Theory, Culture & Society, 2019, 36(6), C. 31-61 \underline{h} ttps://doi.org/10.1177/0263276418771486

Опубликована: Янв. 1, 2019



A Theoretical Framework for the Critical Posthumanities

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Аннотация

What are the parameters that define a posthuman knowing subject, her scientific credibility and ethical accountability? Taking the posthumanities as an emergent field of enquiry based on the convergence of posthumanism and post-anthropocentrism, I argue that posthuman knowledge claims go beyond the critiques of the universalist image of 'Man' and of human exceptionalism. The conceptual foundation I envisage for the critical posthumanities is a neo-Spinozist monistic ontology that assumes radical immanence, i.e. the primacy of intelligent and self-organizing matter. This implies that the posthuman knowing subject has to be understood as a relational embodied and embedded, affective and accountable entity and not only as a transcendental consciousness. Two related notions emerge from this claim: firstly, the mind-body continuum - i.e. the embrainment of the body and embodiment of the mind - and secondly, the nature-culture continuum - i.e. 'naturecultural' and 'humanimal' transversal bonding. The article explores these key conceptual and methodological perspectives and discusses the implications of the critical posthumanities for practices in the contemporary 'research' university.

Ключевые слова: posthumanism, Deleuze, ethics, university, critical, posthumanities, contemporary, posthuman



Abstract

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Introduction

This paper argues that posthuman times, and the posthuman subjects of knowledge constituted within them, are producing new fields of transdisciplinary knowledge, which I call the critical posthumanities. Mvworking definition of the posthuman predicament is the convergence, across the spectrum of cognitive of posthumanism on the one hand capitalism. anthropocentrism on the other. The former focuses on the critique of the humanist ideal of 'Man' as the allegedly universal measure of all things, while the latter criticizes species hierarchy and human exceptionalism. Equally interdisciplinary in character, they are linked to separate social movements and to different theoretical and disciplinary genealogies that do not necessarily follow from each other. Their convergence is currently producing a range of posthumanist positions, but also a return to a variety of neohumanist² claims. A full overview of contemporary enquiries about what constitutes the basic unit of reference for the human



exceeds the scope of this essay.³ What I will try to show instead is that the posthuman constitutes a trans-disciplinary field of scholarship that is more than the sum of its parts and points to a qualitative leap towards the construction of different subjects of knowledge (Braidotti, 2013). My aim is to provide a preliminary theoretical framework for this qualitative shift towards the critical or nomadic posthumanities and to explore its ethico-political implications.

Neo-Materialist Cartographies

Two inter-related assumptions support my project. The first is that to define the posthuman era as the Anthropocene⁴ is not to do it justice: we need to factor in the combination of fast technological advances on the one hand and the exacerbation of economic and social inequalities on the other. Besides, the Anthropocene has already become another 'Anthropomeme' (Macfarlane, 2016), spawning an array of derivative terms, such as 'Capitalocene' 2015), 'Anthrop-obscene' (Parikka, 2015b), but also: 'Plasticene', 'Plantationocene' (Tsing, 2015), 'Mis-anthropocene' and 'Chthulucene' (Haraway, 2015). These neologisms express an accelerationist tendency and their proliferation evokes both excitement and exasperation for thinkers attempting to account critically for the posthuman predicament. Instead of adding to this discursive inflation, I will take a materialist approach, and inscribe the Anthropocene as a multi-layered posthuman predicament that includes the environmental, socio-economic, and affective and psychic dimensions of our ecologies of belonging (Guattari, 2000).

The second assumption concerns the importance of cartographies, as a conceptual off-shoot of neo-materialism. Critical thinking slows down the accelerationist trend of proliferating discourses by drawing cartographies of the power relations operational in and immanent to the production and circulation of knowledge. The specific focus of my cartographies is what kind of knowing subjects are we in the process of becoming and what discourses underscore the process. Cartographies also fulfil a methodological function by providing discursive objects of exchange for a dialogical, but also potentially antagonistic exchange. The subjects of this exchange compose a relational community, defined as a nomadic, transversal 'assemblage' (Deleuze and Guattari, 1987; Braidotti, 1994) that involves non-human actors and technological media. Material, mediated



posthuman subjects constitute a materially embodied and embedded community, a 'people', bonded by affirmative ethics.

Being grounded, any cartographic account is necessarily selective, partial and never exhaustive. Knowledge-production for me is always multiple and collective - hence the unusually large number of bibliographical cross-references in this essay. Footnotes and bibliographies being the expression of democracy in the text, I hope the readers will take my over-crowded article as an attempt to compose a missing community of posthuman scholars: the essay as assemblage. To sum up: a cartography is a theoretically-based and politically-informed account of the present that aims at tracking the production knowledge of and subjectivity (Braidotti. 1994, 2011a, 2011b) and to expose power both as entrapment (pote stas) and as empowerment (potentia).

One field of immediate cartographic relevance to the posthuman is biopolitical scholarship which grew from Foucault's seminal work on the politics of living and dving. Biopolitical scholarship shed new light on power relations in advanced capitalism, but it stopped short of embracing the affirmative aspects of the posthuman turn. For instance, while it focuses on contemporary biopolitical governance, or 'the politics of life itself' (Rose, 2007), it also shows residual Kantianism in terms of values. Both Bios (Esposito, 2008) and Anthr opos Today (Rabinow, 2003) appear as fractured categories, but the non-human elements and technological actors are not given enough prominence. And yet, the materialist concept of nonhuman life (zoe) has emerged as central not only as vulnerable 'bare life' (Agamben, 1998), but also as a productive and vital force (Braidotti, 2002). These limitations make the biopolitical an insufficient frame of reference for the posthuman, and therefore I have adopted a conceptual frame of nomadic becoming (Braidotti, 2011a, 2011b), drawn from neo-Spinozist vital ontologies (Deleuze, 1988, 1990). 5

Subjectivity is not restricted to bound individuals, but is rather a co-operative trans-species effort (Margulis and Sagan, 1995) that takes place transversally, in-between nature/technology; male/female; black/white; local/global; present/past – in assemblages that flow across and displace the binaries. These in-between states defy the logic of the excluded middle and, although they allow an analytic function to the negative, they reject negativity and aim at the production of joyful or affirmative values and projects (Lloyd, 1996; Braidotti, 2011b). Poststructuralism paved the way for this approach, but the posthuman turn materializes it and composes a new ontological framework of becoming-subjects.



Another crucial element of my cartographic approach is the feminist politics of locations (Rich, 1987), also known as situated knowledges (Harding, 1986, 1991; Haraway, 1988), which I take as the original manifestation of embodied and embedded carnal empiricism. This method accounts for one's locations in terms both of space (geo-political or ecological dimension) and time (historical memory or genealogical dimension), thereby grounding political subjectivity. The emphasis on immanence marks the rejection of transcendental universalism and mind-body dualism. All matter or substance being one and immanent to itself, it is intelligent and selforganizing in both human and non-human organisms (Lloyd, 1994, 1996; Protevi, 2013). Vital matter is driven by the ontological desire for the expression of its innermost freedom (conatus). This understanding of matter animates the composition of posthuman subjects of knowledge - embedded, embodied and yet flowing in a web of relations with human and non-human others. Vital neomaterialism will also provide the ontological grounding for the critical posthumanities as a transversal field of knowledge. More on this later.

The last main feature of this neo-materialist, vital approach I want to emphasize is the idea that critical cartographies are not negative, but also entail creativity: they assist us in the process of learning to think differently about ourselves, in response to the complexity of our times. The aim of an adequate cartography is to bring forth alternative figurations or conceptual personae for the kind of knowing subjects currently constructed. All figurations are localized and hence immanent to specific conditions; for example, the nomadic subjects, or the cyborg, are no mere metaphors, but material and semiotic signposts for specific geo-political and historical locations. As such, they express grounded complex singularities, not universal claims (Braidotti, 2011a). The figurations supported by cartographic accounts aim at dealing with the complexity of power relations. They expose the repressive structures of dominant subject-formations (po testas), but also the affirmative and transformative visions of the subject as nomadic process (potentia). In some ways a figuration is the dramatization of processes of becoming, without referring to a normative model of subjectivity, let alone a universal one.

Although the posthuman is empirically grounded, because it is embedded and embodied, it functions less as a substantive entity than a figuration, or conceptual persona. It is a theoretically-powered cartographic tool that aims at achieving adequate understanding of these processes of undoing the human. It does not



define a dystopian future condition, but provides a frame to understand the ongoing processes of becoming-subjects in our fastchanging times. My argument is that the posthuman enables us to track, across a number of interdisciplinary fields, the emergence of discourses about the non/in/trans/meta/post-human, generated by the intersecting critiques of humanism and of anthropocentrism. Any lingering notion of human nature is replaced by a 'naturecultures' continuum (Haraway, 1997, 2003), which also brings to an end the categorical distinction between life as bios, the prerogative of Anthropos, as distinct from the life of animals and non-humans, or zoe (Braidotti, 2006). What comes to the fore instead is new human-non-human linkages, new 'zoontologies' (De Fontaney, 2002: Wolfe. 2003). and Grav. also complex technological interfaces (Bono et al., 2008), in the context of the Anthropocene. The posthuman predicament is, moreover, framed by the opportunistic commodification of all that lives, which, as I argue below, is the political economy of advanced capitalism. With this in mind, let me move onto my cartography of posthuman knowledges and their emerging subjects.

The Proper Study of the Humanities is No Longer 'Man'

The posthuman turn shows that the consensus about the universal value of Eurocentric assumptions about 'Man' has dissipated and this figuration of the human is in trouble. 'Man' as the taxonomic type has now become 'Man the brand' (Haraway, 1997: 74), or rather: 'Ex-Man' (Massumi, 1998: 60). This 'anthropological exodus' produces a colossal hybridization of the species (Hardt and Negri, 2000: 215).

The shift is not met with equal enthusiasm in all quarters. Social theorists from different political backgrounds, such as Habermas (2003), Fukuyama (2002), Sloterdijk (2009) and Derrida (in Borradori, 2003), express intense anxiety bordering on moral panic about the future of the human and the humanist legacy in our advanced technological times. Recently, Pope Francis (2015) joined this debate, supplementing Catholic dogma on Natural Law, with Naomi Klein's analysis of the destructive role of capitalism (Klein, 2014). Although it is undeniably true that the machines are so alive, and the humans so inert (Haraway, 1985), the evidence provided by



posthuman scholarship shows no 'crisis', but a remarkable upsurge of inspiration.

On the positive side, the scholarship of anxiety exposes an ethical-political paradox that deserves further attention. This paradox splits into two issues: the first is that the 'human' – which so preoccupies legions of thinkers and policy-makers today – never was a universal or a neutral term to begin with. It is rather a normative category that indexes access to privileges and entitlements. Appeals to the 'human' are always discriminatory: they create structural distinctions and inequalities among different categories of humans, let alone between humans and non-humans (Braidotti, 2013, 2016).

As a consequence, it is inappropriate to take the posthuman either as an apocalyptic or as an intrinsically subversive category, narrowing our options down to the binary: extinction-versusliberation (of the human). We need to check both emotional reactions and resist with equal lucidity this double fallacy. The 'posthuman' is normatively neutral and it does not automatically point to the end of species, let alone to post-power/gender/class/race/species relations between members of the species. As a figuration, the posthuman is both situated and partial - it does not define the new human condition, but offers a spectrum through which we can capture the complexity of ongoing processes of subject-formation. In other words, it enables subtler and more complex analyses of powers and discourses. They start by questioning who might 'we' be, whose anxiety takes centre-stage in public debates about the convergence of posthumanism and post-anthropocentrism. I want to insist that the posthuman - a figuration carried by a specific cartographic reading of present discursive conditions - can be put to the collective task of constructing new subjects of knowledge, through assemblages or transversal alliances between multiple actors.

The second layer of the paradox exposed by the scholarship of anxiety concerns the tendency to either mourn (apocalyptic variant) or celebrate (euphoric variant) the cause of a new humanity, united in and by the Anthropocene, as both a vulnerable and insurgent category: 'we are in this together!' The reinvention of a pan-human is explicit in the conservative discourse of the Catholic Church, in corporate pan-humanism, belligerent military interventionism and UN humanitarianism. It is more oblique but equally strong in the progressive Left, where the legacy of socialist humanism provides the tools to re-work anxiety into political rage. In all cases, we see the emergence of a category – the endangered human – both as evanescent and foundational.



Politically, it is difficult not to read this vulnerable pan-humanity as a knee-jerk reaction by the centre – the majority – which Deleuze and Guattari define (1987) as sharply as any feminist as: male/white/heterosexual/owning wives and children/urbanized/speaking a standard language, i.e. 'Man', or rather by now – 'ex-Man'. Insofar as the anthropocenic risks of climate change threaten the entire planet, however, one should avoid any cynicism. Radical epistemologies like feminism and postcolonial theory are just as affected by the demise of Man/Anthropos (Chakrabarty, 2009), as the universalist ones.

I propose therefore to deal with the issue conceptually, with the help of nomadic or vital materialism. In this framework, the paradox of simultaneous over-exposure and disappearance of the human is only apparent, and it dissolves if we approach it with the useful distinction Deleuze and Guattari make (1994) within the very notion of the present. The force of the present - and the core of its intelligibility - is that it does not coincide completely with the here and now. Such synchronization is never complete, because in a neomaterialist vital system, all human and non-human entities are nomadic subjects-in-process, in perpetual motion, immanent to the vitality of self-ordering matter. Approaching the present therefore produces a multi-faceted effect: on the one hand the sharp awareness of what we are ceasing to be (the end of the actual) and on the other the perception - in different degrees of clarity - of what we are in the process of becoming (the actualization of the virtual). Both phenomena occur at once, in a non-linear time-continuum.

Think, for example, of Foucault's (1970) image of the face of 'Man' drawn on the sand by the seashore, which is gradually erased by the waves: is it about extinction or renewal? Foucault's genealogical method shows that it is at the moment of its dissolution that 'Man' emerges as a thinkable category; up until that moment it had not surfaced to the critical eye, being the implicit assumption that supported that same category. Deleuze moves the analysis further: if the present is a complex process, critical philosophy cannot stop at the critique of the actual (i.e. of what we are ceasing to be), but needs to move onto the creative actualization of the virtual (i.e. of what we are in the process of becoming). The interplay between the present as actual and the present as virtual spells the rhythms of subject formation.

By extension, the posthuman as cartographic figuration is a branch of contemporary critical thought that allows us to think of what 'we' are ceasing to be – for instance, the Eurocentric category of universal 'Man'. It also sustains, however, the effort to account for



what 'we' are in the process of becoming - the multitude of ways in which the human is currently being recomposed. Posthuman theory focuses, through critical and creative cartographies, on the margins of expression of yet unrealized possibilities for overcoming both humanism and anthropocentrism by concentrating on the issue: who is this 'we' whose humanity is now at stake?

If a cartography is the record of both what we are ceasing to be and what we are in the process of becoming, then critical thinking is about the creation of new concepts, or navigational tools to help us through the complexities of the present, with special focus on the project of actualizing the virtual. This signals an intensive, qualitative shift in becoming that I connect to affirmative ethics. Creativity - the imagination - constantly reconnects to the virtual totality of a block of past experiences and affects, which get recomposed as action in the present, thereby realizing their unfulfilled potential. This mode of affirmative critique is an exercise in temporary and contingent synchronization, which sustains, in the present, the activity of actualizing the virtual. This virtual intensity is simultaneously after and before us, both past and future, in a flow or process of mutation, differentiation or becoming, which is the vita material core of thought. We know by now that there is no Greenwich Mean Time in knowledge production in the posthuman era.

So there is no paradox in the simultaneous over-exposure and nonexistence of the 'human', there is no extinction/survival binary, which means that there is no justification for panic-stricken re-inventions of a vulnerable 'pan-humanity' ('we' are in this together!). What we do have is complexity, embodied and embedded diversity and multiple becomings. We are facing the conceptual challenge of having to hold simultaneously in our minds potentially contradictory ideas like materialism and vitality, growth and extinction. Concepts flow in a continuous present which never fully coincides with a spatiotemporally saturated 'now', but goes on becoming - yearning towards the virtual. It follows therefore that we need to focus our collective efforts upon the projects of defining what 'we' could become as a species and a set of technologically inter-linked material cultures. The aim is to track the multiple, grounded and hence specific and diversified ways in which we are becoming knowing subjects, as 'otherwise other' than the dialectical oppositions and pejorative differences posited by classical humanist 'Man', and the supremacist assertions of 'Anthropos'.



Trans-Disciplinary Exuberance

Next I will argue that the posthuman, as a dynamic, creative convergence phenomenon, is producing new fields of scholarship. The exuberant growth is concentrated in a number of creative transdisciplinary hubs, which have generated their own extra-disciplinary offspring. They seldom coincide with the traditional humanities disciplines, and are also fuelled by marginal and hybrid fields of knowledge.

Over the last 30 years the core of theoretical innovation in the humanities has emerged from a number of often radical and always interdisciplinary practices that called themselves 'studies' (Braidotti, 2013). Women's, gay and lesbian, gender, feminist and queer studies; race, postcolonial and subaltern studies, alongside cultural studies, film, television and media studies; are the prototypes of the radical epistemologies that have voiced the situated knowledges of the dialectical and structural 'others' of humanistic 'Man'.

Another crucial generative trans-disciplinary hub of posthuman knowledge production is science and technology studies (Stengers, 1997), which connects to cultural studies of science (McNeil, 2007); health (Shildrick, 2009) and disability (Braidotti and Roets, 2012; Goodley et al., 2014); media (Bryld and Lykke, 2000; Smelik and Lykke, 2008); topologies of culture and digital media (Lury et al., 2012; Fuller and Goffrey, 2013; Parisi 2013) studies.

These 'studies' share a number of theoretical premises: firstly, they criticize the idea of the human implicitly upheld by the academic humanities on two grounds: structural anthropocentrism on the one hand and in-built Eurocentrism and 'methodological nationalism' (Beck, 2007) on the other. Spelling thus the end of the 'monocultures of the mind' (Shiva, 1993), they critically dis-engage from the rules, conventions and institutional protocols of the academic disciplines. This nomadic exodus from disciplinary 'homes' shifts the point of reference away from the authority of the past and onto accountability for the present (as both actual and virtual). This is what Foucault and Deleuze called 'the philosophy of the outside': thinking of, in, and for the world – a becoming-world of knowledge production practices.

Secondly, they are firmly grounded in the present (as actual and virtual), which means that they take real-life events seriously, and by extension, take power seriously. They are willing to expose the compatibility of rationality and violence, of scientific progress on the



one hand and practices of structural exclusion on the other (Said, 1978). They fulfil the cartographic obligation of being both critical – of dominant visions of knowing subjects – and creative – by actualizing the virtual and unrealized insights and competences of marginalized subjects (Braidotti, 2002, 2006). Not all these 'studies' simply opposed humanism, however: they also offered alternative visions of the humanist self, knowledge and society. Notions such as a female/feminist humanity (Irigaray, 1993) and black humanity (Fanon, 1967) are part of this tradition of more inclusive humanism (Braidotti and Gilroy, 2016).

The case of women's and gender studies is emblematic of both the critical edge and the creative exuberance of posthuman disengagement from dominant ideas about the knowing subject. Contemporary feminism has predicated a concerted exodus from the regime of Man/Anthropos, defined as a species that monopolizes the right to access the bodies of all living entities. Eco-feminists in particular were always geo-centred and post-anthropocentric. A profound sense of non-belonging, of being 'outsiders within' (Woolf, 1939), infuses feminist literature. Since the 1970s feminists (Kristeva, 1980; Barr, 1987, 1993; Haraway, 1992; Creed, 1993), this has resulted in an imaginary political alliance with the 'technoteratological' world (Braidotti, 2002) of the science fiction horror genre. This alliance promotes the insurrection of women - as the others of 'Man' - and other 'others', like LBGT+, non-whites (postcolonial, black, Jewish, indigenous and native subjects) and nonhumans (animals, insects, plants, tress, viruses, fungi, bacteria and technological automata).

Since then the empathic bond to non-human, including monstrous and alien others, has become a posthuman feminist topos (Braidotti, 2002; Creed, 2009). Never quite certain as to the human rights assigned to their sex (MacKinnon, 2007), feminists and LBGT+ (Hird and Roberts, 2011; Gruen and Weil, 2012) have grabbed every opportunity of exiting the binary gender system and taking the leap towards posthuman formations (Balsamo, Halberstam, 1996; 1995, 2012; Giffney 2008; Livingston and Hird, and 2011; Colebrook, 2014b). Trans-species alliances enable experiments with sexual diversity, alternative sexualities and gender systems, modelled on the morphology of non-human species, including insects (Braidotti, 1994; 2002; Grosz, 1995), starfish (Hayward, 2011) and micro-organisms (Parisi, 2004). There is a genuine embarrassment of riches in relation to all references that per necessity cannot make it



to my bibliography, but there is no question that contemporary feminist theory is productively posthuman. 8

Dis-identifications from 'Man/Anthropos' occurred - in the space of several generations - along the axes of becoming-woman/LBGT+ becoming-indigenous/other (sexualization); (racialization) becoming-earth (ecologization). The proliferation of neologisms is telling: if we now are 'humanimals', trans-corporeal human-animal compounds (Alaimo, 2010), or 'trans-speciated selves' (Hayward, 2008), then the earth and its cosmos have become a political arena. This eco-planetary insight and the relationship to non-human life (zo e) are compounded by high technological mediation, digital life being a second nature. Given that there is no 'originary humanicity' (Kirby, 2011: 233) but rather 'originary technicity' (Mackenzie, 2002), what used to be 'naturecultures' has evolved 'medianatures' (Parikka, 2015a) and 'trans-media' practices (King, 2011). A media ecological continuum (Fuller, 2005, 2008) can sustain a general ecology (Hörl, 2013), foregrounding not just any form of materiality, but rather a geological (Parikka, 2015) and terrestrial kind of materialism (Braidotti, 2006; Protevi, 2013).

What is emerging now is a second generation of 'studies' areas, genealogically indebted to the first generation in terms of critical aims and political affects and commitment to social justice, while addressing more directly the issue of anthropocentrism. Significant examples are: posthuman/inhuman/non-human studies; posthuman disability, fat, sleep, fashion, celebrity, success and diet studies; critical plants studies, etc. New media has proliferated into subsections and meta-fields: software, internet, game, algorithmic and critical code studies and more.

A related and equally prolific field of posthuman research concerns the inhuman(e) aspects of our historical condition: conflict and peace research studies; post-Soviet/communist studies; human rights studies, humanitarian management; migration, mobility, human rights studies; trauma, memory and reconciliation studies; security, death, suicide studies; extinction studies, and the list is still growing. successive generations of 'studies' areas are institutionally and theoretically the motor of critique and creativity. I will argue next that they are currently cross-breeding nomadically, generating new discursive practices which I call the nomadic or critical posthumanities.



Cognitive Capitalism Revisited

Before I expand on this new phase, however, let me add that these developments do not take place in a void, but rather within the axiomatic and profit-driven system (Toscano, 2005) of 'cognitive capitalism' (Moulier Boutang, 2012). This system rests on advanced technologies, the financialization of the economy and the overwhelming power of the media and cultural sectors. The practice of labour in such a system is simultaneously highly sophisticated, as it requires cultural and algorithmic fluency, and also highly unregulated and hence open to exploitation.

Advanced capitalism is a differential engine that promotes the quantitative proliferation of multiple options in consumers' goods and actively produces deterritorialized differences for the sake of commodification. The saturation of the social space by fast-changing commodities short-circuits the virtual charge of the present, by infecting it with the internally contradictory temporality of commodity fetishism (Massumi, 1992). Commodities never fully appease or release, but keep us coming back for more. Addictive and toxic, capitalism is an entropic and self-destructive system that 'eats up' the future and endangers the very sources of its wealth and power (Holland, 2011).

The bio-technological pole of this system is based on the economy of 'life as surplus' (Cooper, 2008), which considers as capital value the informational power of living matter itself, its vital, immanent qualities and self-organizing capacity. The information-technology side of the same economy constructs smart virtual systems, mostly applied to 'data-mining', an accumulation of information for the purpose of extensive profiling practices and risk assessments of vast populations.

As a result, cognitive, advanced capitalism profits from the scientific and economic understanding of all that lives. Because life, as it happens, is not the exclusive prerogative of humans, this opportunistic bio-genetic political economy induces, if not the actual erasure, at least the blurring of the distinction between the human and other species, when it comes to profiting from them. Seeds, plants, animals and bacteria fit into this logic of insatiable consumption alongside various specimens of humanity. of Anthropos therefore is uniqueness displaced, producing functional form of post-anthropocentrism that spuriously unifies all species under the imperative of the market. The excesses of the Capitalocene threaten the sustainability of our planet as a whole.



By extension, posthuman scholarship, which emerges and proliferates in such a context, is contiguous and resonates with biogenetic and technologically-mediated advanced capitalism. What prevents it from being just an epistemic form of accelerationism? The answer is affirmative ethics, and the political praxis is collective counter-actualization of the virtual. The barrier against the negative, entropic frenzy of capitalist axiomatic is provided by the politics that ensue from the ethic of affirmation. The political starts with deacceleration, through the composition of transversal subject assemblages that actualize the unrealized or virtual potential of what Deleuze calls 'a missing people'. In the old language: de-accelerate and contribute to the collective construction of social horizons of hope.

The crucial problem is the speeds of de-/re-territorialization by biocognitive capitalism and the toxic saturation of the present it enacts. to the detriment of the actualization of the virtual. The violent erasure, or passive-aggressive blockage, of our collective desire to express and materialize virtual potentials affects both subjectformation and knowledge practices in society. It also impacts on the contemporary university, the scientific community and the art world. How to tell the difference between affirmative and instrumental or opportunistic modes of knowledge production is the fundamental question. Because power, in my scheme of thought, is a multi-layered and dynamic entity, and because as embedded and embodied, relational and affective subjects, we are immanent to the very conditions we are trying to change, we need to make careful ethical distinction between different speeds of both knowledge production with the predictable margins of institutional capitalization - and the construction of alternative knowing subject formations.

A neo-materialist vital position offers a robust rebuttal of the accelerationist and profit-minded knowledge practices of biomediated, cognitive capitalism. Taking 'living matter' as a zoe-geocentred process that interacts in complex ways with the technosocial, psychic and natural environments and resists the over-coding by the capitalist profit principle (and the structural inequalities it entails), I end up on an affirmative plane of composition of transversal subjectivities. Subjectivity can then be re-defined as an expanded self, whose relational capacity is not confined within the human species, but includes non-anthropomorphic elements. Zoe, the non-human, vital force of life, is the transversal entity that allows us to think across previously segregated species, categories and domains. Neo-materialist immanence expands this collective ability



to the sustainability of our modes of knowledge production. Zoe-centred egalitarianism is, for me, the core of a posthuman thought that might inspire, work with or subtend informational and scientific practices and resist the trans-species commodification of life by advanced capitalism (Braidotti, 2006).

The importance of non-human actors in knowledge production systems has a distinguished history in science and technology studies, and actor network theory is part of this tradition. It advances the notion of collaborative networks of human and nonknowledge production actors in systems, providing contemporary object-ology and object-oriented inspiration for ontology. By positing generalized symmetry of actors and objects, however, ANT also prevented any analysis of the power relations at work between them, notably socio-economic differences. Latour dismissed the critical task of epistemology, in favour of the flat ontological equality of actors, which results in the very problematic move to reject the need for any theorization of subjectivity, thus undoing the possibility of a political project altogether. With a history of scepticism about leftist politics, critical theory and Marxist philosophies of modernity, Latour foregrounded ethnographic observations of the material practices that compose science as opposed to what he considered as the over-politicized discussions about power and knowledge, theorized by Foucault and the other post-structuralists. Current discussions about the posthuman predicament revive these traditional dividing lines, and for me they highlight the necessity of re-casting ethical and political subjectivity for our times

Towards the Nomadic Posthumanities

Given the proliferation of first and second generation 'studies' areas in academic settings, their intense and hybrid cross-fertilization and the speed with which they are over-coded by and interwoven with 'cognitive capitalism' (through practices like the academic star system, the research audits, the privatization of universities, the emphasis on grants and fund-raising, etc.), well may we ask: where do these developments leave the academic disciplines of the institutional humanities? In what way are they 'critical'?

My argument is that today the critical posthumanities are emerging as post-disciplinary discursive fronts not only around the edges of the classical disciplines but also as offshoots of the established 'studies'. They provide the answer to what the



humanities can become, in the posthuman era, after the decline of the primacy of universalist 'Man' and of supremacist Anthropos. The building block/plane of composition for the critical posthumanities is the monistic vitalism I sketched above, driven by nomadic, embedded, embodied and technologically-mediated subjects (Braidotti, 2011b) and by complex assemblages of human and non-human, planetary and cosmic, given and manufactured forces. This z oe-centred framework is further enhanced by the analyses of power relations and the social forms of exclusion and dominations perpetuated by the current world-order of 'bio-piracy' (Shiva, 1997), necro-politics (Mbembe, 2003) and systemic dispossession (Sassen, 2014).

Again, the epistemic accelerationism is telling, as shown by even a cursory glance at the terminological diversification of the field. The humanities are currently advocated as: inhuman humanities (Grosz, 2011), digital (Hayles, 1999, 2005), environmental, transformative (Epstein, 2012), emerging, adjectival (De Graef, 2016) and nomadic humanities (Stimpson, 2016). Innovative and threatening in equal measure, the phenomenon of what I call the critical posthumanities ¹ represents both an alternative to the neoliberal governance of academic knowledge, dominated by quantitative data and control, and a re-negotiation of its terms. As Deleuze and Guattari (1994) argue, deepening Foucault's insight about the multi-layered structure of power (as both potestas and potentia): it is not a question of either/or, but of 'and... and'. Contiguity, however, is not the same as complicity, and qualitative differences can and must be made. But how?

There are at least two ways to go about assessing the proliferating discourses of the critical posthumanities. The first approach takes them as expressing new meta-discursive energy on the part of the disciplines. Fuelled by self-reflexivity, they enact an intensive shift and get inspired to move outwards, towards extra-disciplinary encounters with issues and events in the real world. In so doing they also re-assert their institutional power and renew their profiles.

The second approach takes these developments as a nomadic expansion of multiple practices and discourses. This rhizomic growth works through relational assemblages and generative cross-pollination, which is likely to continue releasing hybrid offspring and new heterogeneous assemblages (Deleuze and Guattari, 1994). This is a post-disciplinary (Lykke, 2011) approach, fuelled by the active desire to actualize unprecedented modes of epistemic relations. Nomadic subjects produce nomadic humanities (Stimpson, 2016).



In both cases, the defining feature of the critical posthumanities, is their 'supra-disciplinary' character. I propose to approach both the traditional disciplines and the 'studies' as a constitutive block, composed by the transformation of the classical disciplines and the growth of the infra-disciplinary 'studies' alike, with both of them shifting under multiple pressures. A different affect is at work as well. The point of encounter or assemblage of the critical posthumanities acknowledges the porous nature not only of their institutional boundaries but also of their epistemic core, which gets redefined in terms of relational capacity. The driving force for knowledge production is therefore not the quest for disciplinary purity, or the inspirational force of radical dissent, but rather the modes of relation these discourses are able and willing to open up to. They prosper to the extent that they show the ability and the willingness to move on, acting on their supra-disciplinarity sensibility so that movement can be set in action towards a qualitatively new approach. This is a nomadic shift towards the critical posthumanities.

But this takes me immediately to the next question: what are the codes and modes of re/territorialization of these new, supradisciplinary fields of knowledge? How do they escape from epistemic accelerationism? To take the two pillars of the posthumanities – the environmental and the digital humanities – what meta-patterns of institutional development can we detect in their recent exponential growth? What can make them nomadic and 'critical'?

Let's take the environmental first; if we take a first meta-pattern based on majoritarian formations, identical with and supportive of neoliberal economics, we will encounter the dominant institutional narrative and practice. For instance, let us say that comparative literature, in the framework of the Anthropocene, after generating eco-criticism and animal and plant studies, then joined forces with larger assemblages of multi-disciplinary components (mostly social sciences, anthropology, geology and environmental sciences, and to corporate ideas of sustainability) and re-coded its field of activity as the environmental humanities. The field is so dynamic, it seems unstoppable: it has already sub-divided into the 'green humanities', focused on the earth, and the 'blue humanities', concentrating on water. It claims not only one but several specialized scholarly journals¹¹ and functions like an established academic discipline.

In an analogous way, the dominant or molar narrative about the digital humanities proposes a straight development from media studies, via the application of computing methods to humanities



'content', i.e. databases of biblical texts, the 3D scanning of archaeological finds, or the digitization of musical scores. This posits human-technological relations as a major research theme. It results in a quantitative explosion of studies of non-human objects and themes. Power being productive as well as prohibitive, the neoliberal system finds ways to capitalize also on the marginal and the molecular formations, recomposing them as multiple molarities (i.e. billions of Facebook pages).

To pursue my case, let us say that media studies, affected by cognitive capitalism, encountered computational sciences and cultural studies and mutated into new media studies, then into algorithmic and digital media studies, which then joined forces with larger assemblages of multi-disciplinary components (mostly political ecology, cognitive sciences and philosophy) to produce the digital humanities. The field, by now, is so advanced that it can boast at least six specialized journals, its own advanced companion (Schreibman et al., 2004) and an international network of institutionalized DH centres. ¹²

But is this majoritarian meta-pattern all there is? To what extent is this meta-pattern driven by the speed of re-territorialization of neoliberal economics, and thus limited by it? Many major 'research universities' in the world today can boast digital and environmental humanities centres or institutes. Such enthusiasm for transdisciplinary practices can hardly be gratuitous, especially within cognitive capitalism. Following the analysis of the critical 'studies' above, I would argue that the critical posthumanities are a constitutive block of supra-disciplinary discourses that compose a meta-pattern indexed on the becoming-minoritarian of knowing subjects and knowledge practices. They are carried by affirmative ethical forces.

These minoritarian developments do not prevent, however, the recurrence of patterns of exclusion. So what does it say about the contemporary posthumanities, that so few institutions have embraced 'feminist/queer/migrant/poor/de-colonial/diasporic/diseased humanities'? The speed of de-territorialization of these minor subjects of knowledge is clearly of an altogether different order from the majority-driven epistemic acceleration. Cognitive capitalism cannot or does not want to over-code these minoritarian subjects to the same extent as it territorializes the more profitable ones. But it does pick 'star specimens' from these minor areas, without granting them organizational charts and funds. This disjunction between dominant/marginal, or majoritarian/minor,



however, is also a strength, and it grants minor subjects the political potential of carrying alternative modes of becoming - a different meta-pattern that actualizes what I call 'the missing peoples'. I will return to them after a brief theoretical clarification of this disjunction.

Neo-Materialist Epistemology

Thinking – in philosophy, art and science – is the conceptual counterpart of the ability to enter modes of relation, to affect and be affected, sustaining qualitative shifts and creative tensions accordingly. Escaping the gravitational pull of logocentric systems of thought, critical/creative nomadic thought pursues the actualization of transversal relations, inhabited by a vitalist and materialist multi-directional affectivity that works in terms of transpositions, that is to say generative cross-pollination and hybrid inter-connections (Crist, 2013; Bastian et al., 2017) Thinking is indeed the stuff of the world (Alaimo, 2014).

This stance produces a crucial distinction between quantitative or extensive and qualitative or intensive states, which Deleuze (1988) adapts from Spinoza's ethical system. For instance, my cartography shows a clear quantitative proliferation of discourses generated from posthuman locations. This has produced a series of new 'objects' of studies, many of which are not about the human, but rather non-human agents, technological artefacts, animals, things, etc. What is happening now is that these 'objects' have been itemized and quantified for the neoliberal academic market, generating new fields of enquiry. Does that mean that anybody researching objects/things can claim to be doing the critical posthumanities, in a posthumanistic and post-anthropocentric manner? Is such a quantitative proliferation of discourses enough to sustain the claim to a paradigmatic shift? I hardly think so.

My argument is that a merely quantitative spread without qualitative shifts is an insufficient condition for the production of new concepts and conceptual practices. In order to set up credible and rigorous critical posthumanities, we need a qualitative move. The qualitative criteria I want to suggest are: supra-disciplinarity, meta-discursivity, material grounding, nomadic generative force and affirmative ethics. These general principles get operationalized in a series of methodological guidelines, which include: cartographic accuracy, with the corollary of ethical accountability, and the combination of critique with creativity, including a flair for



paradoxes and the recognition of the specificity of art practices. Other criteria are: non-linearity, the powers of memory and the imagination and the strategy of de-familiarization (Braidotti, 2013).

I cannot go into all of these criteria here, so let me just highlight the crucial ones. For instance: non-linearity is in-built into rhizomic logic. It is also necessary to cope with the complexity of contemporary science and the fact that the global economy functions in a web-like, scattered and poly-centred way. The heteroglossia of contemporary data defies the logic of the excluded middle and demands complex topologies of knowledge, for subjects structured by multi-directional relationality. Critical reason today is contingent and nomadic in character.

Translated into temporal terms, following Deleuze, linearity is the dominant mode of Chronos – the keeper of institutional time and upholder of the authority of the past – as opposed to the dynamic, insurgent and more cyclical time of becoming or Aion. Applied to knowledge production practices, Chronos supports 'royal' – institutionally implemented and well-funded – science/knowledge, compatible with the economic imperatives of advanced capitalism and its 'cognitive excursions into living matter' (Bonta and Protevi, 2004). Aion, on the other hand, produces 'minor' – underfunded and marginalized – science/knowledge, which is, however, ethically transformative and politically empowering. One is sedentary and protocol-bound; the other is nomadic and defines the research process as the creation of new concepts.

The vital materialist continuum sustains the epistemology of becoming that is the conceptual motor of the critical posthumanities. It also supports a new parallelism between philosophy, the sciences and the arts (Deleuze and Guattari, 1994). Bonta and Protevi 'geo-philosophy' redefines (2004) stress that Deleuze's relationship between the 'two cultures' of the 'subtle' (humanities) (natural) sciences and encourages new creative engagements between them. De Landa (2002) praises the intensive mode of Deleuzian science for its anti-essentialism and points out that 'minor' science also replaces typological thinking. The virtual and intensive becoming replaces the ruling principle of resemblance, identity, analogy and opposition. The continuity between the present and the actual, Chronos and Aion, activates multiple genealogical lines of resonance (Deleuze, 1988).

To apply all this to the distinction I made earlier between different speeds of de-/re-territorialization of contemporary knowledge practices, it is clear that the critical posthumanities are caught in



the accelerating spin of the neoliberal logic of capitalizing on life itself. They are developing faster than the academic institutions can keep up with and they are growing either from the trans-disciplinary 'studies', or in the 'trading zones' (Galison, 1997) between the university, social movements and corporate interests. To describe this multi-faceted model of development as a 'crisis' of the humanities is neither accurate nor particularly helpful. The question is rather how far do both the 'studies' (notably the second generation) and the posthumanities co-exist with and even co-construct the profit-oriented re-acquisitions of life as capital – both financial and cognitive – that is the core of advanced capitalism? The distinction I seek is ethical, but its effects are political: it is about what kind of affirmative assemblages we are capable of sustaining, knowing that their political force lies in actualizing 'collective imaginings' (Gatens and Lloyd, 1999).

Complexity becomes - again - the operative word in distinguishing between actualized states of 'royal science' and the virtual becoming of 'minor science'. A neo-materialist vision of matter as auto-poetic calls for a re-tuning of the scientific laws according to a view of the subject of knowledge as a complex singularity, an affective assemblage, and a relational vitalist entity. The zoe-driven, ecosophical and geo-centred turn that sustains the posthumanities, therefore, does not only take the form of a quantitative proliferation of objects of study, but also qualitative and methodological shifts. This ontological frame epistemological conceptions. In a world haunted by regressions of all kinds, the critical posthumanities actualize an immanent politics that avoids the rhetorical generalizations about pan-humanity. They offer tool-kits to address the situated and complex singularity of contemporary subjects of knowledge.

The combination of supra-disciplinary hybridization with the force of vital zoe-geo-centrism pushes the task of de-familiarizing our habits of thought to the edge of a qualitative shift. We are encouraged to expand from the postcolonial injunction of 'unlearning our privilege as our loss' (Spivak, 1990: 9) to a qualitative assessment of our relational deficits and injuries, notably towards non-human others. The frame of reference becomes the world, in all its open-ended, inter-relational, transnational, multi-sexed, and trans-species flows of becoming: a native or vernacular form of cosmopolitanism (Bhabha, 1996; Braidotti, 2006, 2013).

These are the building blocks of qualitative shifts towards the critical posthumanities, as opposed to the exploitation of quantitative



non-human objects of study. At present the institutional alternative to the critical posthumanities is already in place. The Oxford Institute for the Future of Humanity embodies the hegemonic model of the posthuman as trans-humanism, implemented through a programme called 'super-intelligence'. It combines a humanistic belief in the perfectibility of man through scientific rationality with a programme of human enhancement. The director Nick Bostrom pledges allegiance to the European Enlightenment and adopts a moralizing discourse to combine brain research with robotics and computational sciences, plus clinical psychology and analytic philosophy, to define the posthuman as a super-human metarationalist entity. Bostrom is a champion of the Capitalocene, and his approach receives ample economic support from both the scientific community – 'royal science' – and the corporate world.

What I want to propose is an alternative to this approach, namely: 'minor science' and nomadic critical posthumanities. ¹³ A different vision of mediated matter supports the politics of immanence by opening up margins of negotiation within the re-territorializations and networked clusters of interest of cognitive capitalism. The overflowing codes of capital never fully saturate the processes of becoming, just as the present is not saturated, but ever open to the actual. Consequently, the 'minor' discourses always contain margins of dis-enfranchisement from 'royal science', because power is not a single entity, but a multi-layered, dynamic and strategic process.

Thus we could say that the critical posthumanities, on the plateau of 'royal science', are propelled by powerful financial interests. On the axis of 'minor science', however, the growth takes the non-profit form of inter-breeding and cross-pollinating through multiple missing links and liminal spaces. This does not mean that anything goes, but rather that nomadic multi-directionality is the rule for 'minor' sciences and related knowledge production systems. Let us keep in mind, however, the central tenet of neo-materialist ontology, namely that these plateaus are not dialectically distinct and opposed, but rather contiguous and co-constructed. To be more exact: the nomadic lines of flight of minor sciences cut across, re-territorialize and re-compose the dominant knowledge production systems precisely through creating multiple missing links. generative cracks and inhabiting liminal spaces. If there is only one matter, then there is no uncontaminated, pure 'outside' to power; all we have is the stubborn labour of operationalizing critical spaces within, beneath and beyond the present - as the record of both what we are ceasing to be and what we are in the process of becoming.



The only effective materialism today being the politics of radical immanence, the task of critical theory consists in activating subjects to enter into new affective transversal assemblages, to co-create alternative ethical forces and political codes – in other words, to compose a missing people.

The Missing Peoples' Humanities

Because of their highly specialized character, the critical posthumanities are framing multiple planes of organization of knowledge. As a result, is there a risk of re-segregating the critical discourses of the new posthuman landscape? To return to the disjunction mentioned before, what do we make of the fact that so few institutional meta-patterns have emerged around the 'feminist/queer/migrant/poor/de-colonial/diasporic/diseased humanities'? What is the speed and intensity of these de-territorializations, in relation to those of 'royal science'?

Fortunately, the rhizomatic energy of the field is already providing answers: the strength of minoritarian subjects consists in their capacity to carry out alternative modes of becoming and transversal relations that break up segregational patterns. New border-crossings are being set up that aim at actualizing the virtual knowledges and visions of these missing peoples. For instance, since Rob Nixon's seminal work on slow violence (2011), the missing links between postcolonial theories, the environmental humanities and indigenous epistemologies have been exposed and analysed, resulting in growing convergence between them. Arguing that the status of environmental activism among the poor in the Global South has shifted towards the transnational environmental justice movement and the assessment of damaged caused by warfare, Nixon proposes to develop new crossover dialogues between these movements and the - by now already 'classical' - environmental humanities. At the level of the political economy of the posthumanities, this results in the production of new areas of studies that crossover the complex post-anthropocentric axes of enquiry. Postcolonial environmental humanities come to the fore; transnational environmental literature also emerges as a crossover between Native American studies and other indigenous studies areas.

Similar developments are on the way to fill in missing links in the digital humanities. For instance, relying on the work of pioneers like Lisa Nakamura (2002), Ponzanesi and Leurs (2014) claim that postcolonial digital humanities is now a fully constituted field, digital



media providing the most comprehensive platform to re-think transnational spaces and contexts. ¹⁴ These new assemblages pursue the aims of 'classical' postcolonial studies, across the reterritorialized digital humanities platform, into the complexity of 'minor science'. The project of de-colonizing new media is timely, considering that the field is co-extensive with corporate and institutional interests that make it indispensable for economic growth and the war on terror.

The idea that the adoption of digital technologies can exacerbate the devastation of indigenous ways of knowing is also central to Mignolo's decolonial movement. It results in a call for 'de-linking' digital media from the disastrous legacy of European colonialism and western modernity (2011: 122–3). This results in new alliances between environmentalists and legal specialists, indigenous and non-western epistemologies, First Nation peoples, new media activists, IT engineers and anti-globalization forces, which constitute a significant example of new political assemblages. They have produced the decolonial digital humanities, for example the Hastac Scholars Forum, the supplicitly inspired by Mignolo's work.

These theoretically sophisticated transversal discourses combine attention to the earth with enduring care for the people who live closest to the earth – indigenous populations – thus raising the ethical and political stakes. The critique of western imperialism and racism provides an added critical distance – an extra layer of disidentification – that positions these posthuman critical thinkers closer to the dispossessed and the disempowered, adding that many of those are neither human nor necessarily anthropomorphic. Many claim non-western indigenous humanism as their platform (Bignall et al., 2016).

It would be intellectually lazy to take the ongoing proliferation of new discourses as the expression of relativism, and it may be tempting but fallacious to simply read the fast rate of growth of the critical posthumanities as self-generating. The fact that rhizomic knowledge production backed by the internet may be going viral does not make it spontaneous. The multiple hybrid connections of the 'minor sciences' that sustain these new epistemological openings are the result of the hard work of communities of thinkers and activists – alternative collective assemblages – that reconstitute not only the missing links in academic practices, but also and especially the missing people.

In what way were they 'missing' to begin with? Whether we look at indigenous knowledge systems, at feminists, queers, otherwise



enabled, non-humans or technologically-mediated existences, these are real-life subjects whose knowledge never made it into any of the official cartographies. The struggle for their visibility and emergence drives the radical politics of immanence, aimed at actualizing minority-driven knowledges through transversal alliances. The people who were empirically missing – even from 'minor science' – get constituted as political subjects of knowledge through such alliances.

But the other missing people are the virtual ones. As I argued earlier, within a neo-materialist frame, the political – that is to say the actualization of the virtual – is driven by the ethics of affirmation. This entails the overthrowing of negativity through the recasting of the oppositional, resisting self ('I would prefer not to') into a collective assemblage ('we'). This transversal alliance today involves non-human agents, technologically-mediated elements, earth-others (land, waters, plants, animals) and non-human inorganic agents (plastic, wires, information highways, algorithms, etc.). A posthuman ethical praxis involves the formation of a new alliance, a new people.

If the present is the record of what we are ceasing to be, and at present it records the decline of 'Man/Anthropos' and his humanities, but if it is also the trigger for what we are in the process of becoming-subject, then the missing people is an emerging category, as are the posthumanities. This emergence phenomenon refers to a complex singularity, expressing the embedded, embodied, relational and affective forces that generate patterns of becoming, of minor science, of intensive shifts. The activating factor in the politics of immanence is a plane of transposition of forces – in both spatial and temporal terms – from past to future and from the virtual to the actual. It is the actualization of a virtuality, travelling at different speed from capitalist acceleration.

The point of this actualization is to provide an adequate expression of what bodies – as both embodied and embrained – can do and think and enact. Adequate to what? Adequate to what the missing peoples – the embodied, embrained, relational, affective, subjects as transversal assemblages – can do, in terms of sustaining intensity, processing negativity and producing affirmation. Adequate to the ethical task of turning the painful experience of inexistence into generative relational encounters and knowledge production. This is liberation through the understanding of our bondage, as Spinoza teaches us: it extracts knowledge and activism from pain via the transformation of the negative. The politics of immanence compose planes of becoming for a missing people that was never fully part of



the 'human', understood as the 'Man of Reason', whose crisis so preoccupies the humanities today. Deleuze and Guattari nail it: the 'human' is just a vector of becoming; we need to compose a new people and a new earth.

This politics of radical immanence – to actualize the emergence of a missing people – also exposes the weakness of the reactive recomposition of pan-humanity as a threatened category, the vulnerable cosmopolitanism I mentioned earlier. Instead of taking flight into an abstract idea of a 'new' pan-human, bonded in negative passions like fear of extinction, in a world risk society (Beck, 1999), I want to plea for monistic affirmative politics grounded on immanent inter-connections and generative differences: a transversal composition of multiple assemblages of active minoritarian subjects, of many 'people' who are no longer missing.

Conclusion

This cartography demonstrates both the exuberance and the process-ontology underscoring something we may call the posthuman subject. The category appears at the moment of the evanescence of humanist Man and supremacist Anthropos. It is less a concept than a conceptual persona, a navigational tool that helps us illuminate contemporary discursive and material power formations.

I have argued that the proliferation of trans-disciplinary discourses – as 'studies' and as the critical posthumanities – is such as to warrant serious scholarly credentials. It entails 'royal science' formations but also multiple assemblages of 'minor science'. I have argued that we are currently confronted by not just a quantitative growth of areas of study and quantified non-human 'objects' of research, but rather a qualitative shift. I have framed this shift within a vital, neo-materialist epistemology that argues for a naturecultural and medianaturecultural continuum, within the politics of matter as auto-poietic, sym-poietic and hence relational.

This framework provides theoretical grounding for the emergence of the critical posthumanities as a supra-disciplinary, rhizomic field of contemporary knowledge production that is contiguous with, but not identical to, the epistemic accelerationism of cognitive capitalism. It functions at different speeds, moves on different timelines and is fuelled by radically different ethical affects. The novelty of the critical posthumanities, their 'newness', if you wish, is defined by the split temporality of the present as both what we are ceasing



to be and what we are in the process of becoming. They design a horizon of becoming – an academic 'minor science' – that the contemporary university and especially the academic humanities could benefit from. This opening out is multi-directional: it involves social and cultural movements, new kinds of economically productive practices in a market economy liberated form capitalist axioms, and multiple curiosity-driven knowledge practices that do not coincide with the profit motive of cognitive capitalism.

Power being multi-layered (potestas and potentia); the contemporary being multi-dimensional (the present and the actual); time being multi-directional (Chronos and Aion), and cognitive capitalism being tuned into bio-genetics and informational codes – there is nothing left for critical thinkers to do other than to pursue the posthuman, all too human praxis of speaking truth to power and working towards the composition of planes of immanence for missing peoples. Instead of new generalizations about an engendered panhumanity, we need sharper focus on the complex singularities that constitute our respective locations. The critical posthumanities can be the epistemological vehicle for this project.

'We' - the dwellers of this planet at this point in time - are interconnected, but also internally fractured. Class, race, gender and sexual orientations, age and able-bodiedness continue to function as significant markers in framing and policing access to normal 'humanity'. The critical posthumanities provide a diversified array of the changing perceptions and formations of the 'human' in the posthuman era. This field is not aiming at anything like a consensus about a new 'humanity', but it gives us a frame for the actualization of the many missing people, whose 'minor' or nomadic knowledge is the breeding ground for possible futures. The neo-materialist ethics of affirmation that sustain the complex re-composition of minor science in the critical posthumanities is giving us a measure of what we are actually in the process of becoming.

Notes

1. See the different kinds of posthumanism: insurgent (Papadopoulos, 2010); speculative (Sterling, 2014: Roden, 2014); cultural (Herbrechter, 2013) and literary (Nayar, 2013); trans-humanism (Bostrom, 2014); meta-humanism (Ferrando, 2013) and a-humanism (MacCormack, 2014). There is already a posthuman manifesto (Pepperell, 2003) and a posthumanities book series (Wolfe, 2010).



- 2. These range from the classical humanism of Martha Nussbaum (1999) to postcolonial (Gilroy, 2016), queer (Butler, 2004) and mortality-bound humanism (Critchley, 2014), to name just a few.
- 3. For an overview see Braidotti and Hlavajova (forthcoming).
- 4. The term 'Anthropocene', coined in 2002 by Nobel Prize winner Paul Crutzen, describes the current geological era as dominated by human action through technological mediation, consumerism and destruction of the resources of planet earth. It was officially adopted by the International Geological Congress in South Africa in August 2016.
- 5. Neo-materialism is also caught in epistemic accelerationism at present: the 'matter-realism' (Fraser et al., 2006), feminist neo-materialism (Braidotti, 1991; Alaimo and Hekman, 2008; Coole and Frost, 2010; Kirby, 2011; Dolphijn and Van der Tuin, 2012); inventive life (Fraser et al., 2006); generative and viroid life (Ansell-Pearson, 1997, 1999); carnal life (Sobchack, 2004) and vibrant matter (Bennett, 2010).
- 6. Another series of neologisms marks this shift: the non-human (Raffnsoe, 2013); the inhuman (Lyotard, 1989); the post-anthropocentric as a metamorphic entity (Clarke, 2008); the multi-species (Tsing, 2015); posthuman personhood (Wennemann, 2013); the 'new' human (Rosendhal Thomsen, 2013); and posthuman performativity (Barad, 2007). Extinction of life on earth (Lovelock, 2009; Van Dooren, 2014), and of the human (Colebrook, 2014a, 2014b), forecloses any posthuman future (Kroker, 2014).
- 7. See also MacCormack (2012).
- 8. For an overview see Braidotti (2015, 2017).
- 9. With thanks to Sarah Nuttal.
- 10. See also: medical; bio-humanities; energy; public; civic; community; global; ecological; sustainable; interactive; organic; neural-evolutionary; entrepreneurial; translational; greater; resilient, etc., etc.
- 11. See the two major ones: http://environmentalhumanities.org/; <a href="http://e
- 12. This is the CenterNet Network that publishes the DH Commons: http://www.dhcentemet.org/



- 13. A model is the Linköping University's Feminist Posthumanities Hub: https://www.tema.hu.se/tema-g/Posthuman/ posthumanities-hub71-en
- 14. See also the Postcolonial Digital Humanities blog and website: http://dhpoco.org/
- 15. See, for instance, the land/media/indigenous project based in British Columbia (Bieck et al., 2013).
- 16. Co-ordinated by Micha Cardenas, Noha F. Beydon and Alainya Kavaloski; see the website: http://www.hastac.org/forums/colonial-legacies-postcolonial-realities-and-decolonial-futures-digital-media. With thanks to Matthew Fuller.

References

- 1. Agamben, Giorgio (1998) Homo Sacer: Sovereign Power and Bare Life. Stanford: Stanford University Press.
- 2. Alaimo, Stacey (2010) Bodily Natures: Science, Environment, and the Material Self. Bloomington: Indiana University Press.
- 3. Alaimo, Stacey (2014) Thinking as the stuff of the world. O-Zone: A Journal of Object-Oriented Studies 1.
- 4. Alaimo, Stacey and Hekman, Susan (eds) (2008) Material Feminisms. Bloomington: Indiana University Press.
- 5. Ansell Pearson, Keith (1997) Viroid Life: Perspectives on Nietzsche and the Transhuman Condition. London and New York: Routledge.
- 6. Ansell Pearson, Keith (1999) Germinal Life: The Difference and Repetition of Deleuze. London and New York: Routledge.
- 7. Badmington, Neil (2003) Theorizing posthumanism. Cultural Critique 53(1): 10-27.
- 8. Baisamo, Anne M (1996) Technologies of the Gendered Body: Reading Cyborg Women. Durham: Duke University Press.
- 9. Barad, Karen (2007) Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham: Duke University Press.
- 10. Barr, Marleen S (1987) Alien to Femininity: Speculative Fiction and Feminist Theory. Westport: Greenwood Press.



- 11. Barr, Marleen S (1993) Lost in Space: Probing Feminist Science Fiction and Beyond. Chapel Hill: University of North Carolina Press.
- 12. Bastian, Michelle et al. (2017) Participatory Research in Morethan-Human Worlds. London: Routledge.
- 13. Beck, Ulrich (1999) World Risk Society. Cambridge: Polity Press.
- 14. Beck, Ulrich (2007) The cosmopolitan condition: Why methodological nationalism fails. Theory, Culture & Society 24(7/8): 286-290.
- 15. Bennett, Jane (2010) Vibrant Matter. A Political Ecology of Things. Durham: Duke University Press.
- 16. Bhabha, Homi (1996) Unsatisfied: Notes on vernacular cosmopolitanism. In: Garcia-Morena, Laura and Pfeifer, Peter C (eds) Text and Nation. London: Camden House.
- 17. Bignail, Simone, Hemming, Steve and Rigney, Daryle (2016) The ecosophies for the Anthropocene: Environmental governance, continental posthumanism and indigenous expressivism. Deleuze Studies 10(4): 455-478.
- 18. Bieck, Nancy, Dodds, Katherine and Wilhams, Bill (2013) Picturing Transformations. Vancouver: Figure 1 Publishing.
- 19. Bono, James J, Dean, Tim and Ziarek, Ewa P (2008) A Time for the Humanities: Futurity and the Limits of Autonomy. Fordham: Fordham University Press.
- 20. Bonta, Mark and Protevi, John (2004) Deleuze and Geophilosophy: A Guide and Glossary. Edinburgh: Edinburgh University Press.
- 21. Borradori, Giovanna (2003) Philosophy in a Time of Terror. Chicago: University of Chicago Press.
- 22. Bostrom, Nick (2014) Super intelligence: Paths, Dangers, Strategies. Oxford: Oxford University Press.
- 23. Braidotti, Ro si (1994) Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory. New York: Columbia University Press.
- 24. Braidotti, Ro si (2002) Metamorphoses: Towards a Materialist Theory of Becoming. Oxford: Blackwell.
- 25. Braidotti, Rosi (2006) Transpositions: On Nomadic Ethics. Cambridge: Polity Press.



- 26. Braidotti, Rosi (2011a) Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory. New York: Columbia University Press.
- 27. Braidotti, Rosi (2011b) Nomadic Theory: The Portable Rosi Braidotti. New York: Columbia University Press.
- 28. Braidotti, Rosi (2013) The Posthuman. Cambridge: Polity Press.
- 29. Braidotti, Rosi (2015) The posthuman in feminist theory. In: Disch, Lisa and Hawkesworth, Mary (eds) Oxford Handbook of Feminist Theory. Oxford: Oxford University Press.
- 30. Braidotti, Rosi (2016) The contested posthumanities. In: Braidotti, Rosi and Gilroy, Paul (eds) Contesting Humanities. London: Bloomsbury Academic.
- 31. Braidotti, Rosi (2017) Four theses on posthuman feminism. In: Grusin, Richard (ed.) Anthropocene Feminism. Minneapolis: University of Minnesota Press.
- 32. Braidotti, Rosi and Gilroy, Paul (eds) (2016) Contesting Humanities. London: Bloomsbury Academic.
- 33. Braidotti, Rosi, and Hlavajova, Maria (eds) (forthcoming) Posth uman Glossary. London: Bloomsbury Academic.
- 34. Braidotti, Rosi and Roets, Griets (2012) Nomadology and subjectivity: Deleuze, Guattari and critical disability studies. In: Goodley, Dan, Hughes, Bill and Davis, Lennard (eds) Disability and Social Theory. New York: Palgrave Macmillan.
- 35. Bryld, Mette and Lykke, Nina (2000) Cosmodolphins: Feminist Cultural Studies of Technology, Animals and the Sacred. New York: Zed Books.
- 36. Butler, Judith (2004) Precarious Lives. London: Verso Books.
- 37. Chakrabarty, Dipesh (2009) The climate of history: Four theses. Critical Enquiry 35: 197-222.
- 38. Clarke, Bruce (2008) Posthuman Metamorphosis: Narrative and Systems. New York: Fordham University Press.
- 39. Colebrook, Claire (2014a) Death of the Posthuman. Ann Arbor: Open Humanities Press.
- 40. Colebrook, Claire (2014b) Sex After Life: Essays on Extinction, Vol. 2. Ann Arbor: Open Humanities Press.
- 41. Coole, Diana and Frost, Samantha (eds) (2010) New Materialisms: Ontology, Agency and Politics. Durham: Duke University Press.



- 42. Cooper, Melinda (2008) Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era. Seattle: University of Washington Press.
- 43. Creed, Barbara (1993) The Monstrous-Feminine: Film, Feminism, Psychoanalysis. London: Routledge.
- 44. Creed, Barbara (2009) Darwin's Screens: Evolutionary Aesthetics, Time and Sexual Display in the Cinema. Melbourne: Melbourne University Press.
- 45. Crist, Eileen (2013) On the poverty of our nomenclature. Envir onmental Humanities 3: 129-147.
- 46. Critchley, Simon (2014) The Faith of the Faithless. London: Verso Books.
- 47. Crutzen, Paul J and Stoermer, Eugene F (2000) The Anthropocene. Global Change Newsletter 41: 17-18.
- 48. De Fontenay, Elizabeth (1998) Le silence des betes. Paris: Fayard.
- 49. De Graef, Ortwin (2016) Muscular humanities. Presentation at the European Consortium of Humanities Institutes and Centres (ECHIC) Annual Conference, Macerata, 21-22 April.
- 50. Deleuze, Gilles (1988) Spinoza: Practical Philosophy. San Francisco: City Lights Books.
- 51. Deleuze, Gilles (1990) Expressionism in Philosophy: Spinoza. New York: Zone Books.
- 52. Deleuze, Gilles (2003) Pure Immanence. Essays on a Life. New York: Zone Books.
- 53. Deleuze, Gilles and Guattari, Felix (1987) A Thousand Plateaus: Capitalism and Schizophrenia. Minneapolis: University of Minnesota Press.
- 54. Deleuze, Gilles and Guattari, Felix (1994) What is Philosophy? New York: Columbia University Press.
- 55. Dolphijn, Rick and Van der Tuin, Iris (eds) (2012) New Materialism: Interviews and Cartographies. Ann Arbor: Open Humanities Press.
- 56. Epstein, Mikhail (2012) The Transformative Humanities: A Manifesto. London: Bloomsbury.
- 57. Esposito, Roberto (2008) Bios: Biopolitics and Philosophy. Minneapolis: University of Minnesota Press.



- 58. Fanon, Frantz (1967) Black Skin, White Masks. New York: Grove Press.
- 59. Ferrando, Francesca (2013) From the eternal recurrence to the posthuman multiverse. The Agonist 4(1-2): 1-11.
- 60. Foucault, Michel (1970) The Order of Things: An Archaeology of Human Sciences. New York: Pantheon Books.
- 61. Fraser, Mariam, Kember, Sarah and Lury, Celia (eds) (2006) In ventive Life.
- 62. Approaches to the New Vitalism. London: SAGE Publications.
- 63. Fukuyama, Francis (2002) Our Posthuman Future: Consequences of the Biotechnological Revolution. London: Profile Books.
- 64. Fuller, Matthew (2005) Media Ecologies: Materialist Energies in Art and Technoculture. Cambridge, MA: MIT Press.
- 65. Fuller, Matthew (2008) Software Studies. A Lexicon. Cambridge, MA: MIT Press.
- 66. Fuller, Matthew and Goffrey, Andrew (2013) Evil Media. Cambridge, MA: MIT Press.
- 67. Galison, Peter (1997) Image and Logic: A Material Culture of Microphysics.
- 68. Chicago: Chicago University Press.
- 69. Gatens, Moira and Lloyd, Genevieve (1999) Collective Imaginings. New York: Routledge.
- 70. Giffney, Noreen and Hird, Myra J (2008) Queering the Non/Human. New York: Routledge.
- 71. Gilroy, Paul (2016) The Black Atlantic and the Re-enchantment of Humanism. Salt Lake City: University of Utah Press.
- 72. Glotfelty, Chery 11 and Fromm, Harold (eds) (1996) The Ecocriticism Reader. Athens: University of Georgia Press.
- 73. Goodley, Dan, Lawthom, Rebecca and Rusmwick, Katherine (2014) Posthuman disability studies. Subjectivity 7(4): 341-361.
- 74. Grosz, Elizabeth (1995) Space, Time and Perversion: Essays on the Politics of Bodies. New York: Routledge.
- 75. Grosz, Elizabeth (2011) Becoming Undone: Darwinian Reflections on Life, Politics, and Art. Durham: Duke University Press.



- 76. Gruen, Lori and Weil, Kari (2012) Animal others: Editors' introduction. Hypatia 27(3): 477-487.
- 77. Grusin, Richard (2017) Anthropocene Feminism. Minneapolis: University of Minnesota Press.
- 78. Guattari, Felix (1995) Chaosmosis. An Ethico-aesthetic Paradigm. Sydney: Power Pubheations.
- 79. Guattari, Felix (2000) The Three Ecologies. London: The Athlone Press.
- 80. Habermas, Jürgen (2003) The Future of Human Nature. Cambridge: Polity Press.
- 81. Halberstam, Jack (2012) Gaga Feminism. Boston: Beacon Press.
- 82. Halberstam, Jack and Livingston, Ira (eds) (1995) Posthuman Bodies.
- 83. Bloomington: Indiana University Press.
- 84. Haraway, Donna (1985) A manifesto for cyborgs: Science, technology, and socialist feminism in the 1980s. Socialist Review 5(2): 65-107.
- 85. Haraway, Donna (1988) Situated knowledges: The science question in feminism as a site of discourse on the privilege of partial perspective. Feminist Studies 14(3): 575-599.
- 86. Haraway, Donna (1990) Simians, Cyborgs and Women. London: Free Association Press.
- 87. Haraway, Donna (1997) Modest_Witness@Second_Millennium. FemaleMan© Meets Oncomouse $^{\text{TM}}$. London: Routledge.
- 88. Haraway, Donna (2003) The Companion Species Manifesto: Dogs, People and Significant Otherness. Chicago: Prickly Paradigm Press.
- 89. Haraway, Donna (2004 [1992]) The promises of monsters: A regenerative politics for inappropriate/d others. In: The Haraway Reader. New York: Routledge.
- 90. Haraway, Donna (2015) Anthroposcene, Capitaloscene, Plantationoscene, Cthuluscene: Making kin. Environmental Humanities 6: 159-165.
- 91. Harding, Sandra (1986) The Science Question in Feminism. Ithaca: Cornell University Press.
- 92. Harding, Sandra (1991) Whose Science? Whose Knowledge? Ithaca: Cornell University Press.



- 93. Hardt, Michael and Negri, Antonio (2000) Empire. Cambridge, MA: Harvard University Press.
- 94. Hayles, N Katherine (1999) How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics. Chicago: University of Chicago Press.
- 95. Hayles, N Kathrine (2005) My Mother Was a Computer: Digital Subjects and Literary Texts. Chicago: University of Chicago Press.
- 96. Hayward, Eva (2008) More lessons from a starfish: Prefixial flesh and trans- speciated selves. WSQ: Women's Studies Quarterly 36(3-4): 64—85.
- 97. Hayward, Eva (2011) Sensational jellyfish: Aquarium affects and the matter of immersion. Differences 25(5): 161-196.
- 98. Herbrechter, Stefan (2013) Posthumanism: A Critical Analysis. London: Bloomsbury.
- 99. Hird, Myra J and Roberts, Celia (2011) Feminism theorizes the nonhuman. Feminist Theory 12(2): 109-117.
- 100. Holland, Eugene (2011) Nomad Citizenship. Minneapolis: University of Minnesota Press.
- 101. Höri, Erich (2013) A thousand ecologies: The process of cybemeticization and general ecology. In: Diederichsen, Diedrich and Franke, Anselm (eds) The Whole Earth: California and the Disappearance of the Outside. Berlin: Sternberg Press.
- 102. Irigaray, Luce (1993) An Ethics of Sexual Difference. Ithaca: Cornell University Press.
- 103. King, Katie (2011) Networked Reenactments: Stories Transdisciplinary Knowledges Tell. Durham: Duke University Press.
- 104. Kirby, Vicki (2011) Quantum Anthropologies: Life at Large. Durham: Duke University Press.
- 105. Klein, Naomi (2014) This Changes Everything: Capitalism vj. th e Climate. New York: Simon and Schuster.
- 106. Kristeva, Julia (1980) Desire in Language: A Semiotic Approach to Literature and Art. New York: Columbia University Press.
- 107. Kroker, Arthur (2014) Exits to the Posthuman Future. Cambridge: Polity Press. Livingston, Julie and Puar, Jasbir K (eds) (2011) Interspecies. Social Text 29(1) [Special Issue],



- 108. Lloyd, Genevieve (1994) Part of Nature: Self-knowledge in Spinoza's Ethic. Ithaca: Cornell University Press.
- 109. Lloyd, Genevieve (1996) Spinoza and the Ethics. London: Routledge.
- 110. Lovelock, James (2009) The Vanishing Face of Gaia: A Final Warning. New York: Basic Books.
- 111. Lury, Celia, Parisi, Luciana and Terranova, Tiziana (eds) (2012) Topologies of culture. Theory, Culture & Society 29(4—5) [Special Issue],
- 112. Lykke, Nina (2011) This discipline which is not one: Feminist studies as a postdiscipline. In: Lykke, Nina, Buikema, Rosemarie and Griffin, Gabriele (eds) Theories and Methodologies in Postgraduate Feminist Research: Researching Differently. New York: Routledge, 137-151.
- 113. Lyotard, Jean-Francois (1989) The Inhuman: Reflections on Time. Oxford: Blackwell.
- 114. MacCormack, Patricia (2012) Posthuman Ethics. London: Ashgate.
- 115. MacCormack, Patricia (2014) The Animal Catalyst. London: Bloomsbury.
- 116. Macfarlane, Robert (2016) Generation Anthropocene: How humans have altered the planet forever. The Guardian, 1 April. Available at: https://www.theguardian.com/books/2016/apr/01/generation-anthropocene-altered-planet-for-ever (accessed 21 June 2016).
- 117. MacKenzie, Adrian (2002) Transductions: Bodies and Machines at Speed. New York: Continuum.
- 118. MacKinnon, Catherine A (2007) Are Women Human? Cambridge, MA: Harvard University Press.
- 119. Margulis, Lynn and Sagan, Dorion (1995) What Is Life? Berkley: University of California Press.
- 120. Massumi, Brian (1992) 'Anywhere you want to be': An introduction to fear. In: Broadhurst. Joan (ed.) Deleuze and the Transcendental Unconscious. Warwick: Warwick Journal of Philosophy, pp. 175-215.
- 121. Massumi, Brian (1998) Sensing the virtual, building the insensible. Architectural Design 68(5/6): 16-24.



- 122. Massumi, Brian (2002) Parables for the Virtual: Movement, Affect, Sensation. Durham: Duke University Press.
- 123. Mbembe, Achille (2003) Necropolises. Public Culture 15(1): 11-40.
- 124. McNeil, Maureen (2007) Feminist Cultural Studies of Science and Technology. London: Routledge.
- 125. Midgley, Mary (1996) Utopias, Dolphins, and Computers: Problems of Philosophical Plumbing. London: Routledge.
- 126. Mignolo, Walter (2011) The Darker Side of Western Modernity: Global Futures, Decolonial Options. Durham: Duke University Press.
- 127. Moulier Boutang, Yann (2012) Cognitive Capitalism. Cambridge: Polity Press.
- 128. Nakamura, Lisa (2002) Cybertypes: Race, Ethnicity and Identity on the Internet. London: Routledge.
- 129. Nayar, Pramod K (2013) Posthumanism. Cambridge: Polity.
- 130. Nixon, Rob (2011) Slow Violence and the Environmentalism of the Poor. Cambridge, MA: Harvard University Press.
- 131. Nussbaum, Martha C (1999) Cultivating Humanity: a Classical Defense of Reform in Liberal Education. Cambridge, MA: Harvard University Press.
- 132. Papadopoulos, Dimitris (2010) Insurgent posthumanism. Ephe mera 10(2): 134-151.
- 133. Parikka, Jussi (2015a) A Geology of Media. Minneapolis: University of Minnesota Press.
- 134. Parikka, Jussi (2015b) The Anthrobscene. Minneapolis: University of Minnesota Press.
- 135. Parisi, Luciana (2004) Abstract Sex: Philosophy, Bio-Technology, and the Mutation of Desire. London: Continuum.
- 136. Parisi, Luciana (2013) Contagious Architecture: Computation, Aesthetics, and Space. Cambridge, MA: MIT Press.
- 137. Pepperell, Robert (2003) The posthuman manifesto. Intellect Quarterly.
- 138. Available at: www.intellectbooks.co.uk/File:download,id=412/
 Pepperell2. PDF (accessed 26 May 2016).
- 139. Ponzanesi, Sandra, and Leurs, Koen (2014) Introduction to the Special Issue: On digital crossings in Europe. Crossings: Journal of Migration and Culture 4(1): 3-22.



- 140. Pope Francis (2015) Encyclical Letter: Laudato si: On Care for Our Common Home. Rome: The Vatican Press.
- 141. Protevi, John (2013) Life, War, Earth. Minneapolis: University of Minnesota Press.
- 142. Rabinow, Paul (2003) Anthropos Today. Princeton: Princeton University Press.
- 143. Raffnsoe, Sverre (2013) The Human Turn: The Makings of a Contemporary Relational Topography. Copenhagen: Copenhagen Business School.
- 144. Rich, Adrienne (1987) Blood, Bread and Poetry. London: Virago Press.
- 145. Roden, David (2014) Posthuman Life: Philosophy at the Edge of the Human. London: Routledge.
- 146. Rose, Hilary, and Rose, Steven (2000) Alas, Poor Darwin: Arguments against Evolutionary Psychology. New York: Harmony.
- 147. Rose, Nicholas (2007) The Politics of Life Itself. Princeton: Princeton University Press.
- 148. Rosendhal Thomsen, Mad (2013) The New Human in Literature: Posthuman Visions of Change in Body, Mind and Society after 1900. London: Bloomsbury Academic.
- 149. Said, Edward (1978) Orientalism. New York: Pantheon Books.
- 150. Sassen, Saskia (2014) Expulsions Brutality and Complexity in the Global Economy. Cambridge, MA: Harvard University Press.
- 151. Schreibman, Susan, Siemens, Ray and Unsworth, John (2004) A Companion to Digital Humanities. Oxford: Blackwell.
- 152. Shildrick, Margrit (2009) Discourses of Disability, Subjectivity and Sexuality. London: Palgrave Macmillan.
- 153. Shiva, Vandana (1993) Monocultures of the Mind. London: Palgrave.
- 154. Shiva, Vandana (1997) Biopiracy: The Plunder of Nature and Knowledge. Boston: South End Press.
- 155. Sloterdijk, Peter (2009) Rules for the human zoo: A response to the 'Letter on Humanism'. Environment and Planning D: Society and Space 27: 12-28.



- 156. Smelik, Anneke and Lykke, Nina (eds) (2008) Bits of Life: Feminism at the Intersections of Media, Bioscience, and Technology. Seattle: University of Washington Press.
- 157. Sobchack, Vivian (2004) Carnal Thoughts. Berkeley: University of California Press.
- 158. Spivak, Gayatri C (1990) Criticism, feminism and the institution. In: The Postcolonial Critic. New York: Routledge.
- 159. Stengers, Isabelle (1997) Power and Invention: Situating Science. Minneapolis: University of Minnesota Press.
- 160. Sterling, Bruce (2014) The manifesto of speculative posthumanism. Available at: http://www.wired.com/2014/02/manifesto-speculative-posthumanism/ (accessed 6 April 2018).
- 161. Stimpson, Catherine R (2016) The nomadic humanities. Los Angeles Review of Books, 12 July.
- 162. Toscano, Alberto (2005) Axiomatic: The Deleuze Dictionary, ed. Parr, Adrian. Edinburgh: Edinburgh University Press, pp. 17-18.
- 163. Tsing, Anna (2015) The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton: Princeton University Press.
- 164. Van Dooren, Thom (2014) Flight Ways: Life and Loss at the Edge of Extinction. New York: Columbia University Press.
- 165. Wennemann, Daryl J (2013) Posthuman Personhood. Lanham: University Press of America.
- 166. Wolfe, Cary (ed.) (2003) Zoontologies. The Question of the Animal. Minneapolis: University of Minnesota Press.
- 167. Wolfe, Cary (2010) What Is Posthumanism? Minneapolis: University of Minnesota Press.