceable parts, so we intensify rather than transcend the Cartesian framing of existence.

- ⁹ On this point, see also Parry (2004); Helmreich (2009); Brand & Görg (2008).
- ¹⁰ It is worth insisting that Haraway's work has not only been crucial to shaping a progressive Science and Technology Studies research paradigm, but she has explicitly situated her work within a socialist tradition. Neither Haraway's political commitments nor her research as a whole are at issue here. Rather, this essay is interested in the ontology of hybridity upon which a whole paradigm of social theory rests and which emanates from her work.
- ¹¹ Similar claims are found across a range of work. See for instance Latour (1988), Connolly (2013), Barad (2007).
- ¹² I draw in this section on arguments first outlined in Rekret (2018a).
- ¹³ On this point see Parisi (2008).
- ¹⁴ For an overview of the Sokal hoax in the context of the 'culture wars' see Guillory (2002).
- ¹⁵ For instance, see the exchange between Alberto Toscano (2011; 2014) and Jasper Bernes (2013) around logistics.

References

- Badmington, Neil. 2003. 'Theorising Posthumanism.' *Cultural Critique* (53), Winter: 10–27.
- Bensaid, Daniel. 2002. 'A New Appreciation of Time.' In *Marx for Our Times: Adventures and Misadventures of a Critique*, translated by George Eliot, 69–94. London: Verso.
- Bernes, Jasper. 2013. 'Logistics, Counterlogistics and the Communist Project.' *Endnotes* (3) September: 172–201.
- Braidotti, Rosi. 2013. The Posthuman. Cambridge: Polity Press.
- Brand, Urich and Christoph Görg. 2008. 'Post-Fordist Governance of Nature: The Internationalisation of the State and the Case of Genetic Resources.' *Review of International Political Economy* 15(4): 567–89.
- Braun, Bruce and Sarah J. Whatmore. 2010. *Political Matter: Technoscience, Democracy, and Public Life.* Minneapolis: University of Minnesota Press.
- Bryant, Levi, Graham Harman and Nick Srnicek (eds.). 2011. *The Speculative Turn*. Melbourne: Re-Press.
- Choat, Simon. 2017. 'Science, Agency and Ontology: A Historical-Materialist Response to New Materialism.' *Political Studies*.
- Connolly, William. 2013. *The Fragility of Things: Self-Organizing Processes, Neoliberal Fantasies, and Democratic Activism.* Durham and London: Duke University Press.
- Coole, Diana and Samantha Frost. 2010. *New Materialisms: Ontology, Agency, and Politics.* Durham and London: Duke University Press.

- Faulkner, Joanne. 2011a. 'Innocents and Oracles: The Child as Figure of Knowledge and Critique in the Middle Class Philosophical Imagination.' *Critical Horizons* 2(3), 20: 323–46.
- Faulkner, Joanne. 2011b. *The Importance of Being Innocent: Why We Worry About Children*. Cambridge: Cambridge University Press.
- Federici, Silvia. 2004. *Caliban and the Witch: The Body and Primitive Accumulation*. New York: Autonomedia.
- Fernandez, Maria and Suhail Malik. 2002. 'Whatever Happened to the Cyborg Manifesto?' *Mute*, 10 July. Available at: http://www.metamute.org/editorial/ articles/whatever-happened-to-cyborg-manifesto (accessed 14 May 2018).
- Foucault, Michel. 2013. History of Madness. London: Routledge.
- Fukuyama, Francis. 2002. Our Posthuman Future: Consequences of the Biotechnology Revolution. London: Profile Books.
- Guillory, John. 2002. 'The Sokal Affair and the History of Criticism.' *Critical Inquiry* 28(2), Winter: 470–508.
- Habermas, Jürgen. 2003. The Future of Human Nature. Cambridge: Polity Press.
- Hacking, Ian. 1998. 'Canguilhem Amid the Cyborgs'. *Economy and Society* 27: 202–16.
- Haraway, Donna. 1991. Simians, Cyborgs, and Women: The Reinvention of Nature. London: Routledge.
- Haraway, Donna. 1997. Modest_Witness@Second_Millenium: FemaleMan_ Meets_OncoMouse: Feminism and Technoscience. New York and London: Routledge.
- Helmreich, Stefan. 2009. *Alien Ocean: Anthropological Voyages in Microbial Seas*. London: University of California Press.
- Herbrechter, Stephan. 2013. Posthumanism: A Critical Analysis. London: Bloomsbury.
- Jacob, Margaret C. 1998. 'Reflections on Bruno Latour's Version of the Seventeenth Century.' In *A House Built on Sand: Exposing Postmodern Myths About Science*, edited by Noretta Koertge. Oxford: Oxford University Press.
- Jessop, Bob. 2007. 'Knowledge as a Fictitious Commodity: Insights and Limits of a Polanyian Perspective.' *Reading Karl Polanyi for the 21st Century: Market Economy as Political Project*, edited by Ayşe Buğra and Kaan Ağartan. London: Palgrave Macmillan.
- Jasanoff, Sheila. 2012. 'Taking Life: Private Rights in Public Nature'. In *Lively Capital: Biotechnologies, Ethics, and Governance in Global Markets*, ed. Kaushik Sunder Rajan, 155–83. Durham and London: Duke University Press..
- Latour, Bruno. 1988. *The Pasteurization of France*, translated by Alan Sheridan. Cambridge and London: Harvard University Press.
- Latour, Bruno. 1991. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press.
- Locke, John. 2000. An Essay Concerning Human Understanding. London: Routledge.

- Malatino, Hilary. 2017. 'Biohacking Gender.' Angelaki 22 (2): 179-90.
- Merchant, Carolyn. 1983. *The Death of Nature: Women, Ecology and the Scientific Revolution*. London: Harper and Row.
- Mies, Maria. 1998. *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour*. London: Palgrave MacMillan.
- Noys, B. 2012. The Persistence of the Negative: A Critique of Contemporary Continental Theory. Edinburgh: Edinburgh University Press.
- Parisi, Luciana. 2008. 'The Nanoengineering of Desire.' In *Queering the Non/ Human*, eds. Noreen Giffney and Myra J Hird. Aldershot: Ashgate.
- Parry, Bronwyn. 2004. *Trading the Genome* New York, NY: Columbia University Press.
- Pels, Dick. 1995. 'Have We Never Been Modern? Towards a Demontage of Latour's Modern Constitution.' *History of the Human Sciences* 8 (3): 129–41.
- Rekret, Paul. 2018a. 'The Posthumanist *Tabula Rasa'*. *Research in Education: Policy, Theory and Practice*, 101(1):25-29.
- Rekret, Paul. 2018b. 'The Head, The Hand, and Matter: New Materialism and the Politics of Knowledge.' *Theory, Culture & Society*
- Rekret, Paul. 2018c. Derrida and Foucault: Philosophy, Politics, Polemics, London and New York: Rowman & Littlefield.
- Rekret, Paul. 2016. 'A Critique of New Materialism: Ethics and Ontology.' Subjectivity 9(3): 225–245.
- Rekret, Paul and Simon Choat. 2016. 'From Political Topographies to Political Logics: Post-Marxism and Historicity.' *Constellations: An International Journal of Critical and Democratic Theory* 23(2): 281–291.
- Rose, Jacqueline. 1984. *The Case of Peter Pan, Or, the Impossibility of Children's Fiction.* London: Palgrave Macmillan.
- Schmidt, Alfred. 1971. *The Concept of Nature in Marx*. Translated by Ben Fowkes. London: New Left Books.
- Shapin, Steven and Simon Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life.* Princeton: Princeton University Press.
- Sohn-Rethel, Alfred. 1978. Intellectual and Manual Labor: A Critique of Epistemology. London: Macmillan Press.
- Strathern, Marylin. 2005. *Kinship, Law and the Unexpected: Relatives are Always A Surprise*. Cambridge: Cambridge University Press.
- Strathern, Marylin. 1999. Property, Substance and Effect: Anthropological Essays on Persons and Things. London: The Athlone Press.
- Toscano, Alberto. 2011. 'Logistics and Opposition.' *Mute*, 9 August. Available at: http://www.metamute.org/editorial/articles/logistics-and-opposition (accessed 14 May 2018).
- Toscano, Alberto. 2014. 'Lineaments of the Logistical State.' *Viewpoint*, 28 September. Available at: https://www.viewpointmag.com/2014/09/28/ lineaments-of-the-logistical-state/ (accessed 14 May 2018).
- Wilkie, Robert. 2011. The Digital Condition: Class and Culture in the Information Network. New York: Fordham University Press.