

Time and the posthuman: Rosi Braidotti and A W Moore on the posthuman and anthropocentrism after Deleuze's philosophy of time [draft v.3.0]

The aim of this essay is to bring Gilles Deleuze's philosophy of time to bear on an opposition between two recent ways of taking up his philosophy over the question of posthumanism.¹ One way, defined by Rosi Braidotti, adopts Deleuze's philosophy as a starting point for an exploration of a posthuman future which leads to posthumanism in the humanities. The other way, presented by A W Moore, develops a sympathetic interpretation of Deleuze's work, but then departs from it around Moore's claim that philosophy needs to be anthropocentric. I want to show how Deleuze's philosophy of time supports the posthuman approach and sheds light on the forms it might take. Thereby, this philosophy of time also provides rejoinders to Moore and to his defence of anthropocentric necessity.

The following passage from Braidotti's *The Posthuman* illustrates her argument and its connection to work by Deleuze and Guattari. I should stress that they are not the only source for her position and she draws on a wide set of philosophical, social, political, artistic and science-based examples and ideas. It could therefore be claimed that the connection to Deleuze and Guattari can be discarded or needs to be viewed as working alongside others. I accept both these possibilities. My point is about different ways of following on from Deleuze and Guattari, rather than a challenge to Braidotti's wider philosophy. In her reading of Deleuze and Guattari, Braidotti comments that:

Art, not unlike critical philosophy, is for Deleuze an intensive practice that aims at creating new ways of thinking, perceiving and sensing Life's infinite possibilities. By transposing us beyond the confines of bound identities, art becomes necessarily inhuman in the sense of non-human in that it connects to the animal, the vegetable, earthy and planetary forces that surround us. Art is also, moreover, cosmic in its resonance and hence posthuman by structure, as it carries us to the limits of what our embodied selves can do and endure. In so far as art stretches the boundaries of representation to the utmost, it reaches the limits of life itself and thus confronts the horizon of death. Rosi Braidotti, *The Posthuman* (Cambridge: Polity, 2013) p. 107

Deleuze's philosophy of time can explain the following ideas from this argument for the posthuman, 'intensive practice', the 'new', 'transposition beyond confines' and the 'passage to or beyond limits'.

An intensive practice is driven by the intensity of its affects, that is, the drives and emotions giving power and direction to more conscious acts. For instance, an art-form drawing on animal and human connections can be driven by the intensity of empathy. The way intensities function within practices is not bound by the idea that acts are strictly performed by humans, under any common definition of humanism. So to continue with the example, the affect of empathy transforms the human artist beyond

¹ For a fuller critique of Moore's reading of Deleuze see my article 'Deleuze, Moore and anthropocentrism in metaphysics', *Philosophical Topics*, 2016, forthcoming. For a full account of Deleuze's philosophy of time see my *Gilles Deleuze's Philosophy of Time: a Critical Introduction and Guide* (Edinburgh: Edinburgh University Press, 2011).

the boundaries of human existence and into the animal realm, while also drawing the animal towards the human.

New ways of responding creatively to contemporary problems and challenges can be explained by referring to Deleuze's ideas about the connection between revolutionary breaks and continuities in time. These continuities go beyond a location in any specifically human phenomenology; for example, actions in the present are passive contractions of past events which extend the human to animals, plants, and natural and technological spaces, because those actions are formed by joint evolution. As such, creativity involves transformations beyond categorical confines, such as predicates defining the human (for example, animal *capable of reflection*). It also involves transpositions beyond limits ascribed to members of such categories; for instance, around ideas of limited capacities, powers or functions. In the animal-human conjunction, humans and animals are given new powers which neither have when taken as a member of either the human or animal category; for example, when a Harris Hawk works with a human to control pigeon infestation, this work should be understood as forming a hawk-human assemblage. Or, to take a more technological assemblage, contemporary humans form assemblages with networked communication systems, such that human identity and affects should be seen as distributed through such systems, while the systems move into the human body and brain.²

Art, science, technology and philosophy take us beyond the limits of identity, body and representations of the human defined according to humanism. Thereby, they take us into a posthuman future, but this future should not be seen as a clean break with the positive and negative forces that came to shape humanism. This future is characterised as an extension of the human, and sometimes as a threat to it, but this does not imply that it is inhumane in terms of values and qualities. It is non-human in location; that is, in terms of limits and boundaries. It is not necessarily inhumane ethically or in terms of violence against other beings and life forms. Values will not be justified according to the priority of humanism, but they can be seen as extensions of values once seen as confined to humans, both as subjects of such actions and as drawing benefits from them. A simple human ethical responsibility is thereby replaced by a joint ethical task in a shared ecosphere; we move from questions of what is right for us humans to questions of how to care for an ecology as a complex series of interdependencies. For example, though some human values can be accused of leading to the exploitation of animals and ecologies, this does not mean that all humane values are to be abandoned. It is rather that they need to be transformed and distributed more widely beyond human actors and claimants.

For instance, there still needs to be an ethics about pest control using hawks, but this ethics must extend to include birds of prey and so-called pests as having ethical import alongside humans and in complex assemblages with them. Similarly, with the extension and distribution of the human through technological systems new ethical challenges arise such as the shift from direct responsibility, assigned to well-located identity, to more loosely defined and harder to control proxies, such as those found in

² The concept of assemblage, taken from Deleuze and Guattari's work in the two volumes of *Capitalism and Schizophrenia* among other sources, has been widely influential in new theoretical models. For a study of the concept, see Manuel DeLanda's *A New Philosophy of Society: Assemblage Theory and Social Complexity* (London: Continuum, 2006) esp. chapters 1 and 2.

internet defamation and flaming. It is therefore human supremacy, simple location and exceptionalism that are called into question here. This is important in relation to Moore's argument, since we must take account of the ethical dimension of Braidotti's position. The posthuman must not be equated with an unethical stance. For Braidotti the implication is quite the reverse. In order to be ethical in the age of the Anthropocene we need to move to a posthuman ethics.

It is helpful to consider some of the more standard philosophical objections to Braidotti's arguments; these point to why Deleuze's philosophy of time should be taken into consideration. Broadly, the objections concede that art and philosophy, and indeed modern technologies and modern scientific discoveries, place the human beyond boundaries defined by the body or brain. Technical extensions to human limbs and minds, through a wide range of machines and artificial intelligence, have taken humans beyond physical flesh and brain-bound thinking. However, this does not necessarily imply that body and mind in restricted senses aren't essential conditions for human existence. Neither, therefore, does it necessarily imply that the values we might associate with human limits do not apply to extensions beyond the human. The human might well be extended and placed beyond traditional limits, but this does not discount a role for those limits.

Human-centred narratives demonstrate how such traditional forms continue to be influential and perhaps even essential in a changed world. They describe and evaluate the ways in which extensions have enhanced human capacities *by humans and for humans*, for better or worse, in relation to their environment. This is Moore's central point. Narratives – including the posthuman one – are narratives by humans and aimed at humans. This argument can be split into the aims of the narrative and its form. It is by and for humans seeking to give a narrative line to their concerns. That's the aim. The narrative also takes linguistic and rhetorical forms that are humanist historically and in terms of their flavour and character. That's the form. It is therefore possible that the identities, bodies and representations that Braidotti seeks to move beyond are still present in contemporary narratives on the posthuman, including hers. In fact, Moore's claim is stronger than this. His view is that it is *necessarily* the case that narratives remain anthropocentric. This can be put very simply: our narratives are narratives for and about us. It is not a matter of choice, but analytical necessity that the subjects, aims and forms of narratives are human.

To begin to grasp Braidotti's response, we should consider her book as offering a distinctively posthuman narrative in both style and content. It is an account of a development towards a philosophy where the human is neither the sole audience, nor central character, nor source of value, nor foundation for the narrative. This might seem strange, since a book is aimed to be read by humans. That reaction is countered by the idea that humans do not exist as free-standing entities. Any book is taken up by, depends upon, and has effects across non-human and post-human assemblages. We can focus on the human reader, but the book is addressed to and enabled by much wider connections and transformations. On one level, there is the wide technology of printing and dissemination, reading aids and linguistic evolution. On another level, there are the ways books take their place in extended networks of influences and effects, such as the consequences of written recommendations on ecologies and the scene changes brought about by new affects and ideas (indeed humanism was one such

technological and bookish idea; we are still wrestling with its effects across many wider human, plant and physical environments).

The Posthuman invites us to move out into an ecosphere where the human no longer exists as a secure reference point and where ethical relations not only cannot rely on human values but must realise that much of the immoral and non-ethical events that have taken place over recent history demonstrate that human-centred actions have led to terrible violence not only towards humans but also towards animals, plants and the world. Ethical responses shouldn't be seen as dependent on maintaining anthropocentrism at the core or various kinds of enhancement and extensions. It is exactly the opposite, as humans are transformed they become hybrids and members of assemblages with dispersed ethical problems. This means that the idea of a human core and control becomes obsolete in relation to new forms of existence and narratives about the development and future of those new forms.

This leads to a strong context for the opposition between Braidotti's posthumanism and Moore's anthropocentrism around different requirements for a narrative adequate to our times. Following Moore, we could agree that our bodies and minds are inserted in complex external networks, but still insist that the reason we can say it, is that they are *our* bodies and minds. Similarly, we could accept that we live in coordination with wider natural and social processes, but also say that the reasons why we care and why we should care about them are that they are vehicles for necessarily human aims, values and intentions. Following Braidotti, we would accept that there are still recognisably humane ethical and narrative traits to our posthuman condition, but insist that ideas of human exceptionalism and existential priority fail to understand an essentially distributed and interdependent non-human reality.

For Moore, the step into the posthuman might be helpful as a way of describing our situation, but unhelpful in deciding about the deep reality of our identities and about how we should act in accordance with them. For example, in contemporary science fiction, though there are many examples of cyborgs in Cyberpunk literature by William Gibson, Pat Cadigan and Philip K. Dick, it could be claimed their fiction is still recognisably traditional in human ethical concerns and human-like actors. Indeed, famously in the case of *Blade Runner's* Voight-Kampff test, one of the most important narrative lines is around how to keep a human core and tests for humaneness with the rapid increase in the number and powers of cyborgs.³ Similar points could be made around plot lines involving the Borg and Seven of Nine in *Star Trek*, or much more humourously, the android Kryten ('I serve, therefore I am') in *Red Dwarf*.

For Braidotti, our bodies and minds, and our wider relations to animals and to other forms of existence, depend on connections which undo human identities and lead them into the posthuman, whereas Moore relies upon narratives around those identities to argue for his humanism and anthropocentrism. It must be stressed that this reliance is not to permanent and transcendent definitions of the human. His argument rests on changing and changeable accounts. The idea of the human can go through successive

³ As N. Kathryn Hayles points out in her work on the posthuman, in Philip K. Dick's original book version for *Blade Runner, Do Androids Dream of Electric Sheep?*, android simulacra of humans are not allowed into the human realm but are rather legally classified as objects. See N. Kathryn Hayles *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* (Chicago: University of Chicago Press, 1999) p. 169

and impermanent human narratives rather than conform to a transcendent and eternal definition of the human. Moore even allows for the possibility that we might become posthuman. His argument, though, is that we are a long way from that now.

Against this argument for anthropocentrism, Braidotti seeks to show that we are already in a posthuman condition because the wider connections that the human has plugged into, or been forced into, have eroded and replaced anthropocentric forms of existence and narrative. She also argues that this is a good thing. The connections and their displacement of a centralising human identity lead to the following manifesto for a 'nomadic' and 'posthuman' philosophy:

Very much a philosophy of the outside, of open spaces and embodied enactments, nomadic posthuman thought yearns for a qualitative leap out of the familiar, trusting the untapped possibilities opened up by our historical location in the technologically mediated world of today. It is a way of being worthy of our times, to increase our freedom and understanding of the complexities we inhabit in a world that is neither anthropocentric nor anthropomorphic, but rather geo-political, eco-sophical and proudly *zoe*-centred. (*The Posthuman*, 193)

The argument set out in *The Posthuman* depends on an inversion where a human inside and identity is projected outwards. It is driven towards and transformed by forms of life commonly defined as external to and different from the human, such as animals and plants, but also technological systems and machines.⁴ Braidotti demonstrates the strong interdependencies of human, animal and plant life. She shows how technological and geophysical factors determine and participate in posthuman existence. Any separation of the human from them must therefore be seen as an arbitrary and misleading claim to well-defined centrality.

An image for understanding the opposition between Moore and Braidotti would contrast a series of concentric circles, with a changing yet recognisably human core at their centre (Moore) and a constellation of shifting relations which form many different assemblages (Braidotti). She gives us a philosophy of multiple movements: towards the outside, across new open spaces, towards new possibilities and potentialities, in new assemblages and alliances with technologies, ecologies and animal and plant life. It is ethical through a principle of a search for worthiness, understood as the demand to act ethically within the new connections redefining our identities. When the performative contradiction of this position is drawn to our attention – Who acts ethically, if not humans? – Braidotti's response is to appeal to a 'qualitative leap'. It means that the actor can no longer be found in any human characteristic, or power, or faculty, since each of these has been taken beyond its boundaries by forces bringing them into new assemblages which cannot be severed in order to re-establish some kind of secure human actor. An analogy could be drawn to the question 'Who proves?' for computer-based

⁴ Donna J. Harraway's work is among the strongest in investigating the joint transformation of human and animal into new assemblages. See, for instance, *When Species Meet*, Minneapolis: University of Minnesota Press, 2008. In earlier work Harraway has also investigated posthuman cyborgs in an ethical vein that connects to Braidotti's ethical concerns around the posthuman, see Harraway's iconic and ironic manifesto 'Cyborg manifesto' in *Simians, Cyborgs and Women: the Reinvention of Nature* (New York: Routledge, 1991) pp 149ff.

proofs in mathematics. The answer is an assemblage of human and artificial intelligence does the proof. Neither human nor machine, but both: a posthuman intelligence.

When the image of circles with a relatively stable core is replaced by constellations and assemblages, the change goes right down to the idea of a stable human actor and of stable human values the actor is to be guided by. This means the difficult ethical problem is not how to ensure a human actor is worthy of encounters with others that demand a shift in perspective towards them, but rather whether these new assemblages can entertain ideas of worthiness or care when they are shorn of human actors. This problem connects to ethical challenges brought about by powerful, self-producing and evolving artificial intelligences. Why should such intelligences act in ways that are recognisably ethical? How can it be made so they do, when their evolution and self-production seem to make versions of Asimov's ethical Three Laws of Robotics redundant, because of the difficulty in programming them into autopoietic systems which can then reject them?⁵

Braidotti's claims and high energy style could lead to the conclusion that this new nomadic philosophy is one of extremes and of some kind of 'end-of-the-human' destructiveness, despite her claims to ethical worthiness. To understand why this is not the case, it is instructive to follow the stages and rhythms of those nomadic movements. The key here is in the expression 'embodied enactments'. Strong bodily and act-based relations provide a frame and scale for this posthuman philosophy, such that it is in no way empty of specific content and value. We need to be worthy of the new possibilities afforded by connections and potentialities for our bodies; for the way in which, for instance, we think about gender beyond the gendered legacies of Man in humanism, or think about animals beyond the hierarchies of Man, then beast. However, all this presupposes that the 'we' is no longer humanity but assemblages that include human elements but do not carry them at their core. The centre has shifted and this explains Braidotti's emphasis on *zoe*-centredness, the centre becomes a constellation out in the ecosphere.

Here, Moore's point about narratives returns with greater strength because, even if we can suppose that these assemblages are capable of ethical reflection and action, it is hard to envisage that they will have collective and effective narratives to support that action. What would the coherent 'story' be for such assemblages? Might it not founder on destructive tensions, such as different interests for different parts of the assemblage: animal, human and ecological? Moore's claims for the necessity of an anthropocentric sense-making are starkly at odds with Braidotti's account of a posthuman condition and arguments for a posthuman ethics. The opposition, though, is not principally about whether Deleuze and Guattari lead to a posthuman philosophy. He is in agreement with Braidotti about that conclusion. It is rather about whether philosophy can be posthuman given the current state of evolution of our metaphysical ideas, arguments and narratives.

⁵ For many cautions about the dangers and challenges of artificial intelligence and its surpassing of human intelligence, as well as a strong defence of the potential benefits of artificial intelligence, see Nick Bostrom's *Superintelligence: Paths, Dangers, Strategies*, Oxford University Press, 2014.

Moore makes the claim for anthropocentric philosophy as metaphysics in *The Evolution of Modern Metaphysics: Making Sense of Things*. The argument can be summed up briefly as following from two premises: first, that the evolution of modern metaphysics can be understood as an effort to make sense of things; second, that to make sense of things metaphysics must do so 'for us' where 'us' stands for we humans. Following from these premises, Moore concludes that metaphysics must have a humanistic aspect, understood as a need to be anthropocentric:

[Metaphysics] does nonetheless have a humanistic aspect; and it needs to be true to that aspect. Metaphysics may not be anthropological; but it does need to be anthropocentric. That is, it needs to be from a human point of view. It needs to be an attempt to make the sort of general sense of things that we its practitioners can appropriate as distinctively ours. Only then can it involve the kind of self-consciousness that it should. Only then can it enjoy the kind of importance that it should. Importance, where human beings are concerned, is importance to human beings. A W Moore, *The Evolution of Modern Metaphysics: Making Sense of Things* (Cambridge: Cambridge University Press, 2012) p 603

The Evolution of Modern Metaphysics: Making Sense of Things takes Deleuze as the accomplishment of a long line of philosophical sense-making, because of the emphasis Deleuze puts on the creation of concepts and because of the specific concepts Deleuze creates. However, this position is ambiguous because Moore is concerned that Deleuze takes metaphysics too far away from a necessary humanistic aspect.

To grasp fully the differences and stakes at play in Braidotti's posthuman and Moore's humanistic aspect, it is useful to see if the two positions can be brought close to one another. It is uncontroversial to note that Braidotti is in agreement with Moore where he lays stress on creation in metaphysics. It is less obvious, but equally important, to note how Moore has no problem with pushing the boundaries of what it is to be human. His humanistic aspect is open to evolution and to evolution through extension of boundaries alongside making sense of the human in sometimes radically different ways: 'In particular we should be open to the possibility that our metaphysics will one day no longer need to be anthropocentric.' (*The Evolution of Modern Metaphysics*, 604)

The first way of understanding the depth of opposition between Braidotti and Moore is through their contrasting appeals to philosophical necessity. There is a necessity to the human point of view in Moore. There is a necessity for an overcoming of that view for Braidotti. It is interesting to note that, for both, necessity follows from a state of evolution, but for Moore this evolution involves the slow and lengthy development of metaphysical sense-making, whereas for Braidotti it appears to be the rapid evolution towards a posthuman condition. I say 'appears to be' because although it might seem that the posthuman is a recent and fast development, this is itself an illusion if we suppose that the human has always been involved in posthuman assemblages.

For instance, in our dependence on and exploitation of animals and in our status as part of the animal world and as dependent on a wider ecosphere, we have always been posthuman. In that sense, we

might have thought that the Anthropocene was a relatively rapid development. In fact, it has been through a very long gestation that implicates and transforms the metaphysical narratives that Moore wants to appeal to. A similar point can be made in relation to technology. Scientific and technological extensions and assemblages of the human are not at all new. Take, for example, the assemblage of a seventeenth century ship with its dependence on new technologies in ship building, diet and food storage, exploitation of natural resources, farming, and mapping. Any human on such a ship was completely dependent on those technologies and exploitations of plants and animals, without them there would only be death. A similar argument could be made for early technologies such as writing, mathematics, the printing press or the domestication of animals. Technological and animal assemblages with the human are longstanding, not recent.

According to Moore, even though the meaning of the human changes over time, we maintain a human focus for our sense-making as this meaning evolves. Metaphysics should therefore remain anthropocentric, if it is to be true to its vocation of sense-making: '... we cannot oversee its becoming non-anthropocentric except by overseeing its evolution from something anthropocentric.' (p 604) Metaphysics needs to be anthropocentric because it can only make sense for humans if it evolves in a manner consistent with current ways of understanding humanity. For Braidotti, art and philosophy demonstrate how there can be no human centre for us to return to, not only because 'we' no longer exist as such a centre, but also because 'we' never existed as such. We are dependent upon distributed assemblages and we have always been 'out there' such that any effort to return to a human centre is a false representation of our place in a world. This place has always been posthuman but it now appears so all the stronger given the prominence of technological and ecological change.

Philosophy therefore needs to be posthuman, if we are to be true to our posthuman condition. For example, over time, the human has been defined in opposition to that which it is not (animals, barbarians, women, nature, technology) but this opposition introduces the non-human into the human core through this very effort at expulsion (rational as opposed to merely instinctive, civilised as opposed to savage, male reason as opposed to feminine passion, human dwelling and freedom as opposed to natural being and determination, human wisdom as opposed to mechanical calculation). The human was dependent on these false representations of non-human others from the very beginning, not only as that which had to be rejected as the foe that defined us, but also as sources of desire, drift, transformation and dependency for the human.

When Moore claims that our narratives must necessarily be anthropocentric he misses the way in which anthropocentric narratives have always been shaped by the non-human. They are not stories of anthropocentrism but accounts of joint struggles and co-evolution around the human, the non-human and the posthuman. In that sense, our narratives have always been posthuman, but have always been

driven by an interest in hiding that fact in order to celebrate human exceptionalism and purity. The human is not a narrative necessity but rather a political product and choice.⁶

This difference in accounts of necessity in metaphysics defines the stakes of the opposition. For Moore, though our place in the world demands creative responses, these must be considered according to a humanistic narrative about making sense of things and an account of what new conditions imply for what it means to be human: 'To substantiate that claim, some story needs to be told about how understanding the place of humanity in the larger scheme of things could in turn help humanity to live in that place.' (p 343) So if we return to the passage on the posthuman by Braidotti, according to Moore human identity, the human, embodiment and representational narratives must be returned to, even in posthuman moments. For Braidotti, the right movement is away from the human and towards the post-human. This is an ethical direction, in the sense of seeking to be worthy of new conditions.⁷

Deleuze's philosophy of time as a critique of anthropocentrism

Deleuze's work on time appears in different forms across many books over the full length of his career. There is work on time in his early studies of other thinkers, such as Kant, Bergson and Nietzsche. There are two related versions of a philosophy of time in *Difference and Repetition* and *The Logic of Sense*. There is work on time in the cinema books, in particular around Bergson. In this short study, I will concentrate on *Difference and Repetition* and Deleuze's description of time as three syntheses of time which include one another as dimensions. For example, the present is defined as a passive contraction of the past and the future which in turn are to be thought of as passive syntheses in their own right.

The task for this study is restricted. It is to show that Deleuze's philosophy of time, as developed in *Difference and Repetition*, can help us adjudicate between different takes on anthropocentrism in philosophy. The aim is to decide between appeals to necessity: to the necessity of an anthropocentric narrative and to the necessity of a posthuman future. This means that Deleuze's philosophy of time must help decide between the idea that the human is still a necessary and plausible foundation for metaphysics, and the idea that the human needs to be replaced by the posthuman. It could be argued that it would have been better, here, to refer to Deleuze's work with Guattari, since *Anti-Oedipus* and *A Thousand Plateaus* are more directly about anthropology and ideas of the human and posthuman. I do not deny that claim, but my purpose is different. I want to show that even at the most metaphysical

⁶ The thinker who has done most to demonstrate this historical and political construction of the human as contingent rather than necessary is Michel Foucault, most notably in *The Order of Things: Archeology of the Human Sciences* (London: Routledge, 2011).

⁷ Patricia MacCormack has argued for such a posthuman ethics based on readings of Spinoza and Deleuze and Guattari: 'Ethical encounters with liminal bodies (of which our own is always one) are good for [expanding the body and allowing the other to be]. It is an act of love between things based on their difference.' Patricia MacCormack *Posthuman Ethics* (London: Routledge, 2016) p 4

level of the philosophy of time, Moore's claim for anthropocentrism fails, if we follow Deleuze's ideas on time and ontology.

Braidotti and to Moore's arguments have an historical frame: the evolution of metaphysics and the necessity for a human core to the narration of this evolution, for Moore; the contemporary posthuman condition and its effects on the transfer beyond the human and into the non-human, for Braidotti. In *Difference and Repetition*, Deleuze's relation to history is complicated because his work combines transcendental philosophy, with its non-historical elements, and empirical philosophy, with its historical immersion. This means that although history has a role to play, it is as vehicle for contingent facts rather than a formal role. Any given historical epoch or trend plays a role within a transcendental formal frame, but this role is not fully determining because transcendental arguments add formal determination to contingent historical information. This means that though history provides evidence for philosophy it must also be taken in accordance with a prior transcendently deduced frame. For example, for Deleuze, the future is defined as a passive synthesis that introduces a cut into the present independent of any empirical historical observation. Every historical epoch is open to such cuts. We are always amidst the new, independent of the particular historical state we are in.⁸

This implies that arguments from history are incomplete and open to revision on non-historical grounds. For example, Deleuze's work on philosophical ideas pays very little heed to the history of ideas as chronological and historically grounded practice. Instead, his arguments take place in a metaphysical realm where ideas jump across historical times and periods. Philosophy, while historical, is also outside history and determines it. The strongest sign of this is in Deleuze's work on ideal problems; for instance, in *The Logic of Sense*, where the actual historical side of events is conditioned by a virtual problem outside historical time. This is the reciprocal determination of ideal virtual time and actual physical time that is central to Deleuze's model for reality in *Difference and Repetition* and *The Logic of Sense*. In the language of *The Logic of Sense*, the reciprocal determination is between Aïon or the time where every event plays out in eternity across the past and the future, and Chronos or the time where the past and future are concentrated in a physical event such as a wound or mixture of incompatibles.

For example, the event of humans living with artificial organs, like mechanical hearts and kidneys, is not only a concentration of past efforts in medicine and the opening up of new possibilities for the human. Past research and failures lead to and come to fruition with *actual* successes in the present. Future research is directed and opened up by new breakthroughs. However, this event is also a transformation back in time, of *ideas* about the human such as the values assigned to organs and their specifically human 'humours', and forward in time, with the *idea* of a non-human cyborg taking on human functions

⁸ The transcendental interpretation of Deleuze's work, in particular in *Difference and Repetition*, has been developed by Anne Sauvagnargues, Dan Smith and Henry Somers-Hall, among others. Anne Sauvagnargues, *Deleuze: l'empirisme transcendantal* (Paris: Presses Universitaires de France, 2009); Daniel W. Smith *Essays on Deleuze* (Edinburgh: Edinburgh University Press, 2012) and Henry Somers-Hall *Deleuze's Difference and Repetition: an Edinburgh Philosophical Guide* (Edinburgh: Edinburgh University Press, 2013). I discuss these recent interpretations of Deleuze in the second edition of my Gilles Deleuze's *Difference and Repetition: a Critical Introduction and Guide* (Edinburgh: Edinburgh University Press, 2013) esp. chapter 8

and attributes. So there is a reciprocal determination of the actual and the ideal, of the virtual and actual, since the virtual gives value to the actual and the actual determines those virtual ideas. Ideas inform the intensities of attraction and repulsion, of fear and hope, around a scientific breakthrough. Whereas the actual sets off new lines of changing intensities in the virtual; for instance, an actual invention and the shock accompanying it force a reassessment of past and future ideas.

Reciprocal determination is important in relation to the question of the posthuman for two reasons. First, Deleuze gives us a process account of time. It means that we have to think of the human as a process and one that goes much wider than even flexible definitions following from a given narrative. This can be seen in the description of times as passive syntheses. The present as synthesis is made by contractions. For example, a sense of urgency in the present depends on relative speeds of contraction of the past, because urgency is relative to the habits and speeds we have become used to and acquired. If repeated past actions are overcome by an unexpected acceleration in the present, then this process changes the nature of present time; it gives a sense of time as pressing. We experience this very directly when we master a difficult task. At first it seems clunky and demanding, but then becomes fluid and automatic. However, this is only one strand of time among many others. Time is a manifold of such processes and each one extends humanity and each individual human forward and back across many times. Narratives giving us a sense of human identity allow us to make some sense of this manifold, but only by reducing a more complex and extended reality. *In time, we are always pre-human and posthuman, even if we tell ourselves stories to render those facts more manageable.*

Time is not a representation of a space on which processes occur, a line of time, for instance. Time is not a container for actual or virtual processes, such that they could be said to happen in time. It is the opposite, time happens through actual and virtual processes. There is no independence of time from constitutive processes which could legitimate a free-standing representation or realm which could stand as the place where events happen. So, second, it is not only that time is made by processes but also that all things are determined by this making of time. All things are actual and ideal passive syntheses of time. So in the same way as we cannot decide to live outside time, nothing exists independently of time as manifold process. If the present is a process of contraction of the past and the future, so are all things. For example, a new technology such as a heart pacemaker must be understood as a contraction of past research on pacemakers and a change to the future of heart technologies.

For Deleuze, there is no limit to these contractions, to their past as passive synthesis of all of the past, or to the future as cut, seriation and reassembly for all times as expressed by the thing. By seriation and assembly he means that the new alters the way time is ordered in competing series; for example, in the way a new discovery changes the importance given to a discredited line of research. He also means that *all* processes are assembled in a different way; for instance, when a new way of thinking about gender not only changes our views of sex and gender, but also family, marriage, ideas of masculinity, femininity, strength, weakness, passion, abilities, fashion and so on. This means each thing must be seen as a process that transforms all of the past and all of the future in an individual mode, and this mode is multiple according to the different ways it involves syntheses of time. In short, and in support of the

idea of the posthuman, time is much more revolutionary, complex and multiple than humanist narratives allow. We are constantly being remade as posthuman individuals and groupings.

If we combine these points, we get a fairly simple proposition for our work on the posthuman: *humans are made by the manifold processes that make times and these processes are necessarily pre- and posthuman*. Once we describe processes on the basis of Deleuze's philosophy of time in *Difference and Repetition*, we are in a position to reflect critically on the opposition between Braidotti and Moore. However, before going into the detail of the philosophy of time it is important to add a rider to the notion of 'made'. Deleuze's philosophy gives us a set of formal conditions for how humans must be made with times defined as processes. It does not provide the specific ways this can occur. We are given a frame, but not its specific content for individual situations. This is a weak transcendental and formal type of determinism, rather than a strongly causal one. It provides a necessary frame but no necessary individual content.

The proposition about human and times is important because it means that each human is not a well-located individual belonging to a species, or even an individual identified loosely within a broad definition or narrative about the human. Instead, each human is an individuation or a series of processes over all events and times. In that sense, each human is always posthuman in participating in many non-human processes – past, present and future.⁹ For Deleuze, when something becomes habitual in the present it involves a passive selection of all past movements to greater and lesser degrees. A throwing action in the present involves sometimes slight, sometimes quite large variations which take past repetitions and set them in a new line, a new contraction of the past. So the past series is passively selected in a process. There can be an activity in the present; for instance, a decision to emphasise some part of the throw, the follow through, say. However, beyond that activity the overall effect through time is a synthesis outside the control of past and present activity, because action is also habit – a passive synthesis. Thus, if we say that a given sport has shaped a throwing action, we should also say that technologies and human-animal interactions have done so too. Like human affects, human actions and ideas are distributed because they are syntheses. They are pre- and posthuman.

For Deleuze, there are three syntheses of times which can take themselves and each other as dimensions. This leads to nine different processes as syntheses of time. We have a combination of each time with the others and with itself: present by present, past by present, future by present, past by past, present by past, future by past, future by future, past by future, and present by future. The definition of processes of time as passive syntheses places human activity in a secondary relation to passive syntheses that condition it. According to this philosophy of time, an anthropocentric philosophy based

⁹ It is important to distinguish the holistic posthuman of one posthuman system and Braidotti's pluralist posthuman related to the pluralism of Deleuze's philosophy of time. We should think of many times and many posthumans, rather than of one interconnected posthuman system. Claire Colebrook makes this point forcefully in relation to the critical role played by Braidotti, Deleuze and Guattari against monistic humanism and posthumanism: 'The posthumanism of which Braidotti is critical is of a single-system where all observations can be grounded on a single self-expressive living whole' Claire Colebrook, *Death of the Posthuman: Essays on Extinction, Vol. 1* (Ann Arbor: Open Humanities Press, 2014) p166

around the priority of human activity and decision making, or on its independence and freedom, cannot be valid. The human will always presuppose passive syntheses that go beyond human activity and cognitive representation. There will always be more to humans than the accounts they can give of their decisions and the knowledge on which they are based. There is a posthuman background to such decisions and to such knowledge. This background is a condition for them, even when they seek to deny it.

Free will or an independent act presupposes passive syntheses. Where Moore claims that we narrate and make sense of things for us, Deleuze's philosophy of time gives the rejoinder that when we make sense we are conditioned by other passive syntheses, such as past repetitions leading into habits of thought. This implies that it is false to claim a necessity for that narration as anthropocentric. The expression that when we write we are also written captures this passivity and extension beyond our actions. Braidotti is right to emphasise that we need to narrate the real processes that go beyond and undermine accounts of human identity or exceptionalism. We do not simply narrate for us. When we make sense, we are also being made sense of. When we think the narration is for us, it is also directly by and for others, for all the series synthesised in and around us. Once again, this confirms the projection of the human out into a world such that the priority of the human as some kind of centre for judgement and value is reversed.

In Deleuze's philosophy of time, the nine processes of time are interrelated such that everything presupposes each of the syntheses. This is significant for the argument because it extends the number of ways in which the human can be taken to presuppose processes connecting it to the non-human; for instance, as a synthesis of the past and future in the present, or as a synthesis of the present and the past through the cut made by the future. This supports Braidotti's position more than Moore's because his claim for an anthropocentric metaphysics depends on some kind of limited definition of Man, even if this changes over time, whereas Braidotti's argument stresses the extent and depth of the connection of humans to the non-human across a much wider and more eclectic set of beings, times and locations. According to Deleuze's philosophy of time this extension is very large indeed, as can be shown through a closer study of each of the passive syntheses.

We can see the limits imposed by Moore's position in his appeal to human self-consciousness as a remedy for catastrophic errors in metaphysics: 'The failure in some of these cases is a failure of due self-consciousness.' (*The Evolution of Modern Metaphysics*, 602) The counter-argument is that this self-consciousness is not there to be able to fail. There is no free-standing self-consciousness in the present that can consider its past and narrate it and take account of that for its future. Instead, the present is conditioned by the past and by the future such that consciousness is always taken beyond its boundaries and cannot take on the role of reliable form of reflection and barrier against error. That's not to say that we should not reflect or be self-conscious. It is to say that the fact that we do so – and that this can be beneficial for us – does not support the conclusion that metaphysics needs to be anthropocentric. This is because we also need to take account of how consciousness is non-human and beholden to the non-human.

Towards the end of her book, Braidotti criticises the over-privileging of consciousness in a series of questions which follow from her situation of the human in relation to environment, technology and animals:

What if consciousness were, in fact, just another cognitive mode of relating to one's environment and to others? What if, by comparison with the immanent know-how of animals, conscious representation were blighted by narcissistic delusions of transcendence and consequently blinded by its own aspirations to self-transparency? What if consciousness were ultimately incapable of finding a remedy to its obscure disease, this life, this *zoe*, an impersonal force that moves us without asking for our permission to do so. *The Posthuman*, 193

Two linked moves take place in these questions. First, the priority assigned to human consciousness is criticised given its situation within and interdependence to other modes of relation. Second, human consciousness is seen as incapable of resolving its deepest problems, its finitude and being-towards-death. Unless it is extended into the posthuman, human consciousness cannot correctly address its own relation to death or its relation to the death of others.

Deleuze's account of time is a deep critique of the privilege given to any human present and not only the present of consciousness. He stresses the interconnectedness of times and their chaotic and non-linear relations:

Between successive presents, it implies non-localisable links, action at a distance, systems of replay, of resonances and of echoes, objective chance, signals and signs, roles transcending spatial situations and temporal successions. Gilles Deleuze, *Différence et répétition* (Paris: Presses Universitaires de France, 1968) p. 113 [my translation]

The manifold nature of time and the way in which it connects successive presents is such that a series of disparate relations between times is constantly altering them. This ongoing determination and transformation undermines claims to priority for any given present – for instance of human consciousness – exactly because its spatial and temporal location is conditioned by kinds of event reflective consciousness is supposed to avoid: 'action at a distance', 'non-location', 'resonances and echoes', 'chance', 'signals' and 'signs'.

It is because time is a manifold of processes transforming all things in wide and multiple ways that it makes no sense to appeal to some kind of anthropocentric necessity. The centre does not exist except as an illusory way of telling a humanist story. The story is false and damaging, even if it is sometimes reassuring. In time, we have always been posthuman.

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