

Feminist Posthumanities: Redefining and Expanding Humanities' Foundations

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Human nature is not the oxymoron we imagined it to be. In this new planetary age of the Anthropocene, defined by human-induced climatic, biological and even geological transformations, we humans are fully in nature. And nature is fully in us. This was, of course, always the case, but it is more conspicuously so now than ever before: people are entangled in co-constitutive relationships with nature and the environment, with other animals and organisms, with medicine and technology, with science and epistemic politics. We live and die, play, thrive and suffer by each other. Now is the time for greater scholarly attentiveness to such human and more-than-human worlds in socio-cultural research, saturated as they are with ethical and political implications (Van Dooren et al. 2016). For example, think of 'mad cow' disease, where humans feeding cows with by-products from slaughtered sheep infected with the prionic disorder 'scrapie' in turn generates prion disorders in cows that get transmitted to human beef consumers through a series of transcorporeal (Alaimo 2010) gestures across species. We can think, too, of pollen allergies and their increased prevalence, or how hormone-like substances seep from plastics into infants as well as into fish bodies, which we in turn ingest, awaiting potential biochemical surprises. All these are mundane instances of envired embodiment, where science needs to meet cultural knowledge on values, sense-making, politics and purpose, and where the humanities and social sciences meet postnatural nature (Åsberg 2017, Åsberg 2021). While culture and nature never were in fact separated (Haraway 1988; Shiva 1988; Latour 1993), we live in a time when the 'slow violence' (Nixon 2011) of these relationships of embodied environments and envired embodiments appear to us more clearly.

Feminist Thought as the Catalyst of Humanities' Self-Reflection

These relationships seem to us feminist scholars to be more acutely relevant than ever: that is, nature seems humanised – and human cultures naturalised – in new, often unhealthy, ways. The intra-academic term for our time, the 'Anthropocene', has come to stand in for many of these interdependencies and relations (Yusoff and Gabrys 2011; Gunaratnam and Clark 2012; Neimanis et al. 2015). At the brink of mass extinctions, including our own, we need to change our ways – or die trying.

It is high time for versatile research practices that can account for such a human and more-than-human situation, a kind of perfect storm of intermingled human and non-human forces. One not too far-fetched example of such forceful entanglements, and the urgency for humanities and social science scholars to take them seriously, is how the human-induced planetary climate changes manifested in a severe and extended draught

period in Syria, priming for the mayhem of the civil war and its flux of refugees (Kelley et al. 2015). Similarly, the forces of naturecultures frequently become dubious and damaging, such as when we regard 'culture' as an external force of God-like artificiality, when we still debate if women should get human rights, or when we regard less than strictly heteronormative sexual practices as unnatural, or when all kinds of socio-historical inequities get legitimised by scientific authorities (Thornham 2001; Braidotti 2005; Kirby 2008; Roberts 2007; Hird and Roberts 2011; Åsberg and Mehrabi 2016; Åsberg 2017, 2021).

We simply can no longer stand for the modern divide of non-human and human, nature and culture, and we can no longer uphold the division of labour where 'nature' is left to science and 'culture' to the humanities. C. P. Snow's famous, but highly insufficient, thesis of the 'Two Cultures', however influential, can no longer be allowed to vaguely guide us. Even less should it entrench us in critiques of relativism, political correctness, identity politics and all-too-human humanism vis-à-vis positivism, reductionist scientism or biological determinisms. This modern divide (Latour 1993) of culture from nature follows on from a long intellectual tradition of European thinking that separates and asymmetrically orders thought and praxis. It is a divide that plays out differently; it bifurcates, meanders and dovetails into a subset of other violent hierarchies, such as wild/civilised, or Universal Man vis-à-vis women, natives, queers, animals and other Earth Others at large (Shiva 1988; Plumwood 1993; Bryld and Lykke 2000). Ontologically, the world we inhabit is not bifurcated in this simplistic manner. Consequentially, we need ethical research practices and epistemologies that dare step out of disciplinary comfort zones while they stay true to demands on local accountability (Rich 1984), to our own natureculture complicity (Haraway 2016), and to a worldly feminist politics of conviviality today (Heise 2016). It is, we argue, high time for multivalent forms of feminist posthumanities.

The fields of feminist posthumanities draws on multiple sources of thought, creative practice, art, science and various minoritarian areas of study. This allows us not so much to take back the past of the humanities as open it up to a wider agenda, in the spirit of the notion of the 'productive internal crisis' of humanities that drives their self-transformation, and that underpins this volume. For example, feminist creators like Octavia Butler, Ursula Le Guin, Lynn Randolph, Barbara Bolt, Monika Bakke, Perdita Philips, Kathy High, Basia Irland, Katja Aglert, Janna Holmstedt, and many other creative scholar-artists, weave scholarly kinship relations with art and imagination as their engine of discovery and 'alter-worlding' device. Another example, the posthumanist flows of phenomenologist Astrida Neimanis, points out just how much potential such affirmative approaches may encapsulate (Neimanis 2017). Similarly, the materialist scholarship and community-building, poetics, musicology, social media presence and artwork of Barbara Bolt, Matthew Fuller, Lissa Holloway-Attaway and Milla Tienan draw visionary energy from the arts as well as from deep-seated and richly embedded empirical cases, media politics and intra-personal, critical entanglements with natureculture (Wilson 2004), bioart philosophies (Radomska 2016) and unexpected encounters with the wild (Plumwood 2012). Such work brings in important ways together with newer and more veneered communities of scholars in technoscience studies, cultural studies and philosophy to flesh out and theorise contemporary subjectivity and collective agency (cf. Hellstrand 2017). These fields of research revise and reframe our posthuman imaginaries for the purpose of learning to get on better together (cf. Neimanis, Åsberg and Hedrén 2015; Cielemecka 2015; Sjögren 2016). That is, in the feminist registers these authors bring attention to embodied subjectivity, sexuality, temporality, dis/ability to death and dying (Lykke 2015; Mehrabi 2016), to queer non-humans and dark ecologies (Hird and Roberts 2011, Henriksen and

Radomska 2015; Morton 2016), to the vivacities and limitations of whole ways of life, and the materialising structures of our planetary politics and its contradictions. Shunning chronological progress narratives at large, feminist posthumanities may tap into the process ontology of Heraclites as much as into the fundamental critiques of new materialisms (van der Tuin 2011a, 2011b, 2015), join monster networks, laboratories, as well as #metoo movements. There is no shortage of arenas.

For instance, it may be traced back to the early anti-humanists (i.e., Foucault 1970), existential feminists such as Simone de Beauvoir, and other scholars who severely questioned humanity in the aftermath of the European Holocaust. They questioned the universal role, mastery and nature of 'human nature' itself. Following first the postmodern twists and kinks to feminist epistemology (Scott 1996), and then inaugurating through new feminist materialisms the return of ethics and ontology six decades after the Second World War, feminist posthumanities taps into these and many other genealogies at once. For instance, it draws in important ways on the set of iconic philosophers (Derrida, Lyotard, Deleuze, de Beauvoir, Irigaray, Cixous, and others) who peeled back the layers of rationality and exceptionalism that characterised the human subject (Lloyd 1984) and its adjacent rule of logocentrism. A particular starting point may be traced to Michel Foucault, who questioned the figure of the 'human' around which the humanities was built (Foucault 1980). Foucaultian readings afford an understanding of how the very narrow take on the human of the humanities legitimised exclusionary and derogatory social practices, phallogocentrism, Eurocentric cultural imperialism and ecological exploitation by way of academic credentials. As a counter-measure to such all-too-human humanities, feminist posthumanities works almost the other way around, by inclusionary and non-reductive, yet targeted, practices of attentive consideration. Such analytics are forged transversally in knowledge conversations at various crossroads of human and non-human co-constitution. And there need be no firm identity to 'feminist' posthumanities, only an acknowledgement to this rich oeuvre and the ways in which such critical theories have worked transversally, and helped effect a jamming of the theoretical machinery in asserting the existence of excluded others of the humanities.

Beyond the Humanist Imagination: Fulfilling the Double Imperative of Humanities' Self-Transformation

In academically irreverent, yet extremely rigorous, attentive and demanding, practices of scholarly investigation, feminist posthumanities brings things together, new stories and modes of worldly relationality, allowing for their reconfigurations and reconstitutions. Feminist posthumanities can therefore be considered as methodologically fulfilling the 'double imperative of humanities' self-overcoming' stated in this volume's Introduction: the uncovering of the multiple exclusions and reductions at work within the traditional, 'Enlightenment' understanding of humanity that has underpinned humanistic disciplines in modernity; and the assessment of the legacy of humanism and of the binary logics of opposition and exclusion that sustain it. The life sciences, and what we learn about ourselves from daily uptakes of circulating techno-scientific imaginaries, remain a great inspiration to feminist posthumanities. In spectacular claims, Internet memes, alarming news and science popularisations we read about the technological next steps of human evolution, social media augmentation or individualised drug developments. Such science stories exist today parallel to reports on overwhelming amounts of e-waste, loneliness or news on how common plastics seep hormone derivatives into newborn bodies. All such

stories need critical and creative reappraisals for what they entail in an entangled world of contingency and uncertainty. Mutualisms and ambiguities at all levels demand well-rounded cartographies and immersive analyses with an eye to the critical and creative concerns of how to live well with multiple others on this planet (Braidotti 2005, 2016). Feminist posthumanities offer starting points for ethical approaches and analytical abilities to engage with contingent entanglements and multiple others.

Ambiguities abound today. From the Latin *ambiguitas*, meaning paradox or uncertainty, the adjective *ambiguous* signals the changeable, uncertain, disputed and obscure qualities of contemporary life. For instance, we may in everyday media read about minimalist lifestyles featuring trendy 'green' consumption at costly prices and about domestic practices of 'decluttering' that, paradoxically, add significantly to the massive amounts of waste in urban settings. Threats of invasive species, or global species mobility at large (some afforded by the transgenics biotech industry and transfers between man-made lab species or by anthropogenic climate effects) go next to feared new pandemics lurking on a global scale from melting permafrost, makeshift hobby labs and super-medicalised breeding practices in farming and animal husbandry. Perceived threats trigger wars of all kinds and denominations – including the oxymoronic 'humanitarian' ones – and spread their own toxic side effects, triggering diasporas and exodi at a fast-growing pace. Refugees flee scorched or flooded lands only to meet European fences, cameras and new forms of surveillance; an isolated volcano can halt northern air traffic for months while legislations on ecocide lag tragically behind due to inability to appreciate non-human agency. In the affluent parts of the world, exceptional cleaning practices and antibacterial products seem to have paved the way for new allergies and auto-immune responses. At the same time, biologists map the microbiomes, the sum of our microbial genetics, revealing in a news flash the bacterial agency and supremacy over the so-called human body. Indeed, more than fifteen years have passed since the 'human genome' – hailed as the map to our own species and self-understanding – itself turned out to be a predominately multispecies affair (Åsberg 2005; Holmberg 2005). The life sciences have since developed advanced transgenic technologies for targeting human disorders in non-human animal bodies while behavioural biologists and ecologists have documented a range of almost human-like affective and communicative registers, like empathy or intelligence, in non-human animals. In short, the climate sciences and the life sciences seem to complement many well-established poststructuralist efforts to deconstruct the solid and autonomous human individual. Now, the tasks of the more-than-human humanities scholar are thus to provide guiding stories with which to tell these stories, and to present adequate maps to the specifically situated historical locations.

The all-pervasive aspects of our techno-scientific existence, that there is no un surveilled spot on this globe and no body unaltered by modern life, underpin what we may see as both our posthuman and postnatural condition. Presently, our collective imagination manifested in popular cultures also complements a humanistic critique. Many urban, highly educated and privileged people seem for instance increasingly taken by two significant cultural genres. The first is dystopian television series about the fall of white men, often featuring flawed (or even sociopathic) male characters who go to extremes to keep up the appearance of being functional. The white male figures in *White Lotus*, *The Last of Us*, *Succession*, *Mad Men*, *Breaking Bad*, *Dexter* and *House of Cards* come to mind (with *Ted Lasso* as the glaring exception). The second cultural genre is the apocalyptic horror of *Silo* or *Black Mirror*, and dark science fiction films such as *Blade Runner 2049*, *Alien Resurrection*, *Resident Evil* and *Annihilation*. Replicants, hybrids, monsters, mutants, clones, robots and

alien invaders constitute trans-species alliances or transversal assemblages that confront and challenge the received standards of normality, naturalness and propriety. These films seem to portend new forms of posthumanity emerging in none-too-distant futures. Both genres suggest that the contemporary social imaginary is clearly techno-terratological (Braidotti 2002; Potter and Hawkins 2009). Dystopian climate futures that bring modern life back to natural history and ponder the evolutionary or reproductive consequences of human actions and humanistic politics are seen in television mini-series like *Fortitude* or in the feminist literatures of Margaret Atwood (*Oryx and Crake*, *A Handmaid's Tale*) or Ursula Le Guin (*The Word for World is Forest*). Utopian experimentations with lived relationality, sensory enhanced forms of sociality and sense of belonging are also attempted in series like *Sense8*, testing the grounds for posthuman connectivity. Clearly, from the overlapping domains of science and popular imagination we have already moved way beyond the limitations of the humanist imagination, for better and for worse. Despite the somewhat bipolar reports – either utopian or dystopian, technophobic or technophilic – we dream, live and enliven already the posthuman condition. Now more than ever we need the storytelling practices to be accountable for its politics.

Cultural Studies and Feminist Science Studies After the Human

What the emergence of cultural studies did for the societal relevance of cultural critique and anti-elitist imagination in the 1970s, we need to do all over again today. But this time we need it in a post-constructionist modus operandi of wordly immersion. As we have seen since, the planetary parameters have shifted significantly. We now need urgently to deploy both our more specialised analytical tools and a much wider scope in our approach to the entanglements of nature and culture – what Haraway termed ‘naturecultures’ – and their all-over emerging ecologies (Kirksey 2015).

We need to not just move beyond the humanist imagination, but we also need better tools to deal with its lived realities (see, e.g., Moore and Moreno in this volume). That means also that we need to see human imagination not as external to the object of study, but as actively producing it (Åsberg et al. 2011; Yusoff and Gabrys 2011). New materialist and posthuman feminist philosophers can help us make this shift. Revisiting Spinoza with Deleuze, they have argued for the radically immanent (Braidotti 2006) and politically generative (Gatens and Lloyd 1999) force of the imagination. Moreover, materialist imaginaries are also points of reference for ongoing processes of identification and disidentification, crucial for subject formations, educational practices and politics at large, as theorised by Nina Lykke and Hillevi Lenz Taguchi. Feminist posthumanities troubles the very idea of self-referential starting points in the human, humane or in the humanities discipline. An iconic introduction to posthuman performativity and the feminist focus on mutualistic relationships of becoming, matter and meaning is afforded by Karen Barad's groundbreaking 2003 article from the journal *Signs*. Feminist posthumanities remain in that sense anti-foundationalist (Braidotti 2005, 2013) and non-teleological while being through-and-through ‘matter-realist’ (Kember 2003), embedded and embodied, local and situated (Braidotti 1994). Indeed, in recent literature, we see how the historiographies of various forms of worldly posthumanities have met up with a diverse range of feminist scholars engaged with a wide array of epistemological, ontological, ethical and political questions.

For some time, feminist philosophers and scholars of science studies and cultural studies, like Braidotti, Hayles and Barad, have deployed the notion of the posthuman to imag-

inatively link politics and subjectivity. They have done so in order to break or otherwise overcome the fixed, dyadic and hierarchical categories of nature and culture, or the human and the non-human, thereby enabling alternative analyses that explore the entanglements and mutual co-constitutions that result. For Karen Barad, 'posthumanism marks a refusal to take the distinction between "human" and "nonhuman" for granted, and to found analysis on this presumably fixed and inherent set of categories' (Barad 2007: 32). For N. Katherine Hayles, the posthuman signals both a problem and a possibility:

If my nightmare is a culture inhabited by posthumans who regard their bodies as fashion accessories rather than the ground of being, my dream is a version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognises and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity, one on which we depend for our continued survival. (1999: 5)

The posthuman spectrum thus entails both problems and possibilities for feminist materialist thought, as neatly delineated by Braidotti (2013). To Braidotti (2016: 4), the posthuman expresses a critical consensus akin to much feminist theorising that there is no 'originary humanicity' (Kirby 2011) to begin from, only cyborgian ontologies of co-constitutive relations, or 'originary technicity' (MacKenzie 2002). We continue now to trace a partial picture of the relationships between feminist theory and the posthuman, as often has moved by way of science and technology studies (see, e.g., the works of Stacy Alaimo, Myra Hird, Tania Pérez-Bustos, Ericka Johnson, Celia Roberts, Lynda Birke and Tora Holmberg), cultural studies and post-continental philosophy. These are of course also veneered traditions of theory and practice, and feminist theory-practice, in their own right opening up for a variety of post-disciplinaritys.

Introducing the Posthuman, and its Cyborgian Roots in Feminist Science Studies

Decades ago, Donna J. Haraway pointed out how necessary it is to pay attention to the way in which humans are entangled in intricate relationships with technology and science, and with other non-human animals and the environment. Feminists responded further by producing the first explicitly posthuman texts in the late 1990s, stressing the cultural politics of posthuman bodies (Braidotti 1994; Halberstam and Livingston 1995; Balsamo 1996; Hayles 1997) and the impact of techno-embodiment and digital mediation. From early works on the cyborg (Haraway 1991) to more recent work on agential realism (Barad 2003, 2007), the posthuman has proven to be productive for an ontological politics of feminist and critical theory, as prominently exhibited by Braidotti (2013).

As has been pointed out, the term 'posthuman' itself has come to designate a very loosely related set of attempts to reconceptualise the relationship between technology and human embodiment (Hayles 1997). However, popular and scholarly notions of the 'post-human' often signify vastly different and sometimes incompatible things. Troublesome posthumanisms in popular circulation often share a belief in modern progress or technology as salvation from bodily vulnerabilities, even from death. Uncritically celebrating Enlightenment ideals of anthropocentric humanism and progress, such posthumanism can even manifest as a form of superhumanism, or 'transhumanism'. Such transhumanism

works to transcend or overcome the body through mind – or belief in science – and, thus, to complete the imagined mind-body split as well as to confirm the eerily religious authority of science. Transhumanist fantasies get imagined in science fiction stories of digitally downloading minds or cryo-preserving bodies for posterity. However, such post-human fantasies fail to consider the recalcitrant and connected nature of nature, of bodies and of embodied selfhoods as more than a bounded, cerebral affair of willpower and intention. It seems to celebrate mind over matter, as if mind is not of biomatter (brain substance) or mattering itself (the embodied brain, think of mirror-neurons and neural uptakes beyond the surface of the skin). Transhumanisms are therefore somewhat incompatible with ‘doing’ feminist posthumanities and the material-semiotics that support it. Transhumanism stands as a different species of posthumanism, hinged on human mastery and a thrust away from bodily ecologies and their vulnerability, and is therefore exemplary of what we have, in this volume, termed the ‘majoritarian’ approach to resolving the contemporary crisis of the humanities (see the Introduction in this volume). Attention to human and non-human vulnerability and bodily agency is however what has propelled corporeal feminist thought within, for instance, feminist science studies (cf. Treusch 2015; Górka 2016).

Science and technology studies at large have had very little to say on subjectivity in the poststructuralist registers of cultural research. In contrast, the widely popularised life sciences themselves have made us reimagine ourselves in genetic, molecular, bacterial or neuronal terms. With riffs of anti-humanist theory, the laboratory life sciences and their popularised versions in wider cultural settings tell us much – often in estranging terms – about our multiple, split and contradictory posthuman selves. In fact, contemporary bioscience seems indeed to substantiate anti-foundationalist, non-teleological poststructuralist and anti-humanist theories of the embodied self. As mentioned above, newly mapped microbiomes call into question humanist assumptions of self-contained individuality: the sheer number of microbes that inhabit our bodies, including bacteria, viruses, protists or parasites, exceeds the number of our bodily cells by up to a hundredfold (Lingis 1993; Haraway 2008). We are clearly ‘companion species’, engaged in lethal as much as enlivening games of becoming with one another (Haraway 2003, 2008).

It is in the feminist registers of science studies – especially after the feminist conception of the cyborg and in the post-disciplinary efforts of Donna J. Haraway to bring science and cultural studies together – that we find especially fruitful starting points. Karen Barad’s foundational work on the agency of matter and on posthumanist performativity points to the generative and collusive nature of the long feminist science studies tradition of reviewing and working alongside the natural sciences and to the generative nature of feminist encounters with the natural sciences. In similar veins, feminist science studies scholars like Myra Hird and Celia Roberts, Sarah Franklin, Gillian Einstein, Ruth Hubbard, Lynda Birke and many others are committed to the transformative feminist potentials inherent in the practice of science and medicine. These are domains of great agenda-setting social powers compared to social science and humanities research areas. The work of feminist techno-science studies has generated many of the contemporary theoretical innovations in socio-cultural research that draw attention to various forms of posthumanist performativity (Barad 2003), ecological distribution of agency or multispecies relationality.

In empirically robust science conversations that meet up with feminist theorising, Myra Hird (2009) for instance has provided an unusual example of posthumanist social science that boldly indexes the biotic world and bacteria as the origins of sociable life. With this microbial view of ourselves, we realise that identity is not the solid, solipsistic or bounded

affair it has been made out to be: at the very least it is a hybrid geography, an ecology and a more-than-human affair (Whatmore 2002; Kirby 2011). As Hird argues, this fact also makes sociality not a property of human societies but something as old as life itself. Haraway's notion of 'companion species' (2003) is of particular relevance here too: as the biologically situated alternative to abstract conceptions of posthuman subjectivity, her feminist notion of all earthlings as 'companions' who 'become with' one another in mutual reciprocity offers respect for diversity and speciation processes without romanticising hybridity. It points to the necessity not only of bringing on board the feminist skills regarding biologies at work (as livingness and as science disciplines), but it also indexes the sources available to posthuman analysis within the fields of feminist ethics. The rich and various oeuvre of Haraway weaves together biological practices and epistemological politics with cultural studies insights on situated forms of subjectivity, thus paving the way for feminist posthumanities as something already both long-lived and as research still to come. Her post-disciplinary practices of doing the humanities signal the much-needed shift from the nationalism and homogenising humanisms otherwise describing much humanities research.

The humanities can no longer be regarded or practised in the universalist mode of the 'best that has been thought or written', reflecting and reifying stereotypes of the human, humane and humanistic while *de facto* being tied to ethno-national expressions of European culture, racial and gendered definitions of the fully human (Davidson and Goldberg 2004: 46). In a classical anti-humanist argument, Foucault claims that we need to dethrone the concept of Man because it gets in the way of thinking with the high degree of accuracy and complexity required by our historical context (Foucault 1970: 343). Philosophers like Genevieve Lloyd, Elisabeth Grosz, Rosi Braidotti, Judith Butler, Cate Mortimer-Sandilands, and more recently Mel Y Chen and Christine Daigle, have since substantiated and amplified this claim for feminist theory, and posthuman or non-human feminist theorising has since thrived in these veins. Put somewhat simplistically, it has paved the way for feminist theorising without gender, and humanities work without the human (as its centrepieces).

Following from, and responsive to, the corporeal and materialist feminist philosophising of diverse and wide-ranging scholars such as Braidotti (1994), Grosz (1994), Hayles (1999), Tuana (1989), Haraway, and many others, the time is ripe for gathering such efforts under different terms, set up strategically at a variety of universities, as suggested by Środa, Rogowska-Stangret and Cielemecka (2014).

Feminist posthumanities, we suggest, might do that work for us in its immersive and tentacular style of transversality.

Posthuman Humanities: Redefining the Function of the Humanities in the Third Millennium

In many ways it has become increasingly clear that nothing remains evident or given about the 'human' of the humanities (Braidotti 2013). Stepping things up, Braidotti suggests posthuman humanities and critical forms of posthumanism by way of continental thought (Braidotti 2013, 2016). The human, as a placeholder, stands for something deeply entwined with complicated wording practices also in more empirically associated research (Haraway 2008; Tsing 2012). If humans nowadays, as pointed out by posthumanities pioneer Cary Wolfe (2003), are more obviously than ever entangled in co-constitutive relationships with nature and the environment, with science and technology, with vulnerable

embodiments of both human and non-human kinds, we have for sure also in the last decade witnessed the emergence of more-than-human humanities as a response (Wolfe 2003; cf. Whatmore 2002). As Braidotti argues, all these entanglements have serious implications for the institutional practices of the humanities.

The posthuman turn occurred, we might say, at the convergence of different strands of scholarship and activism, broadly defined. If the humanities at large have proven to be their most effective when, to use Homi Bhabha's phrase, 'the unhomely' stirs (1997: 445) – as in the cases of when cultural studies, feminist theory, indigenous studies, techno-science studies, human-animal studies or eco-critique emerged decades ago – it is time we now acknowledge the always-already existence of many forms of posthumanities (Wolfe 2003).

Just as how all posthumanisms are not painted with the same brush (Badmington 2000; Wolfe 2010), the urgency of actually dealing with the key issue in various branches of the posthumanities – namely, how to recalibrate the humanities so as to attend to specific human and more than human interests while accounting for power differentials – is becoming an increasingly important task for all critical communities, including those of the social sciences that no longer can claim relevance only by merit of studying society. Indeed, Cary Wolfe, in founding his famous book series on posthumanities, purposefully intended human-animal studies as a key area of concern for socio-cultural commitment. At the same time, new areas of ecocritical and eco-philosophical posthuman feminist scholarship took centre stage (following on eco-feminisms) in the wake of human-animal studies and environmental humanities: for example, scholars addressed how supremacist theories of the human, based on various brands of humanism and anthropocentrism, have actively prevented research on the multiple 'Others' of the Western humanities. The animal question in the humanities, including Wolfe's works, has since emerged as a field of its own (Weil 2010; Bull, Holmberg and Åsberg 2017). Here, too, ecofeminists have been paving the way for decades, with research on nature (Merchant 1980; Plumwood 1993), animals and speciesism (Adams 1990; Gaard 1993), capitalism (Gibson-Graham 1996), and the political ambiguity of well-meaning Western environmentalism (Shiva 1997).

Altering views to reality (ontology) and attending to the relational politics of ontology, posthuman humanities or posthumanities research underscore new materialist approaches in feminist epistemology. Obviously feminist posthumanities provides several entries as it originates in *medias res*. In the words of groundbreaking feminist new materialist scholar Iris van der Tuin, feminist posthumanities offers 'a different starting point, a different metaphysics' (van der Tuin and Dolphijn 2010). Following the insights that the feminist posthumanities raise onto-epistemologically important questions, we might start then by asking with N. Kathryn Hayles: 'What happens if we begin from the premise not that we know reality because we are separate from it (traditional objectivity), but that we can know the world because we are connected with it?' (Hayles 1995: 48). In other words, feminist posthumanities insists on the practices of situated knowledges (Haraway 1991). Epistemologically, it also tries to overcome Eurocentric 'epistemologies of ignorance' (Tuana 2008), that remain deeply embedded in Western practices of arts and sciences. It affiliates with decolonial options (Tlostanova 2017). Feminist posthuman thought propels itself forward also by its stubborn refusal to forget or 'forgetting to forget', for instance, the time-honoured or buried thoughts of women philosopher physicists (van der Tuin 2011a, 2015), the theory in the flesh (Moraga and Anzaldúa 1981), or the feminist uses of Spinoza, Freud or Deleuze, Silvia Wynter and Douglas Adams, or other 'alter-worlding'

posthumanist imaginers avant la lettre. Repurposing is key to such feminist posthumanities, regardless of whether it is previous philosophy, science or other social practices.

This historiographical method of rediscovery can perhaps be described as a 'game of cat's cradle' (Haraway 1994), or as a post-disciplinary modus of 'diffraction' (Barad) as it pushes the envelope, or 'unruly edges' (Tsing 2012), of what we might here call feminist posthumanities as it is brought in conversations with voices seldom heard. Such posthuman historiographies aim also, if the analogy is suitable, to create a 'calado' – a patch- and meshwork based on anything but poor forms of making-do. This method emphasises connectedness and limits to knowledge, it highlights where differences matter and matter makes a difference. And most importantly, it refuses progress narratives, teleology and scholarly hunts for the next new thing, while it acknowledges relevant pasts for the present.

'Posthumanities', the post-disciplinary modus operandi of related studies of the 'post-human', stands in such a view as more than the operationalisation of more-than-human scholarship (Whatmore 2002; Wolfe 2003, 2010). As intended with the prefix post-, it indexes, repurposes and builds on that which came before. Importantly, posthumanities work recognises the role of the non-human for the human of the humanities. It also ties together such political ontologies with more ethically sustainable epistemologies and post-disciplinary practices. For example, Wolfe defines his book series on posthumanities, mentioned above, as situated at a crossroads: instead of 'reproducing established forms and methods of disciplinary knowledge, posthumanists confront how changes in society and culture require that scholars rethink what they do – theoretically, methodologically, and ethically' (Minnesota University Press, online). Similarly, Haraway (2008) – who has no patience with the overdetermined notion of 'the posthuman' – nevertheless finds the term 'posthumanities' useful for 'tracking scholarly conversations' on the changing relationships between the human and non-human, culture and nature, technology and the body, and Other and Self.

The prefix 'post-' here thus does not signal any kind of end, but rather the inclusion or enrichment of the humanities in a perhaps counter-intuitive movement away from the conventional comfort zones of cultural critique and human-centred research at large. It questions and troubles human exceptionalism (Tsing 2012) and other normative forms of andro- or anthropo- or Eurocentric chauvinisms. As such, posthumanities, like the nomadic transversality of feminist analyses, may well translate and mutate into several bodies of thought across disciplines, while benefiting from, and contributing to, the analytical approaches developed within the humanities. From situated knowledge (Haraway 1991) and embodied and embedded starting points, to the important transcorporeality, that is, ecological flows between porous and susceptible bodies (Alaimo 2008, 2010) that make or break the living, these approaches make for rich analyses.

In short, as the 'human' of the humanities is entangled in intricate and asymmetrical relations of reciprocity with animals, microbiota and our environments, exceptionalist and supremacist assumptions of human nature seem increasingly difficult to sustain (Wolfe 2003). There is no self-contained individual human being to be held in position of mastery, no divide between nature and culture, no 'advanced' civilisation that masters the wild Others, and no universal humanism practised across the diversity of our species: there are only sociable natures and relations that matter.

For better or for worse, we all now inhabit the posthuman condition, a situation that complicates scholarship in the critical humanities (Braidotti 2013; Braidotti and Gilroy 2016). We therefore need to recalibrate the humanities' highly specialised analytical tools

for a wider set of phenomena. Feminist expertise on asymmetrical relations and their co-constitutive powers are particularly helpful here: care and curiosity, creativity and critique, imagination and concern, are what we now have to unlearn and learn anew as we transform the humanities habits from within.

Presented as such a learning-to-become-with practice, feminist posthumanities stand always as more than one possible response to the posthuman challenges to the humanities today (cf. Braidotti 2013; Sjögren 2016). We may obviously draw on a rich set of meandering feminist alter-genealogies or anti-colonial critique and cyborg studies (Haraway 1991), science and literature studies, queer theory, cultural studies (Franklin et al. 2000), situated knowledge practices (Haraway 1991), advanced sex-gender theorising, power-knowledge praxis, feminist pedagogies, and sexual difference theory. Some of these are, under different headings, quite long-standing scholarly conversations; some are more recent. Some are yet to come or are under rapid development, as seen in Matthew Fuller's special issue of *Theory, Culture & Society* on 'Posthumanities', where feminist and media ecological approaches meet to map the infrastructures of posthumanities. We, for our part, draw on feminist or pro-feminist lineages of all kinds. For instance, some of the long-standing theorisations of sex and gender (the nature-culture conundrum of feminist theory) trace gestures of denaturalisation, such as Donna Haraway's cyborg ontology, Judith Butler's dispelling of any heteronormative foundation of biological sex, Stacy Alaimo's influential postnatural form of ecofeminist studies, or Myra Hird's insistence on all organisms' inherent, cellular trans-sexuality. However, such feminist theorising also simultaneously traces the parallel ontological, bio-affirmative, or perhaps renaturalising, turn of feminist theory-practices exemplified by authors such as Elisabeth Grosz, Lynda Birke, Elisabeth Wilson, Vicki Kirby and Karen Barad, to name a few. In any case, feminist posthumanities are not post-biological (but insist on corporealities), yet firmly postnatural (Åsberg 2017).

Postnatural Feminisms: Realising the Humanities' 'Productive Surplus'

The postnatural feminist lineages suggest that nature itself (as an unrecognisable category to which we ourselves belong) is articulate, literate and proliferate, which puts a completely new demand on feminist post-disciplinarity and skill sets. If post-humanities is about recognising and acknowledging the company of predecessor thinkers or postnatural natures' own literacies, its practitioners may not always be found in the academic world. This may demand of us some strange conversations with other community-builders and knowledge practitioners who were there all along, but often stay unacknowledged (Åsberg et al. 2015). Feminist theory defends a partial vision that tries to stay clear of the Scylla of bulldozing universalism and the Charybdis of disempowering relativism in its inconsequential particularity. Instead, consequential matters, stories that matter, and matters that matter in different ways, are the political objects of feminist posthumanities analyses, and co-constitutive relations are the smallest common denominator of study (cf. Barad 2003; Haraway 2008).

We have seen feminists develop different forms of analytical accountability to a more-than-human humanities, the inhuman humanities (Grosz 2011), the posthuman humanities (Braidotti 2013) or feminist posthumanities (Åsberg 2008, 2021). Collaborative research practices thrive in multi-university teams such as The Posthumanities Hub (see <https://posthumanitieshub.net/>). They do so under various headings, including material feminisms (Alaimo and Hekman 2008), neo-materialism (Braidotti 2002), zoontology

(Wolfe 2003), the affective turn (Ahmed 2004; Koivunen 2010), new materialism (Coole and Frost 2010; Dolphijn and van der Tuin 2012), postconstructionism (Lykke 2010), material ecocriticism (Iovino and Oppermann 2014), ahuman ethics (MacCormack 2012), inhuman theory or feminist theorisings of the non-human (Hird and Roberts 2011), ecofeminism (Plumwood 1993), interactionism (Tuana 2008), queer ecologies (Mortimer-Sandilands and Erickson 2010), posthumanist phenomenology, vitalism and vibrant matter (Braidotti 2006; Bennet 2010), queer death studies (Lykke 2015; Mehrabi 2016), critical disability studies, and monster theory (see, for example, Shildrick 2001, 2009, 2019). Other frames include Irigarayan sexual difference, postnatural ecofeminisms, material-semiotics after Michel Serres, reproductive storytelling after Marilyn Strathern, cyborg studies after Haraway, or the ontological turn in science and technology studies in the wake of feminist science studies scholars such as Maureen McNeil and Lucy Suchman. It is precisely through such proliferation of analytical prisms that feminists are realising the 'productive surplus' of the traditional humanities that we identified in the Introduction – namely the relational, dialogical, porous structure of the humanities as a critical tool of orientation in the world.

As all kinds of post-disciplinary responses to the unruly worldliness that contradicts human supremacy, feminist posthumanities aims to discover our rhizomatic and multi-directional (Braidotti 1994) entanglements with each other. It points to a multitude of people, techno-science, global media, biotics, ecologies, animals, finance, land, and other lively matters for consequential but nonteleological purposes of storytelling in feminist scholarship. The purpose of such feminist scholarship is by no means to assert the capacities of non-humans at the expense of the differently situated humans, but to 'stay with the trouble' and enquire how we might, with some grace, be able to live together in more-than-human worlds (Haraway 2008).

The situation for feminist posthumanities today remains especially coloured by its legacy of feminist science studies and its insistence on the bio-curious creativity of feminist theory, as is evidenced in the works of feminist environmental humanities pioneer Stacy Alaimo, or in the transformative and alter-worlding works of Eva Hayward and her collaborations with feminist biologist Malin Ah-King. Gender, like 'genus' and 'generation' (Hemmings 2011; van der Tuin 2015), may well be remembered in this setting for how it has functioned in academic institutions: as an engine of discovery as much as a category of critique. Haraway's work, especially her figuration of the cyborg, with its insistence on a material-semiotic relationality that indexes our sense of belonging, stands out in any case as a particularly fertile starting point for feminist posthumanities.

Yet even in the 'always-already naturecultures' *modus operandi* that we highlight here, feminist posthumanities remains (after a long decade of fervid activity) a multi-headed response defined by its open-endedness, transversality, and its inter-, trans-, or post-disciplinarity. In fact, we insist that feminist posthumanities today is just one term for a response among many others. But it is one particularly suited to the age-old feminist question, within the authoritative annals of the humanities and sciences, of 'who gets to count as human, and at the expense of whom?' Our feminist thinking matters; it is a transformative device we may use to think other stories or matters with, as pointed out by Strathern (1992) and paraphrased by Haraway.

Storying Matters Between the Postnatural and the Posthuman

We have been arguing that nature is no longer separable from culture, and we simply cannot afford the luxury of thinking them apart (Alaimo 2010: 15). Instead, we must grapple with the larger question of how to deal with the implications of this complex entanglement: what kinds of ethics and critiques, arts and sciences, politics and methods, can account for the changes on spatial and temporal scales introduced by climate change or the emergence of the 'politics of Life itself' (Franklin, Stacey and Lury 2000; Rose 2001). And how can we produce valuable worldly accounts and still stay truthful to the specificity of each particular case and location? How can we deal with human accountability in an age of anthropogenic environmental transformations that some call the Anthropocene (or worse, the age of Man)? Can cultural critique rise to the challenge of these complexities and to the radical immanence of events unfolding, both in the world, in the discourse of the sciences, in the arts, and in theoretical practices? This everyday 'mangling' of science, technology, health and environmental concerns with popular culture, embodiment, policy-making and feminist critique demands not just new but generative approaches to both human and non-human subjectivity.

More specifically, the project of redefining the embodied posthuman or more-than-human subject enlists not only cognitive practice but also the resources of the imagination, affects and ethics. It also demands a renewed commitment to the political (Radomska 2016) and 'reworlds' ethics at large with its insistence on non-human facticity. Most importantly for our argument here, such a large theoretical and political shift of perspective could not fail to affect the institutional practices of the humanities. If the humanities today are to honour their location in the midst of this new and complex naturecultural continuum, they need to review what remains of their former attachment to 'Man' as the emblem of the vision of the human they intrinsically upheld and explicitly empowered (Braidotti 2013). Critical and creative feminist thought and practices of living with 'unsettled relations' (Thornham 2001) have a unique contribution to make to the repositioning of the human and the humanities in relation to the posthuman condition (Braidotti 2002; Åsberg, Koobak and Johnson 2011).

Attention to embodied subjectivities and the material structures of the imagination within feminist posthumanities therefore also entails a lively and re-enlivened attention to the conflicts and contradictions of planetary politics. Such an approach is necessary to our continued survival, as most feminist scholars understand. As Val Plumwood famously reminds us, 'We will go onwards in a different mode of humanity, or not at all' (2007: 1).

Finally, Feminist Posthumanities as a Strategy of Resistance and Change

If the posthuman (Braidotti 2013) and various posthumanisms stand as terms and philosophical challenges that aim to redefine the human in the light of deep-working social, environmental, medical and techno-scientific transformations of the twentieth and twenty-first centuries, the feminist posthumanities is the imperfect praxis thereof. Imperfect since there are no maps for these post-disciplinary territories. It stands also for an attempt at a different mode of humanity, as much as a different *modus operandi* of the humanities. In experimental ways, feminist posthumanities works to make the contemporary humanities integrative, transformative and relevant. It works through various subsets of material-semiotics and decolonising moves – such as new materialisms, feminist science

studies, and various ontological turns to ethics – and, like a rickety bio-machine oiled by collective feminist creativity, it works by acknowledgement of limitations, and of course some sly academic subterfuge, for its survival.

As an academic trickster figure of postdisciplinarity, feminist posthumanities can encompass human-animal studies, plant theory, corporealities, cultural studies, science and technology studies, medical humanities, media studies and digital humanities, educational sciences, child studies, post-Derridean or post-Foucauldian studies, art and crafts, gender studies, cultural geography, vegan philosophy, queer theory and unnatural sexuality studies, environmental humanities, heritage studies and much more.

We contend that feminist posthumanities (Åsberg 2008; Braidotti 2017) is but one strategic intellectual platform for these theory-practices. This strategic platform is broad enough to encompass areas, interdisciplines such as human-animal studies (Birke and Holmberg), cultural studies (Fuller), environmental humanities (Alaimo and Neimanis), digital humanities (Holloway-Attaway), medical humanities (Shildrick and McCormack), archaeology (Fredengren), musicology and art research (Tianen and Bolt); science and technology studies (Hird, Pérez-Bustos, Johnson, Roberts); posthuman studies (Lykke, Braidotti and McCormack); educational sciences, and feminist materialisms of various kinds (Lenz Taguchi and Barad). These currents testify to a thriving community of supradisciplinary research of great societal relevance from within, or around, the humanities.

Cognisant of shifting terrains in (and under) the contemporary humanities, feminist posthumanities works transversally so as to also withstand the tectonic shifts of neoliberal academia and cognitive capitalism, a third phase of capitalism, where accumulation focuses on immaterial assets and the virtualisation of economy, networked brains, property rights, and science as determiner of possibilities for innovation and collaboration, while at the same time altering everything living at an unprecedented scale (Braidotti 2017). Put simply, it engages with critical and creative pursuits that address our changing relationships between political animals of both human and more-than-human kinds, and among bodies, technologies and environments. Feminist posthumanities generally employs interdisciplinary or postconventional perspectives (Åsberg 2008; Braidotti 2017); oftentimes this is research that already thrives on the margins or outside of scholarly comfort zones. In an academic world of cognitive capitalism, feminist posthumanities create choreographies that insist on the creativity of indigenous, local but also planetary and feminist ways of knowing. Whatever it touches, it transforms, repurposes and alters, borrowing like a magpie to build nests in high places. It brings the material consequences back with a vengeance, and it insists on the worldliness of thinking at large. Philosophy, art and science stand here as corresponding concepts for the ability to enter into modes of relation (Braidotti 2017), to affect and be affected, sustaining qualitative shifts and creative tensions accordingly. Thinking is worldly practice, as pointed out by Stacey Alaimo. Thinking within the veins of feminist posthumanities also centres on a feminist ethic of relationality, care (Puig de la Bellacasa 2017) and difference (Braidotti 2006). Feminist posthumanities functions thus by what Braidotti has identified as a shrewd resistance to the gravitational pull of logocentric thought systems in academia and society at large, and by the vivid actualisation of transversal relations, nomadic subjectivities and multidirectional transpositions (Braidotti 1994, 2002, 2006, 2013). Thinking is indeed the stuff of the world (Alaimo 2014).

So is creativity, and the limitations that generate it. In the words of Anna Tsing, posthumanities is perhaps most clearly methodological in its insistence on daring ‘to tell the history of the world in a single sentence, or certainly a short essay’ (2012: 141). Like

Haraway, when she suggests we ‘read[] the organism like a poem’, it is about an immanent form of creativity in which we can take part. It is about materially embedded storytelling practices, about daring to acknowledge being not in the centre but in the midst of the world, while at the same time abhorring narcissism and self-absorption. The posthumanities as scholarly and more-than-scholarly practice is then about meeting and gracefully existing in the company of other sociable natures – human and non-human, feminist or not. Feminist posthumanities signals the go-ahead for cultural and science scholars to reject not only the nature-culture divide in theory, but also the division of scholarly labour it upholds and to practise research differently. As the feminist science studies tradition recommends, we cannot leave science to the scientists but must engage with it passionately and work to appreciate its changing nature from within. In addition, it invites scientists to explore further their storytelling practices and creative impetuses. In the interstices of science and art(s), posthumanities find wonder.

Feminist posthumanities, with its internal diversity, patchworked and mixed genealogies, is a field both mature and in its infancy at the same time. From the vantage point of minoritarian desires, where unmarked posthumanities as such already has succeeded in major ways, it aims to territorialise minor subjects at a greater scale and speed. In that sense, feminist posthumanities need now makes clear its affinities to the decolonial option, to other queer, crip or decolonial humanities opportunities. While ongoing as a core activity, this work is nevertheless still largely ahead of us.

Feminist posthumanities signals most importantly that we need a qualitative shift of attention. In these days of populism, Trumpism, nationalism and new right-wing movements that directly target feminist research, gender studies, the humanities and even whole universities [#westandwithCEU], it has become increasingly clear that the humanities need to go onward in a feminist mode of relational affinity and integration, or not at all. As a hybrid spawn of mixed conditionings, feminist posthumanities embraces the unknown: it thrives on xenophilia, as all academic research should.

Strange encounters are of course key to this endeavour, a willingness to expose oneself to the unknown, to alienation. Nothing remains natural or given, yet all is worldly and processual. Feminist posthumanities can contribute to what Gloria Anzaldúa termed an oppositional consciousness – a double vision of renaturalisation and denaturalisation – as well as postconventional community-building with scientists, environmentalists, and animal and body activists. It provides critical and creative re-toolings of the human sciences from their starting points in the embodied and embedded worldliness of knowledge. But it does certainly not stop at the borders of the so-called human sciences. Respectful conversations across disciplinary borders, processes of ‘rooting and shifting’ (Yuval-Davis 2017), might ensue at such crossroads. Feminist posthumanities is but one possible name for such encounters, as it rejects both extreme culturalism and naturalism, living instead in the transdisciplinary borderlands of the arts and sciences today.

A Trajectory, Not a Blueprint

Crucially, the prefix ‘post-’ of posthumanities does not, as mentioned, signal a terminal crisis or ending, but a generative shift of humanities research beyond its classical anthropocentrism: a reinvigoration of the field geared to the social, environmental and scientific challenges of the third millennium (Braidotti and Gilroy 2016). The ‘post-’ does certainly here not imply a post-feminist nor a post-biological stance (Åsberg 2009), but on the contrary, it signals both critical and creative framework for performative and genera-

tive accounts of techno-scientific or other naturecultural practices across disciplines and categories.

Feminist posthumanities may unfold into a series of subsets or rhizomic folds that both encompass and bypass each other. For example, human-animal studies, medical humanities, and environmental or ecological humanities (Squier 2004; Alaimo 2011; Rose et al. 2012; Rose 2015), as well as new media and digital humanities (as presented by Holloway-Attaway), have all generated new forms of posthumanities. They may thus engender feminist cultural studies with a transbiological twist or ecologically embedded ethics (Alaimo 2008). They may encompass human-animal perspectives in techno-science, marine life in musicology, or the ethnography of southern women's stitching technologies. In all cases feminist posthumanities means reaching out, becoming (k)nomadic (Cielemeńska 2015), and composing with others a missing population, standing like modest witnesses on the shoulders of giants, aiming to become accountable companions to troubled and rich intellectual heritages.

It also involves critical conversations between scholars differently invested with feminist knowledge practices and with different emphases. It thus entails also tensions and, we hope, attempts at inhabiting those tensions gracefully. Clearly, the 'feminist' of feminist posthumanities circumscribes not one feminist position or standpoint (Franklin et al. 2000) but a multitude of situated perspectives on the posthuman condition. It is our hope that they will be conducive to transversal alliances and continued conversations. In all its variety, feminist posthumanities encircles a premise in which to rethink human nature, and consequently practise the humanities, otherwise.

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