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Critical Post-Humanism as Problematic: Epistemological, Ethical, and Teleological Gestures for the Future of Post-Humanity

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A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Theory and Criticism

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Abstract

This thesis centres two research questions. First, are the principles of critical post-humanism consistent with its aims? Second, if the principles of critical post-humanism are inconsistent with its aims, what might constitute a veritable post-humanism? I begin by diagramming the stated goals of critical post-humanism, tracing its ‘ethico-onto-epistemological’ conceptualizations—a connected ontology, relational epistemology, and situated ethics—in contradistinction to Kant’s transcendental humanism’s commitment to a separated ontology, reflective epistemology, and deontological morality. Building out from this point, I question whether these commitments are sufficient in the pursuit of a post-humanist philosophy. Focusing on the realm of political ontology, I argue that the promotion of connection, relation, and situatedness can already be found in the ethico-political commitments of Hegel, a thinker many align with the problems of humanism. It follows that, in addition to its initial goals, critical post-humanism requires further—and more thorough—critiques of Kantian-Hegelian rationalism and teleology. The critique of rationalism is explored through the development of a post-humanist ‘ethics’ that would be both non-universal and non-rational. To do this, I highlight work focused on bodies and embodiment, asking what a physiological ethics might look like for critical post-humanism. The critique of teleology, in particular Hegelian teleology, is explored by way of Gilbert Simondon’s anti-hylomorphic philosophy. Drawing out the role of formal and final causality in the latter parts of Hegel’s *Science of Logic*, teleology is understood as akin to hylomorphism. Together, these discussions centre the question: is it possible to determine a normative position or political ontology without an appeal to ends [*telos*]? This question continues to reverberate through the close of the thesis, which focuses on questions of race and inclusion in critical post-humanism.

Keywords: Continental Philosophy, Critical Posthumanism, Embodiment, Entanglement, Epistemology, Ethics, Hegel, Kant, Ontology, Simondon, Teleology

Summary for Lay Audience

During the European Renaissance and Enlightenment, the ‘human’ became increasingly central to the way people thought about being (i.e. ontology), knowing (epistemology), and morality. Where God had once been the standard by which these values were measured, the human being increasingly took God’s place. This constituted a shift from theocentric models to human-centric models, or ‘humanism.’ However, within humanism not all humans were counted as human. Most populations—those who were non-white, non-male, non-heterosexual, etc.—were not included as the arbiter of measure but were instead designated under the category of ‘things.’ As designators of value, humans were understood as separate from ‘being’ or ‘nature.’ This allowed humans to both accurately represent non-human ‘things,’ and justified their domination of those ‘things’ towards human ends. In many ways these ontological, epistemic, and moral ways of thinking remain in place today. Inspired by a multitude of critical discourses, some theorists have suggested that it is necessary to overcome humanism by pursuing a post-humanism. Post-humanism would replace the ontological, epistemological, and moral values of humanism with more relational, caring, and respectful values. This thesis works to both draw out these alternative values before questioning whether they are sufficient for escaping humanism. I focus on issues of rationalism, ethics, finality, and inclusion.

Acknowledgements

The writing of this thesis, and my doctoral studies as a whole, has been an immense experience. The start of my doctoral program began in September 2020, approximately 6 months into social isolation in the midst of a global pandemic. The reality of doing a Ph.D. in a pandemic likely emphasized the sense of isolation already endemic to this sort of work. To make matters more difficult on myself, the majority of this text was written during my first year as a father. I do not believe I have ever experienced something so difficult as trying to write a thesis while being the primary care giver to an infant amidst my wife's return to work, numerous daycare closures, and the expected lack of sleep.

To begin, I want to thank the Social Sciences and Humanities Research Council of Canada for their financial support over the course of this thesis. That support both provided me the confidence to continue to do this research and provided the sustenance for its continued pursuit.

There are numerous people at the Centre for the Study of Theory and Criticism who enabled this work to be completed. Foremost, I would like to thank my supervisor Dr. Nandita Biswas Mellamphy. Working with Dr. Biswas Mellamphy as both a co-writer and supervisee has been a joy. Her pointed but generous feedback has enabled my interrogation of these ideas in a precise and succinct manner. Over the course of my M.A. and Ph.D. studies, she has taught me how to write through what I would describe as an apprenticeship in transdisciplinary research. Next, I would like to thank Dr. Nick Dyer-Witheford, whose feedback on my thesis has both strengthened the work as a whole and provided me with the confidence to go forward. I also would like to thank Dr. Allan Pero for both his time as the director of the Theory Centre and for his unwavering support of my studies. Special thanks to both Dr. Helen Fielding and Dr. Joshua Schuster for their support as directors of the Theory Centre. I want to thank Dr. Michael Gardiner, Dr. Peter Schwenger, Dr. Tilottama Rajan, Dr. Regna Darnell, and Dr. David Janzen for their innovative courses, which

pushed the limits of my thinking in inventive and original directions. Finally, special thanks to Melanie Caldwell for their continued support throughout this thesis and my time at the Theory Centre. Without their unwavering ability to answer any number of my emails during the course of this work, I certainly would not have finished.

Over the course of my time at the Theory Centre, I have had the pleasure of engaging with a community of supportive, innovative, and ingenious individuals. Special thanks to Jeremy R. Smith whose resolute friendship has enabled our continued collaboration despite a great deal of ongoing theoretical disagreement! Further thanks for Christina Burke, whose friendship and conversation has often kept me sane within the chaos of this discipline. Many thanks to my colleagues at the Theory Centre, including Christopher Austin, Michael Bodkin, Kathryn Carney, Peter Heft, Won Jeon, Jennifer Komorowski, Virkam Panchmatia, Payoshini Pandey, Eric Shepperd, Nick Wees, and Andrew Woods. Additionally, I'd like to thank colleagues and friends who provided encouragement and support including Amy Allen, Debayudh Chatterjee, Soumya Dasgupta, Harriett S. Hughes, Ziyana Miché Lategan, Jared Miller-Price, Siraj Sindu, Yumi Shiroma, Kristian Olesen Toft, and Mary E. Witlacil. Further thanks to those who have, knowingly or unknowingly, supported my journey towards this degree in some way, including J. Adams, Levi Bryant, Kevin R. den Dulk, Lisa Nathan, Heather O'Brien, and Mikael Pelz.

I'm incredibly grateful for my family's support throughout this process. Thank you to my father, Gordon Vangeest, and siblings, Anna and Ari Vangeest. Special thanks to my mother, Anita Vangeest, for being willing to talk through life stuff at any point that I needed. Thanks to my grandparents, Johan and Hilda Tamming, for inspiring my love of learning from a young age. Further thanks to my mother- and father-in-law, Dale and Bonnie Oliver, for their help with food and childcare despite the seven hour drive up to Portland.

My dog, Slavoj Levin, deserves a special mention. A constant stalwart and loyal companion throughout the turmoil of COVID-19, moving from California to Oregon, and having a baby, your presence has been a constant comfort.

To Johan Oliver, I owe you all the thanks and love in the world for coming into my life during this process. I could not imagine life without you, and I thank you for your constant cuddles, your insistent laughing, and your love of jokes. You make all of this worth it.

Finally, my unconditional love to Margot Oliver. Without your love and support nothing I do would be possible. Thank you for giving me the strength and courage to complete this work. You are the foundation of all I do, and I couldn't imagine doing it with anyone else.

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Preface

Why did I decide to write a thesis on post-humanism? I was originally introduced to post-humanism by Lisa Nathan while studying for a master's degree in library and information studies at the University of British Columbia. I had recently picked up a book called *A Thousand Plateaus* and was interested in ways that it might intersect with theories of information. Nathan suggested that I read Haraway's 'A Cyborg Manifesto,' which led me to read both Chela Sandoval's *Methodology of the Oppressed* and Rosi Braidotti's *The Posthuman*. At the time, I found these texts invigorating: thinking through the intersection of not only humanity but also plants, animals, and technology. I slowly moved away from these works. I got married, moved to Detroit, and began a second master's degree at The University of Western Ontario. Upon the completion of that degree, which culminated in a thesis on Nietzsche, Deleuze, and the non-philosopher François Laruelle, I wanted to study something slightly more tangible. Beginning my doctoral studies at the start of the COVID-19 pandemic, my wife and I relocated to Eureka, California, which is about a 30-minute drive from Redwood National and State Parks. Given this location, and a romantic desire to 'reconnect with nature,' I initially proposed a study titled "Speculative Arborescence: Ethics of the coastal redwood." Looking back at my SSHRC proposal on this topic, I am touched by how much of that initial vision remains here. As I wrote at the time, an "ethics of the non-human must start with treating the non-human as radically Other—as Stranger, as Alien, as Fugitive." My position then, as it is here, stressed a certain exogenous and alien dimension of the non-human, one which recognized the human hermeneutic field as shrouded by humanism and anthropocentrism. While this early centring of the coastal redwood did culminate in my article, "Forest Semiosis: Plant Noesis as Negentropic Potential," I became increasingly frustrated with how these issues were framed in the literature: most notably in works that drew heavily from the very works in 'post-humanism' that I had been introduced to at UBC. As a result, I decided to centre my research around a more abstract focus: the

body of scholarship called ‘critical post-humanism.’ As an early attempt to work through this literature, my essay “Philosophical Health in Entangled Cosmopolitan Posthumanism,” thought through the return to a universalism by way of a more entangled *eudaimonia* or ‘post-human flourishing.’ This essay marked my first attempt to think critical post-humanism in relationship with and distinction to the work of Gilbert Simondon. From this essay, I began to think through both the tendency of critical post-humanism to repeat certain positions that it claimed to critique *and* to consider the realities that would be necessary to instantiate in order to overcome these tendencies. These two considerations are largely the foundation of the work that follows: to both think through the latent humanism of critical post-humanism and speculate on the potentiality of a veritable post-humanism.

In some ways, this thesis treats ‘critical post-humanism’ as an exemplar for what I see as problematic tendencies in the contemporary humanities and work in ‘theory’ more generally. For instance, the push towards what I term a ‘constructive methodology’ could be taken as part of a general trend in contemporary theoretical scholarship, which seeks more affirmative (and less critical) engagements with theory. Similarly, the attempt to ‘re-write the human’ brings to mind the continued rhetoric of ‘thinking differently’ and ‘imagining new possibilities’ that appears endemic to so-called critical scholarship today. While these critiques may one day be generalized, my claims in this thesis should only be taken as specific to critical post-humanism and its interlocutors. Any promotion towards a more general critique is only a bonus.

I feel it is important to mention this relationship with both critical post-humanism and critical-theoretical scholarship more generally, given the largely critical aspects of this thesis. I want to emphasize that I am critical of this scholarship not because of any grudge, but because I want it to succeed. The aim of critical post-humanism—to promote a more ecological and relational alternative to the dominating and destructive tendencies of humanism—is one that I am wholeheartedly

sympathetic to. As a whole, I find this scholarship to be refreshing and revitalizing. It is work that needs to be done. As such, while I am largely critical of the way that critical post-humanism has been put forward, my critique is never an attempt to dismantle or destruct critical post-humanism nor its aims. My aim, if I should be so bold as to claim an aim, is to embolden and strengthen the project of critical post-humanism, to provide it grounds for future development and further exploration. I want to feel as invigorated by this scholarship as when I was first introduced to it, because its critique is necessary, useful, and beneficial. My critique merely aims to provide the ample grounds which, much like compost, would allow that scholarship to bloom.

This project is funded through the Social Sciences and Humanities Research Council (SSHRC) Joseph Armand Bombardier Canada Graduate Scholarship (GCS) Doctoral Scholarship.

Introduction, Have we ever been separated?

Is it possible for ‘humanity’ to escape or emancipate from ‘humanism’? ‘Humanism,’ as I use it here, is an ‘episteme’ that centres the ‘human’ as the ontological, epistemological, and moral nexus of value. The ‘human’ is taken as separate from and determinate of ‘nature.’ *Episteme* is the ancient Greek term for knowledge, from which we get the term epistemology. In *The Order of Things*, Michel Foucault used the term ‘episteme’ to describe an ‘epistemological field,’ which determines the ‘conditions of possibility’ in a historical age.¹ As episteme, humanism determines the ‘conditions of possibility’ in this age. Sylvia Wynter tracks the development of humanism as the current, racialized episteme. Her work maps the way humanism crystalizes racial distinctions, determining who counts and does not count as human.² The history of humanism contains many populations who have not fallen under the European concept of humanity as it was developed in the Renaissance and Enlightenment periods. As far as it is possible to think before or co-currently ‘outside’ humanism, it may be possible to think past or post-humanism: to move beyond the confines of humanism’s various impositions. It is worth noting, however, that setting the discussion up in this manner already risks falling back into the purviews of humanistic modernity. For instance, Bruno Latour suggests that modernity works through both the Kantian separation of humans and peoples from nature and things, while adopting what he calls “the double task of domination and emancipation.”³ Attempts at emancipation from this ‘modern constitution’ ultimately reinforce modernity’s double task. Because modernity sets out the task of emancipation, any attempt to emancipate from modernity remains thoroughly in modernity. As a corollary, the attempt to emancipate from

¹ Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, trans. Unknown (New York: Vintage, 1970), xxii.

² Sylvia Wynter, “Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation—An Argument,” *CR: The New Centennial Review* 3, no. 3 (Fall 2003), 318. <https://doi.org/10.1353/ncr.2004.0015>.

³ Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge: Harvard, 1993), 10.

humanism remains thoroughly modern and thus thoroughly humanistic. For Latour, to engage in a project of emancipation from modernity requires stepping outside the confines of emancipation. This requires that one withdraw from modernity's error: not to think *post*-modernity but instead to realize that 'we' have never been modern. 'Critical post-humanism,' which is at the centre of the study at hand, adopts a framework resonant with Latour: an appeal to emancipation from the conditions of humanism by recognizing humanism's errors. Coined by Jill Didur, 'critical post-humanism' is not the overcoming of the division between 'human' and 'non-human' (or 'nature' and 'culture') but instead "questions the view that there was ever an originary divide between these things in the first place."⁴ The term 'critical,' here, designates a separation from prior notions of 'post-humanism' (such as those developed within transitional humanism). Drawing from Didur, Stefan Herbrechter describes the term 'critical' as serving a 'double function': both open to technocultural change and engaged with critiques of humanism and the humanist tradition.⁵ Following these thinkers, critical post-humanism is something of a misnomer. Rather than moving *beyond* humanism, or *beyond* the human, it seeks to articulate the ontological refusal of humanistic separation: to claim that 'we' have never been separated.

For scholars working in critical post-humanism, the central issue of this episteme can be traced to humanism's ontological, epistemological, and moral outgrowths. For these scholars, humanism

⁴ Jill Didur, "Re-Embodying Technoscientific Fantasies: Posthumanism, Genetically Modified Foods, and the Colonization of Life," *Cultural Critique* 53, no. 1 (2003): 101-102, <https://doi.org/10.1353/cul.2003.0021>.

⁵ Stefan Herbrechter, *Posthumanism: a critical analysis* (London: Bloomsbury Academic, 2013), 3

informs the development of racism,⁶ where humanity is understood as white, and sexism,⁷ where humanity is defined as male. More recent scholarship has argued that humanism is central to the developments of both speciesism⁸ and climate destruction,⁹ given ties between the *Anthropos* and the Anthropocene. The basic idea, which is discussed in more depth in Chapter One, is that the ontological separation of ‘humans’ (or ‘persons’) from ‘nature’ (or ‘things’) invokes the tools of epistemological reflection, which promotes humanity as lawgiver over nature, and deontological morality, which takes humanity as the highest end or *telos* of all activity. Using a term from Karen Barad, this framework provides the ‘ethico-onto-epistemological’ justification for human domination or ‘anthropocentrism.’ Barad’s term, ‘ethico-onto-epistemology,’ attempts to think the “intertwining

⁶ Discussions of the exclusion of Black and Indigenous populations abound in the literature. For some explicit engagements on the race and post-humanism, see Philip Butler, “Making Enhancement Equitable: A Racial Analysis of the Term ‘Human Animal’ and the Inclusion of Black Bodies in Human Enhancement,” *Journal of Posthuman Studies* 2, no. 1 (January 1, 2018), <https://doi.org/10.5325/jpoststud.2.1.0106>; Cristin Ellis, *Antebellum Posthumanism* (New York: Fordham University Press, 2018); Stephanie Polsky, *The Dark Posthuman: Dehumanization, Technology, and the Atlantic World* (Planet Earth: Punctum, 2022). Work on post-humanism and Indigeneity includes: Danielle DiNovelli-Lang, “The Return of the Animal: Posthumanism, Indigeneity, and Anthropology,” *Environment and Society* 4, no. 1 (September 1, 2013): 137–56, <https://doi.org/10.3167/ares.2013.040109>; Simone Bignall, Steve Hemming, and Daryle Rigney, “Three Ecosophies for the Anthropocene: Environmental Governance, Continental Posthumanism and Indigenous Expressivism,” *Deleuze Studies* 10, no. 4 (November 1, 2016), <https://doi.org/10.3366/dls.2016.0239>; Karin Murriss, “The ‘missing peoples’ of critical posthumanism and new materialism,” in *Navigating the Postqualitative, New Materialist and Critical Posthumanist Terrain Across Disciplines: An Introductory Guide* (London: Routledge, 2021) <https://doi.org/10.4324/9781003041177>.

⁷ There is a great deal of feminist literature in critical post-humanism, in large part due to the influence of Donna Haraway. A few examples include: Francesca Ferrando, “A Feminist Genealogy of Posthuman Aesthetics in the Visual Arts,” *Palgrave Communications* 2, no. 1 (May 10, 2016): 1–12, <https://doi.org/10.1057/palcomms.2016.11>; Cecelia Åsberg, “Feminist Posthumanities in the Anthropocene: Forays Into The Postnatural,” *Journal of Posthuman Studies* 1, no. 2 (2017): 185, <https://doi.org/10.5325/jpoststud.1.2.0185>; Nicole Falkenhayner, “The Ship Who Sang: Feminism, the Posthuman, and Similarity,” *Open Library of Humanities* 6, no. 2 (October 12, 2020), <https://doi.org/10.16995/olh.598>; Rosi Braidotti, *Posthuman Feminism* (London: Polity, 2021).

⁸ Discussions of animal-species relationships are vast in the literature, insofar as the collapse of ‘human/non-human’ distinctions often works towards the capacity to think a non-rights based, non-liberal approach to animal inclusivity. Examples include Patricia MacCormack, *Posthuman Ethics: Embodiment and Cultural Theory* (Farnham: Ashgate Press, 2012); Cynthia Willett, *Interspecies Ethics: Critical Perspectives on Animals: Theory, Culture, Science, and Law* (Minneapolis: University of Minnesota Press); Helen Kopnina, Haydn Washington, Bron Taylor and John J Piccolo, “Anthropocentrism: More than Just a Misunderstood Problem,” *Journal of Agriculture and Environmental Ethics* 31 (2018): 109-127. <https://doi.org/10.1007/s10806-018-9711-1>.

⁹ For example, Arianne Conty, “Animism in the Anthropocene,” *Theory Culture & Society* 39, no. 5 (2022), <https://doi.org/10.1177/02632764211039283>; Gustavo Blanco-Wells, “Ecologies of Repair: A Post-human Approach to Other-Than-Human Natures,” *Frontiers in Psychology*, 12 (2021), <https://doi.org/10.3389/fpsyg.2021.633737>; Nandita Biswas Mellamphy and Jacob Vangeest, “Human, All Too Human? Anthropocene Narratives, Posthumanisms, and the Problem of ‘Post-anthropocentrism,’” *The Anthropocene Review*. First online. <https://doi.org/10.1177/20530196241237249>.

of ethics, knowing, and being.”¹⁰ For Barad, and many other thinkers of critical post-humanism, ontology, epistemology, and ethics must be understood as entangled or co-mediated. To express this, their work introduces the term ‘intra-connection’ or ‘intra-action.’ This term is worth unpacking as I draw upon its usage throughout this thesis. Unlike the prefix ‘inter-’, which would designate the coming together of ontology, epistemology, and ethics, the prefix ‘intra-’ designates their co-individuation. This means that one cannot treat ontology, epistemology, and ethics as separate entities that are mixed. Instead, ontology, epistemology, and ethics emerge from a single movement or phenomenon. Each must be thought in and through the others: a perichoresis of being, knowing, and normativity.¹¹ Scholarship working with this model of ‘connection’¹² poses ontological connection, epistemic relation, and ethical situatedness as promoting a more process-oriented and ethico-ecological awareness. For these theorists, the ‘emancipation’ from humanism would be the end of humanism’s domination. These terms work together, as ‘anthropocentrism’ has been defined as a “human-centred valuation theory” where humanity, alone, is worthy of ethical consideration.¹³ While there is a great deal of work that falls within its purview, critical post-humanism’s common “denominator might be a shared critique of humanism’s anthropocentrism and the white, Western, colonial, patriarchal structures that underpin it.”¹⁴

One recent definition of critical post-humanism states that “critical posthumanism is a rethinking of the relationship between human agency, the role of technology, and environmental and

¹⁰ Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), 185.

¹¹ Perichoresis is a theological term describing the ‘dance’ of the Christian God as Father, Son, and Holy Spirit. Is it any wonder that Barad’s work has held so much appeal to progressive theology? See, for instance, the collection by Catherine Keller and Mary-Jane Rubenstein (ed), *Entangled Worlds: Religion, Science and New Materialisms* (New York: Fordham University Press, 2017).

¹² See Nandita Biswas Mellamphy, “Humans ‘in the Loop’?: Human-Centrism, Posthumanism, and AI,” *Nature+Culture* 16, no. 1 (March 2021): 11-27. <https://doi.org/10.3167/nc.2020.160102>

¹³ Koprina et al., “Anthropocentrism,” 115

¹⁴ Stefan Herbrechter et al., “Critical Posthumanism: An Overview,” in *Palgrave Handbook of Critical Posthumanism*, eds. Stefan Herbrechter et al. (Switzerland: Palgrave MacMillan, 2022), 6. https://doi.org/10.1007/978-3-031-04958-3_66

cultural factors from a post- or non-anthropocentric perspective.”¹⁵ Resonant with the idea that ‘we have never been separated,’ the aim of ‘re-thinking’ these relations is often repeated. Theorists are quick to use terms such as ‘rewriting,’¹⁶ ‘re-turning,’ and ‘re-membering’¹⁷ to consider ‘post-humanism’ in relation to ‘humanism.’ In this manner, critical post-humanism is less interested in some entity that might emerge after the ‘human’ than in re-conceptualizing how the ‘human’ relates to ‘nature.’ For instance, Cary Wolfe’s often cited understanding of post-humanism states that “posthumanism in my sense isn’t posthuman at all—in the sense of being ‘after’ our embodiment has been transcended—but only posthumanist in the sense that it opposes the fantasies of disembodiment and autonomy inherited from humanism.”¹⁸ Unlike Latour, however, Wolfe sees something in the employment of ‘postmodernity,’ as he equates his own understanding of ‘posthumanism’ with Lyotard’s term, noting post-humanism “comes both before and after humanism.”¹⁹ It is ‘before’ insofar as the human is always already ‘embedded’ with nature, and ‘after’ as a historical moment where ‘connection’ determines the new episteme. Thus, the concept of ‘re-writing’ invokes an inherent tension: at once a descriptive analysis of the human, i.e., that humanity has never been separate, and a normative, emancipatory aim, i.e., overcoming humanism. In other words, humanity must both recognize and act in accordance with this (more accurate) onto-epistemological description. Given the complexity of the prefix ‘post’ in relation to the ‘human,’ (both before and after), I have followed Francesca Ferrando in adopting the use of the hyphen: “the hyphen is the term of mediation, it communicates the fact that there is another term, or other terms,

¹⁵ Ibid., 19.

¹⁶ Stefan Herbrechter, “Critical Posthumanism,” in *Posthuman Glossary*, ed. Rosi Braidotti and Maria Hlavajova (London: Bloomsbury, 2018), 94.

¹⁷ Karen Barad, “Troubling Time/s and Ecologies of Nothingness: Re-Turning, Re-Membering, and Facing the Incalculable,” in *Eco-Deconstruction: Ecological Issues in Philosophy and Theology*, ed. Matthias Fritsch, Philippe Lynes, and David Wood (New York: Fordham University Press, 2018), 43.

¹⁸ Cary Wolfe, *What is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010), xiv.

¹⁹ Ibid.

which shall be acknowledged and so it situates the ‘post’ within a multiplicity of possibilities.”²⁰ The ‘post-’ of critical post-humanism signals the tension in its emancipatory end.

This thesis interrogates the aims or ends of critical post-humanism’s emancipation from humanism. The primary research question of this investigation is this: are the principles of critical post-humanism consistent with its aims? Critical post-humanism has been critiqued from several perspectives, though these are often extrinsic to its aims.²¹ In contrast, the aim of this thesis is to work from the perspective of critical post-humanism to reveal its tensions and problems. Thus, unlike extrinsic critiques of post-humanism, which tend to critique post-humanism in favor of some alternative (often a renewed form of humanism), this thesis centres the problem and tensions of critical post-humanism with the aim of continuing and emboldening its project. To this aim, I am motivated by a second question: if these principles of critical post-humanism (connection, relation, situatedness) are inconsistent with its aims, what might constitute a veritable post-humanism? While I cannot fully answer this second question in the work at hand, my hope is that this work may provide some groundwork for further speculation.

Given these two research questions, it is worthwhile to provide some boundaries for the work at hand. This thesis takes a rigorous investigation of the core tenants of critical post-humanism as its central aim. There are a vast number of approaches that have been and could be used to investigate humanism, post-humanism, and critical post-humanism.²² The scope of this thesis does not allow for a full encounter between humanism and posthumanism. For instance, while an account of the encounter between humanism and capitalism, through the study of changes in the human condition in relationship to the historically changing mode of production, would provide a worthwhile avenue

²⁰ Francesca Ferrando, *Philosophical Posthumanism* (London: Bloomsbury, 2019), 66.

²¹ A notable exception, which is discussed most prominently in chapter 5, is the work of scholars noting the continued exclusion of Blackness and Indigeneity within the universalizing schema of critical post-humanism.

²² Nandita Biswas Mellamphy and I have investigated several approaches relating to post-humanism and the Anthropocene. See Biswas Mellamphy and Vangeest, “*Human, all too human?*”

of investigation, such a study is beyond the scope of my analysis.²³ Neither do I aim to provide a comprehensive history of the study of humanism and post-humanism. Instead, my goal is to study the operations of critical post-humanism so as to problematize them. Towards this objective, it is useful to outline my method of approach.

Method

My method is inspired by numerous critical-theoretical analyses, including genealogy, immanent critique, and the centering of problems. My initial thought was to present this as a genealogical investigation, as conceived by Friedrich Nietzsche and Michel Foucault. Despite a range of critical-theoretical works employing the rhetoric of genealogy, its use as a method is often assumed and overlooked.²⁴ While Nietzsche does not provide a clear account of his method, he does distinguish his approach from the ‘English kind’ of genealogy.²⁵ This is likely in reference to the work of Thomas Hobbes and David Hume.²⁶ Nietzsche is critical of both their appeal to origin, and assumption that morality provides a social benefit or utility.²⁷ Reconstructing Nietzsche’s method, Foucault emphasizes this opposition to ‘origin’ [*Ursprung*] in favor of ‘descent’ [*Herkunft*] and ‘emergence’ [*Entstehung*].²⁸ Descent appeals to neither the origin nor the essence but the accidents of an object. It does not erect foundations but disturbs what is taken as given by tracing the inscriptions on the body through its history. Emergence is delineated through this descent: the

²³ I do, however, discuss possible ways of using Marx and Marxism in chapters 1 and 4.

²⁴ To take an example from ‘critical post-humanism,’ see Francesca Ferrando, “A feminist genealogy of posthuman aesthetics in the virtual arts.” While Ferrando uses the term ‘genealogy’ in the title and throughout the essay, they never articulate genealogy as a theoretical method. At most, their use of genealogy allows for a more creative narrative than would be employed in an attempt at a general history. My own understanding of ‘genealogy’ is informed by Colin Koopman, *Genealogy of Critique: Foucault and the Problem of Morality* (Bloomington: Indiana University Press, 2013).

²⁵ Friedrich Nietzsche, *On the Genealogy of Morality in Beyond Good and Evil / On the Genealogy of Morality*, trans. Adrian del Caro (Stanford: Stanford University Press, 2014), 210.

²⁶ The reference to “these English psychologists” comes at the beginning of the first essay of *Genealogy*. Nietzsche’s relationship to other sorts of genealogy is the central discussion of Jesse Prinz, “Genealogies of Morals: Nietzsche’s Method Compared,” *The Journal of Nietzsche Studies* 47, no. 2 (2016): 180-201.

<https://doi.org/10.5325/jnietstud.47.2.0180>.

²⁷ Nietzsche, *Genealogy*, 218.

²⁸ Michel Foucault, “Nietzsche, Genealogy, History,” in *Language, Counter-Memory, Practice: Selected Essays*, ed. Donald F Bouchard (Ithaca: Cornell University Press): 145-152.

problems of descent are the productions of emergence. From this perspective, emergence is accidental, contingent, and indeterminate, it is not bound to an essence, teleology, or metaphysical design.²⁹ For Foucault, genealogy is tasked with tracing emergence through the inscriptions of descent. Foucault draws upon Nietzsche's concepts of descent and emergence to understand genealogy as a form of 'effective' history [*wirkliche Historie*], which he distinguishes from meta-historical and supra-historical approaches that are typical of 'traditional history.' Where traditional history assumes a continuous sense of historical development (a 'universal history'), genealogy takes history to be discontinuous. Both Nietzsche and Foucault use a genealogical model to trace the contingent emergence of contemporary social structures, such as morality, the prison system, and sexuality. However, given that my study is not strictly historical, my approach cannot be taken as strictly genealogical. This thesis does not dwell on historical minutia nor the particularities of historical events. Yet, I take inspiration from genealogy as a method of critique and evaluation dedicated to tracing bodily inscription. As Jesse Prinz states, "Nietzsche debunks morality by holding up a mirror to its intended readers and revealing that they are contemptible *by their own standards*."³⁰ Thus, while not adopting an explicitly genealogical method, I take inspiration from genealogy as a critical and evaluative approach that attempts to 'hold up a mirror' to critical post-humanism. My aim is to evaluate critical post-humanism by its own standards.

My second thought was that this study could be conceived as a form of immanent critique. Like genealogy, immanent critique is an ambiguous method. This is likely due to a variety of competing models and influences.³¹ The defining features of immanent critique are not always

²⁹ For a further description, see Gary Gutting, "Foucault's Genealogical Method," *Midwest Studies in Philosophy* XV (1990): 327-343. <https://doi.org/10.1111/j.1475-4975.1990.tb00221.x>

³⁰ Prinz, "Genealogies of Morals," 191. Emphasis in original.

³¹ On this ambiguity see Michael A. Becker, "On Immanent Critique in Hegel's *Phenomenology*," *Hegel Bulletin* 4, no. 2 (2018): 224-246. <https://doi.org/10.1017/hgl.2018.8>; Titus Stahl, "Habermas and the Project of Immanent Critique," *Constellations* 20, no. 4 (2013): 533-552. <https://doi.org/10.1111/1467-8675.12057>.

clarified, and often assumed, leading to a diversity of definitions.³² While some apply the terms to Hegel and Marx,³³ I understand immanent critique as a methodological approach generated by the Frankfurt School's reading of Marxist-Hegelian dialectical theory to engage in cultural critique. Hegel's *Phenomenology of Spirit* provides a classic example of the dialectical process, with consciousness consistently finding itself entangled with its object of study.³⁴ Furthermore, Marx is often taken as providing an example of immanent critique in his 1843 letter to Arnold Ruge, stating: "we do not anticipate the world with our dogmas but instead attempt to discover the new world through the critique of the old."³⁵ These two examples show the key aspects of immanent critique: as in Hegel, immanent critique cannot take a standpoint outside of its object; as in Marx, the object is critiqued according to its own positions.³⁶ Marx's statement shows the particularity of immanent critique when distinguished from 'transcendent' critique. As Theodor Adorno expresses in *Prisms*, transcendent critique aims at totality from an Archimedean vantage. In contrast, immanent critique attempts to critique society from within:

Immanent criticism of intellectual and artistic phenomena seeks to grasp, through the analysis of their form and meaning, the contradiction between their objective idea and that pretension. It names the consistency or inconsistency of the work itself expresses of the structure of the existent. [...] A successful work, according to immanent criticism, is not one which resolves objective contradictions in a spurious harmony, but one which expresses the idea of harmony negatively by embodying the contradictions, pure and uncompromised, in its innermost structure.³⁷

³² Becker's "On Immanent Critique" provides several definitions. For one recent positive reconstruction, see Alexei Procyshyn, "The Conditions of Immanent Critique," *Critical Horizons* 23, no. 1(2022): 22-43. <https://doi.org/10.1080/14409917.2019.1616485>.

³³ For example, Andrew Buchwalter. "Hegel, Marx and the Concept of Immanent Critique." *Journal of the History of Philosophy* 29, no. 2(1991): 253-279; and Karen Ng, "Ideology Critique from Hegel and Marx to Critical Theory," *Constellations* 22, no. 3 (2018): 393-404. <https://doi.org/10.1111/1467-8675.12170>.

³⁴ G.W.F Hegel, *Phenomenology of Spirit*, trans. A.V. Miller (Oxford: Oxford University Press, 1977).

³⁵ Karl Marx. "Letter from Marx to Arnold Ruge." *Marxists.org*. URL: https://www.marxists.org/archive/marx/works/1843/letters/43_09-alt.htm [Accessed May 30, 2024]

³⁶ I adopt these principles from Becker's, "On Immanent Critique." Becker adopts them from the work of Moishe Postone.

³⁷ Theodor Adorno, *Prisms*, trans. Shierry Weber Nicholson and Samuel Weber (Cambridge: The MIT Press, 1983), 32.

Like genealogy, immanent critique works to problematize the object of investigation from its own position. Unlike genealogy, however, immanent critique is historical-dialectical: it works by pointing out the contradictions immanent to its object to overcome its object. Given the dialectical foundation, immanent critique tends to be more openly emancipatory than genealogy. Unlike certain readers of Hegel and Marx, however, critical theorists like Adorno do not take emancipation to be an inevitable historical consequence.³⁸ Where immanent critique has been used as a form of cultural criticism, this emancipatory aim often aligns with a critique of ideology. For example, Adorno and Max Horkheimer's *Dialectic of Enlightenment* speaks of a 'deceived masses' who "insist on the very ideology which enslaves them."³⁹ Here, immanent critique would be used to seek out the internal contradictions of this ideology in order to judge the ideology without an "independently justified principle."⁴⁰ Immanent critique is useful as a method for critiquing a totality for which one lacks an external standpoint (such as Marx's 'world' or Adorno and Horkheimer's 'culture industry').

It would be difficult to evaluate 'critical post-humanism' through either genealogy or immanent critique. Given that critical post-humanism is much more a pronouncement than an event, it is not possible to genealogically trace its emergence through contingency. As the continued use of imperative suggests,⁴¹ post-humanism remains 'to-come.' Even if some scholars suggest that 'we' are (or have always already been) post-human, these pronouncements tend to assert, rather than show as already instantiated, the actualization of post-humanism. The various attempts to bring

³⁸ See Robert J. Antonio, "Immanent Critique as the Core of Critical Theory: its Origins and Developments in Hegel, Marx and Contemporary Thought," *The British Journal of Sociology* 32, no. 3 (1981): 330-345. <https://doi.org/10.2307/589281>.

³⁹ Max Horkheimer and Theodor W Adorno, *Dialectic of Enlightenment*, trans. John Cummings (New York: Continuum, 1972), 134.

⁴⁰ Such a standard is both a strength and a weakness. A strength insofar as it refuses to assume an independent, unjustified normative standard. A limit, insofar as it makes it difficult to introduce any normative structure. On this debate see Titus Stahl, "Immanent Critique and Particular Moral Experience," *Critical Horizons* 23, no. 1 (2022): 1-21. <https://doi.org/10.1080/14409917.2017.1376939>; and Rachel Fraser, "IV — The Limits of Immanent Critique," *Proceedings of the Aristotelian Society* 123, no. 2 (2023): 97-125. <https://doi.org/10.1093/arisoc/aoad005>.

⁴¹ The use of imperative is highlighted in chapters 3 and 5.

about post-humanism in whichever form it may emerge suggest that even if ‘we’ are already post-human, we certainly are not yet post-humanists. As such, a genealogical investigation is impossible, for one cannot trace an emergence that has not yet emerged.⁴² Furthermore, critical post-humanism cannot be taken as totalizing. While it is a cultural artifact, it is difficult to consider the critic’s position as necessarily bound to critical post-humanism as an object of inquiry. While recognizing the impossibility of producing a neutral or objective external position, it certainly remains possible to write an extrinsic critique of critical post-humanism.⁴³ Critical post-humanism lacks the criteria of totality necessary for immanent critique. This study is, in large part, informed by a sympathy towards critical post-humanism and its aims, including the critique of humanism and desire for a distinct conceptualization. As such, while my scholarship is indebted to its developments, I cannot fully align my method with immanent critique’s overall pursuit of emancipation nor its historical-dialectical projections.

Despite these objections, my method emerges somewhere in the intersection of Nietzsche and Adorno. In *Negative Dialectics*, Adorno praises Nietzsche for critiquing philosophical authority.⁴⁴ He poses ‘negative dialectics’ as a method for analyzing philosophical models: “Philosophical thinking is the same as thinking in models; negative dialectics is an ensemble of analysis of models.”⁴⁵ Like genealogy and immanent critique, Adorno adopts a method without ‘reconciliation’ or ‘end.’ Posing his study in this manner, ‘negative dialectics’ can be understood as an investigation into the ‘problem’ of philosophy. Adorno is not alone in this methodological pursuit. In 20th century French

⁴² It follows that one might contrast ‘post-humanism’ with an archaeological or genealogical approach to the ‘human’ and ‘humanism,’ which is certainly possible. One famous example is Foucault, *On the Order of Things*.

⁴³ To offer a few examples, see Jennifer Cotter, “Posthuman Feminism and the Embodiment of Class.” In *Stories in Post-Human Cultures*, eds. Adam L. Bracken and Natasha Guyot. 27-37. (Leiden: Brill, 2018)

https://doi.org/10.1163/9781848882713_004; Mark Carrigan and Douglas V. Porpora, “Introduction: Conceptualizing Post-human futures,” in *Post-Human Futures*, 1-22. (London: Routledge, 2021); Matthew Flisfeder, “From Posthumanist Anaesthetics to Promethean Dialectics: Further Considerations on the Category of the Hysterical Sublime,” *Rethinking Marxism* 35, no. 2 (2023): 158-179. <https://doi.org/10.1080/08935696.2023.2183682>.

⁴⁴ Theodor Adorno, *Negative Dialectics*, trans. E.B. Ashton. (New York: Continuum, 1973), 20.

⁴⁵ *Ibid.*, 29.

philosophy, the work of Henri Bergson and Jean Cavailles inspired the philosophical investigation of ‘problems.’⁴⁶ For Bergson, the study of problems is grounded in philosophical precision: imprecise or ‘nonexistent problems’ lead to faulty philosophical conclusions.⁴⁷ To reach philosophically concise conclusions, one must be rigorous in formulating questions and problems.⁴⁸ For Cavailles, the study of mathematical problems is integral to the development of mathematical progression. Like the genealogical method, Cavailles stresses contingency in mathematical progression by emphasizing ‘gestures’ rather than ‘solutions.’ The formalization of a problem determines future mathematical notions: “the demand in the problem imposes the gesture that will solve it.”⁴⁹ Within their respective domains, Bergson and Cavailles each emphasizes the development of problems in the production of concepts.⁵⁰ Cavailles description of ‘gesture’ speaks to a ‘constructive realism’ that informs Gilles Châtelet’s use of ‘diagrams.’ Châtelet devotes his work to “the historical dignity of problems” writing that “Gestures and problems mark an epoch and unknown to geometers and philosophers guide the eye and hand.”⁵¹ Because gestures are not substantial entities, but instead processes that are elastic and relational, they cannot be ‘given’ or ‘grasped’ but only ‘diagrammed’ or captured ‘mid-flight.’⁵²

⁴⁶ For a broad overview see the special issue of *Angelaki*: Sean Bowden and Mark G.E. Kelly (eds) “Problems in Twentieth-Century French Philosophy,” *Angelaki* 23, no. 2 (2018). <https://doi.org/10.1080/0969725X.2018.1451456>.

⁴⁷ See Bergson’s discussion of the ‘pseudo-problem’ of ‘nothing’ in Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: The Modern Library, 1911); Henri Bergson, *The Creative Mind: An Introduction to Metaphysics*, trans. Mabelle L Addison. (Mineola: Dover Publications, 2007).

⁴⁸ See Craig Lundy, “Bergson’s Method of Problematization and the Pursuit of Metaphysical Precision,” *Angelaki* 23, no. 2 (2018): 31-44. <https://doi.org/10.1080/0969725X.2018.1451460>.

⁴⁹ Jean Cavailles cited in Pierre Cassou-Noguès, “Cavaillès, Mathematical Problems and Questions,” *Angelaki* 23, no. 2 (2018): 73. <https://doi.org/10.1080/0969725X.2018.1451463>.

⁵⁰ At times, this can appear almost identical to the ‘non-concepts’ of Adorno’s negative dialectics. For instance, Giovanni Maddalena’s description of Cavailles’ gestures: “The mathematical object is ‘inseparable’ from the operation that gives birth to it. That is why to understand is to grasp the gesture and to be able to continue” In Giovanni Maddalena, “Gestures, Pierce, and the French philosophy of mathematics,” *Lebenswelt: Aesthetics and Philosophy of Experience* 13 (2018): 70. <https://doi.org/10.13130/2240-9599/11109>.

⁵¹ Gilles Châtelet, *Figuring Space: Philosophy, Mathematics, and Physics*, trans. Robert Shore and Muriel Zaghera (Dordrecht: Kluwer Academic Publishers, 2000), 3.

⁵² “A diagram can transfix a gesture, bring it to rest, long before it curls up into a signs, which is why modern geometers and cosmologers like diagrams with their peremptory power of evocation. They capture gestures mid-flight; for those capable of attention, they are moments where being is glimpsed smiling... Like the metaphor, [diagrams] leap out in order to create spaces and reduce gaps: they blossom with dotted lines in order to engulf images that were previously

Working from this depiction of ‘problems,’ this thesis begins with the re-construction of a ‘diagram’ of critical post-humanism. By terming this re-construction a diagram, I am noting three things: First, the reconstruction cannot be taken as a definitive account of the totality of critical post-humanism. Given the sheer amount of work on post-humanism, such a definitive picture is impossible. Instead, informed by the study of genealogy, this thesis is an attempt to trace the tendencies of the scholarship, to capture ‘mid-flight’ the principles that seem to repeat across discourse in critical post-humanism. Second, rather than exhaustive, this re-construction tends towards the operational, or process-oriented, tendencies of critical post-humanism. The term ‘operational’ focuses on the process of critical post-humanism’s instantiation or coming into being, rather than its given being or identity.⁵³ By refusing to attempt a strict representation of critical post-humanism in its totality, and instead tracing the operations of its movement, I allow for change to occur within its operations. Third, by presenting this re-construction as a ‘diagram,’ I focus on the problem or problematic of critical post-humanism that would allow for further development. Given the operational tendency of diagrams, they necessarily open to subsequent problems and developments. This provides an opening to the subsequent chapters of this work. Once my initial diagram is sketched in the first chapter, subsequent chapters attempt to problematize its developments, opening to new processes, and potentially new diagrams. In this sense, the centring of problems as an object of study gives way to novel developments.

Like Châtelet, I am informed by the work of Gilbert Simondon, who is an important figure in the fourth chapter of this thesis. As Châtelet notes, Simondon is both a thinker of ‘gestures’ and ‘problems.’ Simondon’s philosophy of technology traces how gestures are iteratively adapted into

figured in thick lines. But unlike the metaphor the diagram is not exhausted: if it immobilizes a gesture in order to set down an operation, it does so by sketching a gesture that then cuts out another.” Ibid., 10.

⁵³ My use is adopted from Gilbert Simondon. See Gilbert Simondon, *Individuation in Light of Notions of Form and Information*, trans. Taylor Adkins (Minneapolis: University of Minnesota Press, 2020), 3. Henceforth *ILNFI*.

techniques, promoting “lines of descent that are increasingly autonomous and concrete.”⁵⁴

Simondon’s philosophy applies the study of ‘problems’ to living being, arguing that life is constituted through the resolution of ‘vital problems.’⁵⁵ Problems and problematics are central to philosophical study given that every ‘resolution’ is determined by its ‘problem.’ Influenced by both Bergson and Simondon, Gilles Deleuze expands the centrality of ‘problems’ in philosophical investigation.

Curiously, given his critique of Hegel, Deleuze aligns the study of problems with the dialectic, noting that “dialectic is the art of problems and questions.”⁵⁶ He suggests that dialectics and philosophy run into issues when they centre propositions and solutions rather than questions and problems.

Deleuze’s prioritization of problems in dialectical thought offers a further rejoinder to Adorno. In his final work with Félix Guattari, Deleuze aligns his understanding of philosophy with *Negative Dialectics*.⁵⁷ This alignment is consistent with the centring of problems to think through the operational development of philosophy. The centring of problems can be taken alongside both genealogy and immanent critique as an attempt to remain in the tension of problems and questions without an immediate turn to solutions.

Just as these approaches investigate the ‘problems’ and ‘gestures’ of philosophy and mathematics, the study at hand investigates the ‘problem’ of critical post-humanism. My method is, at once, diagrammatic and critical. I begin the first chapter with an attempt at diagramming ‘critical

⁵⁴ Chatélet *Figuring Space*, 10. While the use of ‘descent’ is not expressly aligned with Nietzsche, Châtelet’s use of the term is notable.

⁵⁵ “In the living being there is *an individuation by the individual* and not merely an operation resulting from an individuation completed by a single stroke, as though it were a fabrication; the living being resolves problems, not just by adapting, i.e. by modifying its relation to the milieu (like a machine is capable of doing), but by modifying itself, by inventing new internal structures, and by completely introducing itself into the axiomatic of vital problems. *The living individual is a system of individuation, an individuating system, and a system that is in the midst of undergoing the process of individuating.*” Simondon, *ILNFI*, 7. Emphasis in original.

⁵⁶ Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia, 1994), 157.

⁵⁷ “Philosophy takes the relative deterritorialization of capital to the absolute: it makes it pass over the plane of immanence as movement of the infinite and suppresses it as internal limit, *turns it back against itself so as to summon forth a new earth, a new people[...]* [Philosophy] is therefore closer to what Adorno called ‘negative dialectic’ and to what the Frankfurt School called ‘utopian.’” Gilles Deleuze and Félix Guattari, *What is Philosophy?*, trans. Hugh Tomlinson and Graham Burchell (New York: Columbia, 1994), 99.

post-humanism' to better define my object of study. Rather than propose some solution or proposition, however, the remainder of the study works to critically examine the diagram in question: both working to trouble its presuppositions and to challenge whether it 'works' according to its own principles and positions. My method of 'problematization' works in a similar manner to genealogy and immanent critique: following both those methods in attempting to turn the logic of a domain against itself by testing the tendencies of that domain against its own principles. This could be read as an attempt to strengthen the object under investigation: an experiment to determine weak points that might resolve into a stronger area of study and critique. I am not so confident as to suggest that this is the case, though my work does gesture in that direction.

This approach places my investigation squarely at odds with previous studies of critical post-humanism. Discourse on 'post-humanism' and 'critical post-humanism' occurs in numerous disciplinary boundaries, leading to a plurality of methodological approaches. Given the diversity of questions brought together under its purview, 'post-humanism' is inherently interdisciplinary.⁵⁸ In questioning both the 'human' and the 'humanities,' post-humanism broaches fields of anthropology, biology, chemistry, literature, philosophy, politics, psychology, and sociology (to provide a non-exhaustive list). Within 'critical post-humanism' and the 'critical post-humanities,' scholars have adopted several methodological approaches. These can be distinguished from my own, 'problematic' approach, by way of a few examples.

⁵⁸ My use of the term 'interdisciplinary' is quite generic: meaning a study involving multiple academic disciplines. It is worth mentioning critique of 'interdisciplinarity' within critical post-humanism. For instance, Cary Wolfe takes issue with interdisciplinarity for collapsing disciplinary distinction. Wolfe suggests that 'transdisciplinarity' offers an alternative that allows distinct disciplines to offer a 'distributed reflexivity' that understands "the fact that that (by definition) *no* discourse, no discipline, can make transparent the conditions of its own observations." Wolfe, *What is Posthumanism?*, 116. Alternatively, Stephan Herbrechter notes that a posthumanist interdisciplinarity is a sort of 'contamination of disciplines' or 'hybridity and translation'. He suggests that this new form of interdisciplinarity should seek epistemic inclusion: one that "in the positive sense depends on significant transgressions of boundaries by which new and usually hybrid forms of knowledge are produced and returned to or retranslated into the diverse disciplines." Herbrechter, *Posthumanism*, 174.

Perhaps the most straightforward approach to the subject is the historical and dialectical method used by N Katherine Hayles to present the historical progression of cybernetic technology in dialectic tension with humanity. Through the mutation of human, cybernetics, and technology, Hayles see the ‘posthuman’ emerging from ‘liberal humanism.’⁵⁹ Similar to the historical-dialectical method, some authors have provided a synthetic approach working to survey the general ‘field’ of post-humanism. Stefan Herbrechter’s *Posthumanism: a critical analysis* and Francesca Ferrando’s *Philosophical Posthumanism* both use this approach to determine further potentials of post-humanism as an innovative field and tool for critical analysis. While Herbrechter does so in order to “show the truly innovative potential of a *critical* posthumanism,”⁶⁰ Ferrando’s text almost reads like a self-help book for post-humanists, building upon prior literature to ask questions like “How can we exist as post-humanists?”⁶¹ Despite methodological differences the historical-dialectical and survey approaches are similar in working towards an understanding of what ‘post-humanism’ is and what it might do. Hayles does so by mapping a historical progression, while Herbrechter and Ferrando map the movements of the ‘post-humanities’ as a particular ‘field.’ These approaches are closest to my own, though they tend towards a more positive approach than what is generated by my problematic one. Overall, my first chapter is closest to Hayles’ *How We Became Posthuman*, as I attempt to understand ‘post-humanism’ through the historical disciplinary positions that came to frame it.

Distinct from this process of mapping or tracing, the majority of works appear to take a methodological approach that might be vulgarly termed ‘the constructive method.’⁶² By ‘constructive method,’ I am not referring to a ‘social constructive approach,’ which would inherently separate the

⁵⁹ Hayles writes, “the posthuman appears when computation rather than possessive individualism is taken as the ground of being, a move that allows the posthuman to be seamlessly articulated with intelligent machines.” N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Information* (Durham: Duke University Press, 1999), 33.

⁶⁰ Herbrechter, *Posthumanism*, viii.

⁶¹ Francesca Ferrando, *Philosophical Posthumanism* (London: Bloomsbury, 2019): 185.

⁶² Alternatively, Carrigan and Porpora’s, “Introduction: Conceptualizing Post-human futures” suggest the term ‘epochal theorizing.’

‘social’ from a constructed ‘nature.’⁶³ Instead, by ‘constructive method’ I am referring to works that begin by constructing a theoretical model before applying that model to a variety of phenomena. This approach often draws upon the tools of literary criticism: using comparison, analysis, and interpretation to develop a close reading of a diversity of texts or objects of inquiry. The strongest of these approaches tend to use hermeneutic or exegetical interpretation: building from their object to establish concepts. Two examples of this approach are Elizabeth Povinelli, who draws upon anthropological study to determine a conceptual apparatus, and Barad, whose interpretation of Niels Bohr’s theorization of quantum entanglement grounds their ‘agential realism.’⁶⁴ Simultaneously, the constructive method allows for the development of what Donna Haraway calls ‘storytelling’ as necessary for shaping theoretical paradigms.⁶⁵ Storytelling aligns with Haraway’s insistence on ‘comedy’ and ‘irony’ as a critical methodology: an attempt to challenge stability in positivistic methods.⁶⁶ While Haraway’s early work allows for more paranoid, negative, and critical readings, recent work in critical post-humanism identifies more with ‘post-critical’ inquiries towards repair and regeneration.⁶⁷ There are many examples of how ‘storytelling’ begins by introducing a conceptual model before applying that model. Anna Lowenhaupt Tsing’s *The Mushroom at the End of the World* begins from the premise of ‘enabling entanglements’ before drawing upon evidence from anthropological and mycological studies to support their theoretical construct.⁶⁸ Similarly, María Puig

⁶³ Rosi Braidotti makes just this critique, arguing that social constructivist approaches, which rely on epistemic separation of observer and observed, should be critiqued in favor of more relational epistemic approaches. Rosi Braidotti, *The Posthuman* (London: Polity, 2013), 2-3.

⁶⁴ Elizabeth Povinelli, *Geontologies: A Requiem to Late Liberalism* (Durham: Duke University Press, 2016); Barad, *Meeting the Universe Halfway*.

⁶⁵ She writes, for instance, “It matters what thoughts think thoughts; it matters what stories tell stories” Donna Haraway, *Staying with the Trouble* (Durham: Duke University Press, 2016), 39.

⁶⁶ In “A Cyborg Manifesto” Haraway attempts to construct an ‘ironic political myth’ through the figure of the cyborg. See Donna Haraway, *Simians, Cyborgs, and Women* (London: Routledge, 1990), 149. In *Modest_Witness*, they name this as a “nervous, symptomatic, joking method [that] is intended to locate the reader and the argument on an edge.” Donna Haraway, *Modest_Witness@Second_Millennium.FemaleMan_Meets_OncoMouse* (London: Routledge, 1997).

⁶⁷ For an analysis and critique, see Brigitte Bargetz and Sandrine Sanos, “Feminist Matters, Critique and the Future of the Political,” *Feminist Theory* 21, no. 4 (December 2020): 501–16, <https://doi.org/10.1177/1464700120967311>.

⁶⁸ Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015).

de la Bellacasa's *Matters of Care* begins by bringing discourses on 'care ethics' into post-humanism to develop a model of 'matters of care.' The later chapters in that book then use close readings of science and technology studies, soil sciences, and other examples to understand how 'care' is more concretely instantiated.⁶⁹ Often these attempts at conceptual constructions express a desire for 'seeking possibility' in the development of 'speculative fabulations' that might enable 'new imaginings.'⁷⁰ Under this guise, 'post-humanism' is framed as both a concept and method for developing 'open futures.'⁷¹

While the constructive method centres a positive account, 'deconstructive' and 'de-territorializing' approaches emphasize the critical aspects of a constructive approach in troubling dominant paradigms. Wolfe's deconstructive-hermeneutic approach to post-humanism brings together Jacques Derrida's deconstruction with Niklass Luhmann's approach to systems theory. Wolfe takes issue with Hayles' historical-dialectical method for remaining too humanistic in its method of historical progression.⁷² He suggests that Derrida and Luhmann allow for more 'openness' in recognizing "the very thing that separates us from the world *connects* us to the world."⁷³ While Wolfe plays lip service to deconstruction, his method largely works to apply his Derridean-Luhmannian conceptual model to various discourses in philosophy and the humanities. His chapters bring Derrida and Luhmann into conversation with cognitive science, bioethics, animal studies, contemporary art, and literature. Rather than 'deconstruct' these domains (a la Derrida), Wolfe largely provides a comparative approach that shows the superiority of Derrida to other thinkers. For

⁶⁹ María Puig de la Bellacasa, *Matters of Care: Speculative Ethics in More than Human Worlds* (Minneapolis: University of Minnesota Press, 2017).

⁷⁰ The term 'speculative fabulation' is again Haraway's. It is deployed through their use of the acronym 'SF' which can at time refer to science fiction, speculative fabulation, string figures, and speculative feminism.

⁷¹ See, for example, Serena Andermatt Conley's attempt to use post-humanism as a conceptual model for developing open-ended possibility through the concept of 'care.' Serena Andermatt Conley, "The CARE of the POSSIBLE" *Cultural Politics* 12, no. 3 (2016): 339-354. <https://doi.org/10.1215%2F17432197-3648894>.

⁷² Specifically, Wolfe is critical of both Hayles' historical dialectical and Foucault's genealogical method for not "applying its own protocols and commitments to *itself*" Wolfe, *What is Posthumanism?*, xvii. Emphasis in original.

⁷³ *Ibid.*, xviii.

example, the first chapter of his book works to pit deconstruction against Daniel Dennett's analytic work in the philosophy of mind. Wolfe does not engage in the deconstruction of Dennett, but merely aims to show the superiority of his own model. In contrast to this 'deconstructive-hermeneutic' approach, Rosi Braidotti identifies her 'de-territorializing' method with the use of 'dis-identification,' 'de-familiarization,' and 'critical distance.' According to Braidotti, this method works by first 'de-territorializing' or 'distancing' itself from the 'dominant' vision of subjectivity (which assumes the separation of humanity from nature) before then 're-territorializing' through the adoption of a more holistic, 'inter-relational,' or 'zoe-centric' model.⁷⁴ Despite the theoretically distinct backgrounds (which results in quite apparent theoretical differences), Braidotti's methodological approach ends up working in a very similar manner to Wolfe's: taking the 're-territorialized' conceptual model of 'post-humanism' and the 'post-humanities' and applying it against various instances and examples.

Because my emphasis centers problems rather than constructions or solutions, my method is quite distinct from these approaches. Unlike the constructivist approaches, my initial diagram should not be taken as a theoretical or conceptual model that might be applied to a variety of situations, nor should it be taken as a solution to the realities of contemporary capitalism or neoliberalism. Instead, the aim of diagramming 'critical post-humanism' is to draw out its logics, commitments, and aims to see how it measures up against its own criteria. The diagram is not a solution but the object of interrogation and problematization. My aim is not to find a solution nor a possibility, it is not an attempt to draw out the possibilities of a field (like Ferrando and Herbrechter), nor is it an attempt to propose a conceptual model that might solve the realities of contemporary domination (like those employing the constructive model). Instead, it seeks only to problematize critical post-humanism with a focus on its own problems and problematics. To ask: What criteria are necessary for post-

⁷⁴ Braidotti, *The Posthuman*, 88-89.

humanism? What criteria are established by post-humanism? Are those criteria adequate for the realization of post-humanism? And does the scholarship of critical post-humanism work in accordance with those criteria?

Outline of Chapters

The present study develops through five chapters. Chapter One, “Critical Post-Humanism, A Philosophical Diagram,” works to diagram the work of ‘critical post-humanism’ by reading it in contradistinction to both the ‘transcendental humanism’ of Immanuel Kant and attempts to ‘steer humanity’ through first-order cybernetics and ‘transitional humanism’ (or ‘transhumanism’). For Kant, in particular, ‘humanism’ develops through 1) the ontological separation of ‘humans’ from ‘nature’ (or ‘persons’ from ‘things’); 2) a rational principle of epistemic reflection, which holds those ‘humans’ as capable of reflecting on, and giving value to, ‘nature’; and 3) a deontological moral system where ‘humans’ or ‘persons’ are generated as ‘ends’ while ‘nature’ or ‘things’ are generated as ‘means.’ Tracing the influences of ‘post-structuralism,’ second order cybernetics, de-colonial, post-colonial, Black studies, and feminism, this chapter offers a ‘diagram’ of the ontological, epistemological, and ethical alternatives that are promoted by ‘critical post-humanism.’ In doing so, it focuses on the research questions: what is critical post-humanism? What are critical post-humanism’s central beliefs, core principles, and aims? Working through its historical lineage, the chapter offers a diagram of ‘critical post-humanism’ as centring principles of 1) ‘ontological connection,’ which is the principle that humanity is not separate from nature; 2) ‘epistemic relation,’ which is the principle that rational activity cannot be separated nor reflect on some alien world; and 3) ‘situated ethics,’ which draws upon feminist standpoint epistemology to understand ethics as being locally generated. This diagram serves as the starting point for continued inquiry into critical post-humanism.

Starting with the principles of ontological connection, epistemic relation, and situated ethics, Chapter Two, “Political Ontologies and Critical Post-Humanism,” centres the political ramifications of critical post-humanism. Working through the political ontological outcomes of critical post-humanism, it asks: are the aims of connection, relation, and ethics sufficient for a critique of humanism? For instance, how is a post-humanist political ontology different from a humanistic political ontology? Furthermore, if one finds that these principles are not sufficient on their own, what would be necessary to constitute a sufficient break from humanism? To begin, this chapter continues to read ‘critical post-humanism’ in contrast with Kant. It opens with a discussion of how critical post-humanism attempts to offer a ‘dialogic’ or ‘critical cosmopolitanism’ against the moral and political cosmopolitanism that is often connected with Kant’s political writings. The chapter thus traces how connection, relation, and ethics work in the political domain. To question the sufficiency of this alternative, the chapter presents similarities between critical post-humanism and the political ontology found in Hegel’s discussion of ‘ethical life’ [*Sittlichkeit*]. Given these similarities—alongside the fact that works in critical post-humanism are quick to denounce Hegel as a humanist—it is necessary to determine an alternative framework for producing a sufficient break with humanism. The second half of this chapter does so by tracing Kant and Hegel’s mutual rationalism and teleology.

Following this centring of rationalism and teleology, Chapter Three and Chapter Four work through the potentiality of a non-rational and non-teleological post-humanism. Chapter Three, “Post-Humanist Ethics? Physiological Ethics contra Rationalist Moralism,” seeks a non-rational foundation for critical post-humanism’s ‘situated ethics.’ For critical post-humanists, such as Rosi Braidotti and Patricia MacCormack, one way of distancing post-humanism from rationalism has been to centre the body and embodiment as the locus of ethical concern. Taking up this project, I work through discussions of Hume, Spinoza, Deleuze, and Nietzsche to think through the

potentiality of a post-humanist ‘ethics.’ In doing so, the chapter centres three research questions: First, how might ‘ethics’ derive from nature, affects, impressions, and the body? Second, in their pursuit of such an ethics, are critical post-humanists successful at deriving normative positions without an appeal to rationality? Third, what might such an embodied’ or ‘physiological’ ethics entail? Beginning with Deleuze’s reading of Hume, I focus on the genesis of both subjectivity and morality through the affective dynamisms productive of the body. With this in mind, the chapter turns to the use of Spinoza in critical post-humanism. Using Braidotti and MacCormack as test cases, I invoke a close reading of their discussions of ‘ethics’ to see whether their projects are adequately divorced from rationalism’s centring of the power of human thought. Here, I argue that their use of Spinoza and centring of ‘adequate ideas’ or ‘common notions’ in the pursuit of ‘responsibility’ ultimately leads both theorists to maintain the power of reason in generating a universal form of obligation. Rather than suggesting this is inherently negative, I offer a fork in the road: to continue towards universal ‘moral’ frameworks that would develop along the lines of thinkers like Edmund Husserl, Emmanuel Levinas, and Enrique Dussel, or continue to pursue a non-universal and non-rationalistic ‘ethics’ by truly centring the body and embodiment. Turning to Nietzsche, this chapter closes by thinking through the potentiality of an ‘ethics’ that would truly centre the body and embodiment against the humanistic valorization of rational activity.

Where Chapter Three focuses on humanism’s rationality, Chapter Four, “Transductive Post-Humanism: Beyond the ‘Ends’ of Humanity and Hegelian Hylomorphism,” centres the question of finality or teleology. This chapter is motivated by the following research questions: First, does critical post-humanism offer a critique of teleology? Second, if this critique is insufficient, what might a critique of Hegelian teleology look like? Finally, is it possible to determine a normative position or political ontology without appealing to ends [*telos*]? The chapter begins by reading through critiques of teleology offered in the work of Stefan Herbrechter, Donna Haraway, and N Katherine Hayles.

While recognizing strengths in each of these positions, I ultimately find the critiques of teleology lacking. In response, the bulk of the chapter works towards an alternative critique of Hegelian teleology through Gilbert Simondon's theory of individuation. Suggesting that Hegelian teleology tends to retain the structure of Aristotelean hylomorphism, I centre Simondon's critique of the hylomorphic schema as a potential pathway for thinking against teleological political formations. To close, Simondon's alternative understanding of individuation, in 'transduction' and 'ontogenesis,' is used to discuss the potential of a 'transductive ethics:' a notion of ethics that retains an opening to exogeny without rational determination.

To close, Chapter Five, "Intrastructural Necropolitics: Entanglement, Transparency, and the Conditions of Domination," questions the intra-connection of ontology, epistemology, and ethics by centring the question: what if entanglement (which is to say, connection and relation) is the basis of domination? Focusing on recent depictions of racialization as a technological production, this chapter thinks through how the contemporary 'intrastructure,' as coined by Denise Ferreira da Silva, (re-)inscribes the conditions of contemporary 'necropolitics,' as theorized by Achille Mbembe. Working through the development of 'intrastructural necropolitics,' this chapter puts critical post-humanism in conversation with developments in Afro-pessimism to think through a problem that percolates throughout prior chapters: what if the source of liberation constitutes the very affront to that liberation? Specifically, what is to be done if the politics deployed by critical post-humanism structurally reinforce the conditions of Black dispossession described by Afro-pessimism? This problem opens to a discussion of both 'oblique' tendencies and an 'active nihilism,' which might inaugurate not 'novel possibilities' but a focus on potentialities already present within critical post-humanism.

Chapter 1, Critical Post-Humanism, a Philosophical Diagram

What is ‘critical post-humanism?’ The purpose of this chapter is to provide an understanding of both the development and the aims of ‘critical post-humanism.’ The three parts of the term might aid in this analysis. The adjective ‘critical’ and prefix ‘post’ both apply to the noun, humanism. To develop an understanding of ‘critical post-humanism’ one must work backwards, determining first ‘humanism,’ then ‘post,’ and finally ‘critical.’ Working historically, this chapter traces the developments of humanism, post-humanism, and finally critical post-humanism to produce a diagram of that final term. As described in the introduction, a philosophical diagram does not provide a definitive account of its object as a fixed being or identity. Instead, following Gilles Châtelet’s description, a philosophical diagram attempts to capture the tendencies of its object in ‘mid-flight.’ A philosophical diagram of critical post-humanism can never claim to offer a definitive history, nor an exhaustive representation, but only ever an attempt to conceive of its behaviors, tendencies, and repetitions. As a result, this undertaking is as much creative as it is descriptive, following the genealogical propensity toward selection.

This chapter follows a largely historical trajectory, but it is not clearly a historical project. The history or historiography⁷⁵ presented is largely determined by the interests of critical post-humanism, rather than a succinct historical representation. I begin by exploring the ‘transcendental humanism’ of Immanuel Kant, which I take as the central object of critique for critical post-humanism. This study of Kant, which continues into chapter 2, provides the basis for the ontological, epistemological, and ethical positions that are aligned with humanism. These consist in the

⁷⁵ My use of historiography, here, is slightly tongue in cheek, referring to Walter Benjamin’s distinction between ‘historicism’ and ‘material historiography’ in thesis XVII of “Theses on the Philosophy of History,” in *Illuminations*, trans. Harry Zohn, ed. Hannah Arendt (Boston: Mariner Books, 2019), 207. Benjamin notes that a ‘materialistic historiography’ is constructive rather than descriptive, ‘blasting’ history through with the ‘now’ [*Kairos*]. My use is not meant to imply a work pregnant with messianic potential, but only the selective tendency enabled by the historiographic against the more representational and descriptive tendencies of historicism.

ontological separation of ‘humans’ (persons) from ‘non-humans’ (things), a representational epistemology where ‘humans’ are capable of objectively representing ‘non-humans,’ and a deontological morality where ‘non-humans’ are used as means to ‘human’ ends. Second, I trace how transcendental humanism both continues and is displaced by 19th century philosophy and mid-20th century work in cybernetics and transitional humanism. While these developments begin to think beyond human ‘ends’ (which treat the ‘human’ as *telos* or final cause), they remain largely bound to a human determination (which takes the ‘human’ as efficient cause). As a result, these shifts maintain a humanistic onto-epistemology. In the third section, I explore the influence of 20th century critiques of humanism in the work of ‘post-structuralism’ and second-order cybernetics on the developments of critical post-humanism. Continuing to trace influences on critical post-humanism, the fourth section turns to normative critiques of humanism leveled from post-colonial theory, de-colonial theory, Black studies, and feminism. Finally, the fifth section of this chapter works to diagram ‘critical post-humanism’ through the elements of ontological connection, epistemic relation, and situated ethics.

Humanism From Descartes to Kant

Humanism is often identified as a shift away from theological frameworks. Renaissance humanism, for instance, may be identified with shifts away from religious studies in classical antiquity towards a study of humanity [*studia humanitatis*]. Nevertheless, humanism is not necessarily a form of secularism nor the end of religious belief.⁷⁶ Many Renaissance humanists were Christians and sought the knowledge of ancient scholars to support and enliven Christianity, not destroy it.⁷⁷

⁷⁶ On the relationship of humanism and secularism, see Anthony B Pinn’s (ed), “Introduction,” in *The Oxford Handbook of Humanism*. Xiv-xxviii (Oxford: Oxford University Press, 2019). <https://doi.org/10.1093/oxfordhb/9780190921538.001.0001>.

⁷⁷ The most influential account of this understanding is found in the work of Paul Oskar Kristeller, who aimed to distinguish Renaissance humanism from contemporary designations. For Kristeller, Renaissance humanism was largely a continuation, rather than a break from Antiquity. See, for example, Paul Oskar Kristeller, *Renaissance Concepts of Man and Other Essays* (New York: Harper Torchbooks: 1972).

Even in the Enlightenment period, during which science and rationalism promoted direct confrontations with the church, many humanists were religiously motivated. For instance, while the geometrical projects of René Descartes and G.W. Leibniz are at odds with the theological works of scholasticism,⁷⁸ both were engaged in the practice of theodicy: a defence of God's goodness against the problem of evil.⁷⁹ Even Immanuel Kant, a central figure in the epistemic shift from a divine to a human foundation for knowledge, maintained the role of philosophical free thought as a support or apologetics for religious knowledge.⁸⁰ Rather than a shift away from religion, humanism constitutes an epistemic shift where knowledge is grounded in human reason rather than divine grace. Karl Marx offers an example of this epistemic development: "Man makes religion, religion does not make man [...] *man* is no longer abstract being squatting outside the world. *Man is the world of man.*"⁸¹ Tracing this development through the Enlightenment period, Michel Foucault suggests an epistemic shift occurs in the formation of the human sciences: 18th century disciplinary shifts from 'natural history' to 'biology,' the 'science of wealth' to 'economics,' and 'general grammar' to 'philology' correspond with an empiricism applicable to humanity. For Foucault, 'humanism' consists in an epistemic shift where sciences are invested in the 'human' as subject and object of investigation as the 'human' is both observer and the object of observation. According to Foucault, these sciences attempt to "completely cover the entire domain of what can be known about man."⁸²

⁷⁸ For a thorough analysis of Descartes' relationship with Scholasticism, for instance, see Roger Ariew, *Descartes among the Scholastics* (Leiden: Brill, 2011).

⁷⁹ Descartes largely accepted Augustine's theodicy from *De Libero Arbitrio* (*On Free Choice of the Will*). For a description of how Descartes attempts to square Augustine's theodicy into the fourth Meditation's discussion of 'error,' see chapter 7 of Stephen Mann, *Descartes and Augustine* (Cambridge: Cambridge University Press, 1998). The study of theodicy is even more apparent in Leibniz, for whom the problem of evil was a major area of philosophical inquiry. Both his first and last major works were concerned with the study of theodicy. That final work is G.W. Leibniz *Theodicy: Essays on the Goodness of God, the Freedom of Man, and the Origin of Evil*, trans. by E.M. Hoggard (La Salla: Open Court, 1985).

⁸⁰ This is the role of free thought in the 'lower faculty' as aid to the 'higher faculties' in Immanuel Kant. For the relationship of philosophy and theology, specifically, see the Appendix to the first part of Immanuel Kant, *The Conflict of the Faculties*, trans. Mary J. Gregor (New York: Abaris Books, 1979).

⁸¹ Karl Marx, *Critique of Hegel's Philosophy of Right*, trans. Joseph O'Malley (Oxford: Oxford University Press, 1970). Emphasis in original.

⁸² Foucault, *The Order of Things*, 310.

Critics identify ‘humanism’ as both a philosophical anthropology that distinguishes ‘human’ from ‘non-human’ and an ‘anthropocentric’ assertion that ‘humans’ are superior to ‘non-humans.’⁸³ The term ‘anthropocentrism’ defines any position that holds ‘humans’ as distinct from ‘non-humans,’ superior to ‘non-humans,’ and thus justified in subordinating ‘non-humans.’ While all anthropocentric assertions are necessarily humanistic, it is debatable whether humanism is necessarily anthropocentric. Critical post-humanists often argue that humanism is necessarily anthropocentric, with critics claiming this is too sweeping a generalization.⁸⁴ Identifying ‘humanism’ with ‘speciesism,’ some have suggested that a ‘good speciesism’ (or ‘good humanism’) would be analogous with a ‘good racism’ or ‘good sexism.’ According to this line of thinking, positions subordinating ‘non-humanity’ to ‘humanity’ are “ethical failing[s].”⁸⁵ This language takes ‘post-humanism’ as a project of emancipation: liberation from the epistemological presuppositions of humanism and anthropocentrism. As one prominent scholar suggests, this is the ‘deconstruction’ of ‘species supremacy’ and “any lingering notions of human nature [...] as categorically distinct from the life of animals and non-humans.”⁸⁶ Critical post-humanism is a political and ethical response to humanism’s rationalistic epistemology and ontological hierarchization.

The centring of ‘humanity’ as epistemic foundation is not unique to the European Renaissance and Enlightenment. The European ‘re-discovery’ of ancient philosophy in the early Renaissance was integral to its development.⁸⁷ Plato’s theory of knowledge as recollection [*anamnesis*] and

⁸³ This distinction is offered by David Roden, *Posthuman life: Philosophy at the Edge of the Human* (London: Routledge, 2011), 11.

⁸⁴ Karen Ng, “Humanism: A Defense,” *Philosophical Topics* 49, no. 1 (2021): 147n3. URL: <https://www.jstor.org/stable/48652165>.

⁸⁵ Kopriva et al., “Anthropocentrism.”

⁸⁶ Braidotti, *The Posthuman*, 65.

⁸⁷ The relationship of the first publication of Plato’s works in Latin and the development of Renaissance humanism is the subject of Denis J.-J. Robichaud’s, *Plato’s Persona: Marsilio Ficino, Renaissance Humanism, and Platonic Traditions* (Philadelphia: University of Pennsylvania Press, 2018). This adoption of Greek philosophy in the Renaissance is explored in J.R. Milton. ‘Delicate learning,’ erudition and the enterprise of philosophy, in *Humanism and Early Modern Philosophy*, ed. Jill Krane and M.W.F. Stone. 159-177 (London: Routledge, 2000). This history sometimes elides the influence of Islamic philosophy in the preservation of these ancient works and their ‘re-discovery’ in Europe.

prioritization of *a priori*, ideal forms offers a normative promotion of rationality. Recollection is an epistemic position positing empirical or sensuous knowledge as consisting in the recollection of innate knowledge.⁸⁸ Plato's rationalism prioritized these *a priori* forms against *a posteriori* (or empirical) knowledge. In *Republic* V, for instance, Plato suggests that the *a priori* idea of the beautiful is superior to any *a posteriori* instance or empirical sensation of beauty.⁸⁹ While Aristotle rejects Plato's theory of innate knowledge and overt rationalism in favor of a more blended epistemic approach, his work tends to maintain the intellect as evidence of human superiority. This superiority serves to justify human flourishing [*eudaimonia*] as the central purpose or end [*telos*] of his ethical and political philosophy.⁹⁰ Yet, the centring of humanity can be found even in pre-Socratic philosophy. It is Protagoras who issues the statement, "Man is the measure of all things." While this position is denounced by subsequent thinkers as 'relativistic,'⁹¹ it has more recently been taken as emblematic of the 'high-humanistic creed' of the European Renaissance.⁹² Similar positions were expressed in Ancient Rome, most notably by the playwright Terrence, whose *Heuton Timorumenos* famously states, "I am human, and nothing human is alien to me / *Homo sum, human nihil a me alienum puto.*"

Despite these historical precedents, post-humanist critics tend to focus on the emergence of Continental Rationalism in the European Enlightenment, with Descartes as *persona non grata*. Val Plumwood, for instance, argues that where Plato provides a normative account of rationality, and takes the human as rationality's exclusive domain, it is only with Descartes that 'nature' becomes constructed as mechanized 'other' to humanity.⁹³ Neil Badmington similarly takes Descartes as

⁸⁸ See, for example, Plato, *Meno*. Translated by G.M.A. Grube. In *Plato: Complete Works*, ed. John M Cooper (Indianapolis: Hackett, 1997), 881-886.

⁸⁹ Plato, *Republic*, trans. G.M.A. Grube, revised. C.D.C Reeve. In *Plato: Complete Works*, ed. John M Cooper (Indianapolis: Hackett, 1997), 1106-1107.

⁹⁰ The role of *telos* in Aristotle is discussed in depth in chapter two. For a discussion of *eudaimonia* in Aristotle's ethics, see Thomas Nagel, "Aristotle on Eudaimonia," *Phonesis* 17, no.3 (1970): 252-259. <https://www.jstor.org/stable/4181892>.

⁹¹ See Plato, *Theatetus*, trans. M.J. Levitt, revised. Myles Burnyeat. In *Plato: Complete Works*, ed. John M Cooper. (Indianapolis: Hackett, 1997), 169.

⁹² Braidotti, *The Posthuman*, 1.

⁹³ Val Plumwood. *Feminism and the Mastery of Nature* (London: Routledge, 2003), 107.

providing a division between human ‘mastery’ and non-human ‘machines.’ For Badmington, “Descartes asserts his anthropocentrism on the grounds that it would be impossible for a machine to possess enough different organs to enable it to respond to the infinite unpredictability of everyday life.”⁹⁴ For both Plumwood and Badmington, the ramifications of Descartes’ mechanistic physics and dualistic metaphysics institutes a hierarchical subordination: the human mind, which is rational, self-transparent, and free, is justified in controlling matter, which is mechanistically determined and not free. While these critics are correct in noting a division between Cartesian physics and metaphysics and present a very important critique of Descartes’ epistemic self-transparency, it is worth examining whether this hierarchical account is an accurate depiction of Cartesian metaphysics.

Descartes’ understanding of the relationship of mind and matter is more complex than these accounts acknowledge. In attempting to distance himself from scholasticism, Descartes’ dualism never provides a strict separation between the intellect (which is tied to the rational) and sensation (the empirical). Sense, he argues, is comprised of a synthesis of bodily processes and mental ideas. Mental ideas are composed by the intellect and the will. Introduced in the fourth meditation, the intellect and will are distinct modes of thinking: the intellect is the faculty of knowing while the will is the faculty of choosing.⁹⁵ In *Principles of Philosophy*, Descartes aligns the intellect with perception and the will with volition. Despite this separation, he treats the two faculties as inter-connected in the process of judgement.⁹⁶ In contrast to these mental faculties, ‘material’ is aligned with mechanism.⁹⁷ Where the mind attempts to understand and represent the world through perception

⁹⁴ Neil Badmington, “Theorizing Posthumanism,” *Cultural Critique* 53, no. 1 (2003):10-27. <https://doi.org/10.1353/cul.2003.0017>.

⁹⁵ René Descartes, *Discourse on Method and Meditations on First Philosophy*, trans. Donald A Cress (Indianapolis: Hackett, 1998), 83.

⁹⁶ “In order to judge, the understanding is required (because we can make no judgement about a thing which we in no way perceive); but the will is also required, in order that assent may be given to the thing which has been perceived.” René Descartes, *Principles of Philosophy*, trans. R.P. Miller and Valentine Rodger Miller (Bloomington: Indiana University Press, 1982), 16.

⁹⁷ *Ibid.*, 100.

and judgment, material mechanism operates in accordance with determined outcomes. The mind-matter distinction arises throughout Descartes' work. For instance, in the *Meditations*, he offers a division between the material human body and the human mind. The body is taken as a machine analogous to clockwork, while the mind is granted some capacity of immaterial freedom:

I might regard a man's body as a kind of mechanism that is outfitted with and composed of bones, nerves, muscles, veins, blood and skin in such a way that, even if no mind existed in it, the man's body would still exhibit all the same motions that are in it now except for those motions that proceed either from a command of the will or, consequently, from the mind.⁹⁸

In the *Discourse on Method* this division is used to distinguish humanity from animals. While he holds it would be impossible to distinguish between a highly complex automaton and an animal, insofar as both operate mechanistically, Descartes suggests that the presence of human reason makes it possible to distinguish between a highly complex automaton and a human being. He asserts that while an automaton might be able to mechanistically imitate human language and bodily action, it would be incapable of imitating the infinite arrangement of human language that corresponds to the contingencies of human existence. Even the 'dullest men' produce a more complex variety of language configurations than are possible by a machine.⁹⁹ For Descartes, this distinction cannot be understood through material difference: humans do not appear to have some unique organ that animals lack. It follows that the difference between humans and animals consists in the capacity for rationality and intelligence. Descartes' theorization of a 'rational soul' explains the ontological distinction. For both Plumwood and Badmington, this separation of a 'rational human' from a

⁹⁸ Descartes, *Discourse on Method and Meditations on First Philosophy*, 100.

⁹⁹ Ibid., 32. It has been suggested that Descartes' consideration of human intelligence and automata is relevant to contemporary developments in artificial intelligence. It will be interesting to see both the technological and philosophical implications of these studies. See Yueming Luo, "Descartes' Intelligent Agent," *International Journal of Social Science Studies* 10, no. 6 (2022): 75-79. <https://doi.org/10.11114/ijsss.v10i6.5731>.

‘mechanical animal’ produces the justification for a hierarchical subordination under humanism: animal automatons are subservient to human control.¹⁰⁰

Despite what Plumwood and Badmington may claim, neither Descartes’ argument nor the subsequent history of Cartesian physics suggests that a hierarchical subordination is the outcome of his position. While Descartes’ metaphysics does presuppose a transparent and internal subject, his substance dualism derives from a presumed human-machine separation.¹⁰¹ Substance dualism is the outcome of this separation, not its cause. Descartes’ aims to explain the division, not justify it. Plumwood and Badmington largely ignore Cartesian physics, arguing that it serves only as a subordinate canvas for human (rational) domination. Yet, the history of Cartesian physics attests to a more unified understanding of mind-body interaction, allowing for the development of even of a materially embodied soul. For example, accounts from medical scholarship, even amongst Descartes’ peers, provides accounts of the body through Cartesian physics that takes humanity as integrated in psycho-somatic processes (and not as separated mental states).¹⁰² These developments in Cartesian mechanistic physics problematize attempts that subordinate materiality in Cartesian metaphysics. Rather than the subordination of materiality to the mind, Cartesian physics provides accounts of complex physiological processes, which are paralleled with (and not subordinated to) the complexity of the mind.¹⁰³ Julian Offray de La Mettrie’s critique of the Cartesian soul *based on* Cartesian physics is a quintessential example. La Mettrie takes the complexity of humanity’s

¹⁰⁰ Badmington aligns Descartes with Deckard in Philip K Dick’s *Do Androids Dream of Electric Sheep?* to exemplify the notion of ‘control’ provided in Plumwood: “A machine is made to be controlled, and knowledge of its operation is the means to power over it. Through knowledge of the machine of the body, even death itself might be controlled.” Plumwood, *Feminism and the Mastery of Nature*, 109. For these theorists, humans justify their control of the ‘non-human’ replicants due to the machinic and mechanistic subordination.

¹⁰¹ See Roden, *Posthuman life*, 29.

¹⁰² For an account of these developments, see Philippe Huneman and Charles T. Wolfe, “Man-Machines and Embodiment,” in *Embodiment*, ed. Justin E.H. Smith, 241-276 (Oxford: Oxford University Press, 2017).

¹⁰³ These developments give birth to the ‘parallelism’ adopted in Cartesian occasionalism by figures such as Louis de La Forge. For an overview, see Andrea Sangiacomo and Desmond Clarke, “Louis de La Forge,” *Stanford Encyclopedia of Philosophy*, ed. Edward N Zalta. 2020. URL = <https://plato.stanford.edu/archives/sum2020/entries/la-forge/>.

mechanistic existence as the basis of meaning: “The excellence of reason does not depend on a big world devoid of meaning (immateriality), but on the force, existence, and perspicuity of reason itself.”¹⁰⁴ Throughout his work, the role of analogy is apparent. “[La Mettrie] is not saying that brains are like clocks, but rather, putting forth a functional analogy between different arrangements of matter and their corresponding different functional properties.”¹⁰⁵ In Cartesian physics, which draws upon the complexities of Descartes’ own proposals to trouble substance dualism, thought develops through the complexity of mechanistic organization, not separate from and despite it. As La Mettrie suggests, “Man is so complicated a machine that it is impossible to get a clear idea of the machine before-hand, and hence impossible to define it.”¹⁰⁶ Descartes’ soul-body dualism is an attempt to account for the ways that this produces a distinction. In turn, the distinction allows for the development of a mechanistic physics with complex organization. Descartes’ mind-body separation (or substance dualism) does not inherently justify the domination of one complex system of organization by another. Given the complexity of materialist possibility awakened by Cartesian physics, it is apparent that the foundation for the justification of the human domination of nature is located elsewhere.

The justification for human domination is more readily apparent in Immanuel Kant’s transcendental project. This project is foundational to humanism’s ontological, epistemic, and moral presuppositions. As David Roden notes, human exceptionalism is largely “due to Kant’s *turn away* from Cartesian epistemology (in which a self-transparent subject represents a mind-independent nature) towards the transcendental subjectivity that actively organizes nature.”¹⁰⁷ Descartes may present a mind that is separate from matter, but the intellect and will attempt to represent an

¹⁰⁴ Julien Offray de La Mettrie, *Man A Machine*, trans. Gertrude C Bussey, rev. MW Calkins. (Chicago: Open Court, 1912), 87.

¹⁰⁵ Huneman and Wolfe, “Man-Machines and Embodiment,” 255.

¹⁰⁶ La Mettrie, *Man A Machine*, 89.

¹⁰⁷ Roden, *Posthuman life*, 30. Emphasis added.

incredibly complex system of physiological organization. In contrast, Kant's transcendental project understands organization as occurring through the human mind: material complexity is reduced to human intuition. As Bruno Latour notes, anthropocentrism finds its roots in 'Kant's Copernican Revolution' where "Things-in-themselves become inaccessible while, symmetrically, the transcendental subject becomes infinitely remote from the world."¹⁰⁸ For Kant, human cognition does "not merely represent the world, but actively organize[s] it, endowing it with value, form, and meaning."¹⁰⁹

Henry E Allison uses the term 'transcendental humanism' to express the way Kant offers a "conception of man as one and the same time a part of and lawgiver to nature."¹¹⁰ Allison explains this development through Kant's synthesis of the rationalist and empiricist projects, offering a new focus on human subjectivity.¹¹¹ Continental rationalism, associated with Descartes, Spinoza, and Leibniz, offers a 'transcendental' philosophy oriented towards the divine. Transcendental, as used here, is a philosophical account of the *a priori* conditions of any possible experience. Kant defines transcendental as "all cognition that deals not so much with objects as rather with our way of cognizing objects in general insofar as that way of cognizing is possible a priori."¹¹² In the Introduction to the second edition of the *Critique of Pure Reason*, Kant acknowledges that while our cognition begins with empirical experience, experience cannot be the basis of cognition. Instead, Kant's transcendental philosophy is an attempt to determine what conditions are necessary for

¹⁰⁸ Latour, *We Have Never Been Modern*, 56.

¹⁰⁹ Roden, *Posthuman Life*, 120.

¹¹⁰ Henry E Allison, "Kant's Transcendental Humanism," *The Monist* 55, no. 2 (1971): 183. <https://www.jstor.org/stable/27902214>.

¹¹¹ On this synthesis Allison writes, "With the rationalists, Kant distinguished sharply between questions concerning the causes and origins of our knowledge (*quid facti*) and questions about its limits and objective validity (*quid juris*). Thus, a rigorous critique of psychologism, i.e. of any attempt to explain, or explain away the validity of either our cognitive or moral principles by means of an analysis of their basis in human nature or their genesis in human experience, is one of the more characteristic traits of Kantian philosophy. Yet this transcendental, logical investigation of the nature and limits of knowledge, and of the fundamental principles of morality, leads Kant back to the human subject, in whose cognitive faculties he finds the *a priori* principles of human knowledge and in whose autonomy he finds the basis of the categorical imperative" Ibid., 182.

¹¹² Immanuel Kant, *Critique of Pure Reason*, trans. Werner S. Pluhar (Indianapolis: Hackett, 1996), A12, B25, 64.

human cognition to make judgements about experience.¹¹³ In the rationalist tradition, the *a priori* foundation of cognition was God. This can be seen in Descartes' deployment of Anselm and Aquinas' arguments for the existence of God, or in Spinoza's description of God as an infinite substance near the opening of the *Ethics*. Inspired by the psychologism of empiricism, found—to varying degrees—in the work of John Locke, George Berkley, and David Hume, Kant aims to explain the transcendental ground of knowledge in 'psychological and genetic' terms. Thus, Kant seeks a scientific rather than dogmatic foundation for knowledge.¹¹⁴ For example, Hume outlines a radically humanistic philosophy beginning with a science of humanity: "There is no question of importance, whose decision is not compriz'd in the science of man; and there is none which can be decided with any certainty before we become acquainted with that science."¹¹⁵ In contrast with the rationalist approach, which grounds knowledge in the power of God's grace, empiricism maintains a commitment to empirical evidence as the ground of knowledge.¹¹⁶ Due to the impossibility of empirically grounding universal truths in experience, Hume's writings on empiricism produce a radical skepticism regarding knowledge claims.¹¹⁷ In his critical philosophy, Kant attempts to synthesize these movements: taking the transcendental tools of rationalism to seek the cognitive conditions of empirical experience (but without the dogmatic implications) in conjunction with the empirical commitment to a human science and a human foundation for radical inquiry (but without supposing experience as the foundation). Kant's project offers a transcendental approach concerned with humanity rather than the divine: seeking the human "conditions of ordinary experience and scientific knowledge."¹¹⁸

¹¹³ See *Ibid.*, B1-B10, 43-51.

¹¹⁴ Allison, "Kant's Transcendental Humanism," 185.

¹¹⁵ David Hume, *A Treatise of Human Nature*. Oxford: Oxford University Press, 1967.

¹¹⁶ For a more thorough discussion of empiricism, see chapter 3.

¹¹⁷ Hume discusses this skepticism in Book 1, Part IV of *A Treatise of Human Nature*.

¹¹⁸ Allison argues that, despite the turn towards humanity, Kant's thought remains transcendental because "it is grounded in the conviction that human knowledge has certain a priori conditions which alone render it possible, and which not only cannot be revealed, but are in fact necessarily presupposed by the kind of empirical analysis of 'human

As a human science, Kant's *Critique of Pure Reason* aims to “establish the a priori and objective validity” of human knowledge.¹¹⁹ He writes, “these inquiries [are] far superior in importance and their aim [is] much more sublime, than anything that our understanding can learn in the realm of appearances.”¹²⁰ This superiority is due to the fact that the empirical realm (of appearances) must necessarily depend on some *a priori* conditions that make any sensation possible. To bridge the gap between rationalism and empiricism, Kant brings together the *a priori* judgements of rationalism with the synthetic judgements of empiricism. He begins by distinguishing analytic and synthetic judgements. Analytic judgements belong to a concept. For example, the statement ‘God is perfect’ is an analytic judgement because perfection is contained in the definition of God. In contrast, synthetic judgements add something to the concept. For example, ‘John is a bachelor’ expands our understanding of John by adding the accidental or predicate category of ‘bachelor’ to the concept of ‘John.’ All empirical or *a posteriori* judgements are synthetic.¹²¹ Empirical judgements synthesize concepts with predicates. For instance, one might empirically determine how heavy a box is, thus adding the predicate weight to their understanding of the box. Furthermore, all analytic judgements are *a priori*. Empiricism does not provide cognitive tools to determine a concept. An analytic *a posteriori* judgement is, thus, impossible. The only possible remainder is a synthetic *a priori* judgement: a judgement that is the synthesis of *a priori* concepts rather than empirical experience. Kant offers the proposition “everything that happens has its cause” as an example.¹²² The concept ‘everything that happens’ does not analytically contain the predicate of causality in its definition. Causality must be added as a synthetic judgement. However, as Hume’s skepticism suggests, this judgement is too universal to be empirically derived. The judgement must, then, be a synthetic *a priori* judgement: the

nature’ or the ‘human understanding’ characteristic of British empiricism.” Allison, “Kant’s Transcendental Humanism,” 187.

¹¹⁹ Ibid., 189.

¹²⁰ Kant, *Critique of Pure Reason*, A3, B7, 48.

¹²¹ Ibid., A7, B11, 52.

¹²² Ibid., A9, B13, 54.

synthesis of distinct *a priori* concepts. Kant continues to suggest that all theoretical sciences, including mathematics, natural science, and metaphysics, contain synthetic *a priori* judgements. Metaphysics, in particular, is said to contain “nothing but synthetic *a priori* propositions,” which aim to expand *a priori* cognition.¹²³ The goal is to synthetically determine an *a priori* basis for cognition.

The first part of the *Critique of Pure Reason* takes up this “science of all principles of *a priori* sensibility” in what Kant terms the ‘transcendental aesthetic.’¹²⁴ The transcendental aesthetic constitutes a science of the metaphysical synthetic *a priori*: a synthetic or expansive judgement of the foundation of the *a priori* conditions necessary for experience. The transcendental aesthetic relates space and time as the *a priori* concepts of outer and inner sense, which constitute the two sources of human cognition. Rather than a thorough analysis of the transcendental aesthetic (which would take up far too much space), I am interested in Kant’s discussion of ‘intuition’ and ‘understanding’ in the introduction of the transcendental aesthetic because it clarifies the role synthetic, *a priori* cognition plays in the organization of sensation. Intuition, Kant suggests, “is that by which a cognition refers to objects directly, and at which all thought aims as a means.”¹²⁵ Nevertheless, intuition only occurs after an object has affected us in some manner. Humans require some sensuous experience of an object to intuit that object. Like the empiricists, Kant conceives of intuition as arising empirically. However, unlike the empiricists, Kant argues that concepts cannot be derived empirically. Rather, it is the power of the human understanding that derives concepts.¹²⁶ While humans empirically derive intuitions, the understanding transforms these sensations into thoughts and concepts. The power of the understanding is transformational: empirically driven intuitions provide the understanding with

¹²³ Ibid., B18, 59.

¹²⁴ Ibid., A21, B35, 73.

¹²⁵ Ibid., A19, B33, 71.

¹²⁶ Ibid., A19, B33, 72.

an ‘undetermined object’ that Kant terms an ‘appearance.’ It is only through the understanding, however, that this ‘appearance’ is given ‘form.’ Kant continues,

Whatever in appearance corresponds to sensation I call its matter, but whatever in appearance brings about the fact that the manifold of appearance can be ordered in certain relations I call the form of appearance. Now, that in which alone sensations can be ordered and put into a certain form cannot itself be sensation again. Therefore, although the matter of appearance is given to us only a posteriori, the form of all appearance must altogether lie already for the sensations a priori in the mind: and hence that form must be capable of being examined apart from all sensation.¹²⁷

Even before the development of the synthetic conditions of experience (space and time) in the transcendental aesthetic, Kant proposes that the appearances of sensation, or what he calls ‘matter,’ are only subsequently organized by the understanding into what he terms ‘form.’ The development of formal organization is mandated by human reason. The development of the transcendental aesthetic already assumes this distinction, which is presented as a given by Kant. In other words, Kant’s critical science is an attempt to explain what *a priori* conditions are necessary to explain this transformation from intuited matter to organized form. Kant’s epistemology presupposes that a transcendental, human subject organizes sense data through synthetic activities: that humans take unorganized ‘matter’ and organize it into ‘form.’ Furthermore, as Allison notes, Kant “holds that synthetic activities not only organize items given to the mind in its experience, but also to constitute or make this experience itself possible.”¹²⁸ The structure of cognition unifies these experiences into form. This subsequently constitutes the condition of objective human knowledge. To be fair, Kant treats these conditions as transcendentally and not empirically real. The understanding’s process of organization does not determine empirical reality but only organizes it and gives it form.¹²⁹ Nevertheless, Kant’s affirmation of human cognition in the transcendental subject, alongside his

¹²⁷ Ibid., A20, B34, 73.

¹²⁸ Allison, “Kant’s Transcendental Humanism,” 197.

¹²⁹ Ibid., 193.

understanding of that subject's role in organizing matter into form, together promote a transcendental humanism by which human cognition, alone, is taken as the purveyor of value, form, and meaning. The powers of human reason are unique in their ability to give sense to the empirical world. Rationality is the sole purveyor of judgement.

The power Kant instills in human cognition crystalizes the ontological, epistemological, and ethical commitments to humanism. These commitments—to an ontological separation of a transparent humanity from an opaque nature; a reflective and rational epistemology that takes this separation as grounds for neutral observation; and a deontological morality that takes rational subjectivity as the highest good and end—inform both subsequent developments of humanism, such those found in German Idealism, cybernetics, and transitional humanism, as well as challenges from anti-humanism, Black studies, feminism, de-colonial theory, and post-humanism. Before interrogating these developments, it is worth spending a moment exploring how Kant develops these positions.

At least in the first *Critique*, Kant's ontological commitments do not appear to aim at a grand cosmological design. For example, Kant is critical of grand metaphysical systems for presupposing form over matter.¹³⁰ He suggests that nothing is more detrimental to expanding human cognition than attempts to formalize intuition in advance.¹³¹ As deployed in the transcendental aesthetic, Kant's metaphysical principles are minimal: only offering the synthetic conditions for empirical inquiry. Given that intuition and understanding start from the presentation of appearance, the organization of form in the understanding cannot take place prior to sensation. Nevertheless, in presenting the relation of the understanding to matter in this way, Kant already presupposes a separation and distinction between the understanding and empirical sensibility. Given that the

¹³⁰ See, for instance, Kant's critique of Leibniz in the appendix to part II of the Transcendental Logic. Kant, *Critique of Pure Reason* A261-A268, B316-B234, 323-329.

¹³¹ *Ibid.*, A238, B297, 305.

understanding does not contain its own content, concepts must be derived from experience.¹³² Concepts are built on appearances. Thus, only the universal conditions of the transcendental aesthetic can be transcendently (though not empirically) derived. All other conceptualizations require empirical intuition.¹³³ There is a stark contrast between a transparent, rational self and an opaque, never to be fully grasped, nature. While it is possible to determine the conditions of the understanding through the mere powers of pure reason, the empirical world remains something of a mystery. Hence, it is possible to distinguish the ‘world of sense’ from the ‘world of understanding.’¹³⁴ This distinction reveals the boundary of the understanding: intelligible concepts, which result from the understanding, are distinct from empirical objects. Intelligible concepts are named ‘phenomena;’ empirical objects ‘noumena.’ Phenomena correspond with the object of understanding and appearance: the thing as it appears to reason. Noumena is identified with the empirical object, or the ‘thing in itself.’ Synthetic judgements can only apply to phenomena, never noumena. Nevertheless, Kant provides a special place for noumena, calling it “an *object of nonsensible intuition*.”¹³⁵ In contrast with an object of the understanding, which is transparent to pure reason, a noumenal object is a problem for the understanding, located outside of the understanding’s grasp. Noumena remain separate from humanity’s synthetic and transparent cognition, producing an ontological and epistemological separation between transparent rationality and the opaque natural world. Kant even introduces the transcendental dialectic as a tool that can be used to stop reason from deceiving itself in thinking that it has access to noumena.¹³⁶ Human reason is ontologically distinguished because of

¹³² Ibid., A239, B298, 306.

¹³³ Kant stresses this in A245-A247, B303-304, 310-311. In the second edition, he writes, “Now from this flows incontestable the consequence that the pure categories can *never* be of *transcendental* but always only of *empirical* use, and that the principles of pure understanding can be referred only, with respect to the universal conditions of a possible experience, to objects of the senses, but never to things as such (i.e. never without taking account of the way in which we may intuit them.” B303, 310-311.

¹³⁴ Ibid., A255, B311, 319.

¹³⁵ Ibid., B307, 317. Emphasis in original.

¹³⁶ Ibid., A298, B354, 350.

its epistemological rendering: the incapacity of the (self-transparent) intuition to grasp the (opaque) thing in itself serves as evidence of this separation. Epistemologically, this separation conditions humanity's position as the lawgiver of value and meaning: the understanding reflects on and organizes, thereby giving meaning to, intuited appearance. Human reason is arbiter of all conceptual development. This self-transparent reason is ontologically separated from the natural world.

While there are immense ramifications of these ontological and epistemic conditions, Kant's moral philosophy provides the strongest impulse towards humanity's domination of nature. Taken alone, ontological separation and epistemic reflection do not necessarily provide a justification for domination. Domination requires a normative dimension. Kant's *Groundwork of the Metaphysics of Morals* and *Critique of Practical Reason* set out his moral project. The *Groundwork*, published between the first and second editions of the first *Critique* in 1775, distinguishes humanity from the rest of nature. For instance, Kant writes that "Rational nature is distinguished from the rest of nature by this, that it sets itself an end."¹³⁷ He suggests, furthermore, that "this end can be nothing other than the subject of all possible ends itself, because this subject is also the subject of a possible absolutely good will."¹³⁸ Taken together, these claims produce at least two ramifications. First, rational nature is separated from the rest of nature because it can determine ends. Second, rational cognition can use its rational capacities to determine that rational beings, such as itself, ought to be taken as ends. Together, these ramifications reveal the centrality of rationality in Kant's moral philosophy. Rational beings maintain a law giving capacity derived from the first *Critique*. Given this capacity rational beings, those Kant terms 'persons,' are justified in their domination of 'nature.' He writes,

Beings the existence of which rests not on our will but on nature, if they are beings without reason, still have only a relative worth, as means, and are therefore called things, whereas rational beings are called persons because their nature already marks them out as an end in itself, that is, as something

¹³⁷ Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. Mary Gregor (Cambridge: Cambridge University Press, 1997): 4:437, 44.

¹³⁸ *Ibid.*, 4:437, 45.

that may not be used merely as a means, and hence so far limits all choice (and is an object of respect).¹³⁹

While ‘persons’ are taken as having intrinsic worth, the rest of nature only has value in relationship to persons. The onto-epistemic separation of human rationality becomes the basis for humanity’s domination of nature. This conclusion, when extended with the law giving capacity rendered to persons as transcendental (transparent) subjects, allows for the imposition of rational, human law onto nature.

While Kant is not necessarily proposing an idealist ontology, nor supposing that humans can create the world through arbitrary means, his normative position does justify rational humans taking natural ‘things’ as means to human ends. Such normative principles are further crystalized in Kant’s deontological moral system. ‘Deontology,’ as it is used in ethical philosophy, refers to a universal rule-based moral system. Kant’s ‘categorical imperative’ is often taken as exemplary of deontological morality. The *Groundwork* aligns an imperative with a rational command that is both objective and necessary for the will to follow.¹⁴⁰ Imperatives are statements that include a universal (and not subjective) ‘ought.’ Kant suggests that an imperative is ‘categorical’ when it is applied directly to an action, and not to any extenuating circumstances.¹⁴¹ In other words, a categorical imperative holds regardless of consequence. For example, under the categorical imperative it is wrong to lie under any circumstance, no matter the consequence. Kant’s *Critique of Practical Reason*, published in 1788, provides a similar, albeit more abstract, account of this moral position. Noting that ‘practical philosophy,’ by which Kant means any philosophy focused on normative values, is contained within pure reason, he suggests that practical ‘principles’ should be taken as ‘maxims’ when they are subjective and as “objective, or practical *laws*, when the condition is cognized as object, that is, as

¹³⁹ Ibid., 4: 428, 37.

¹⁴⁰ Ibid., 4: 413, 24.

¹⁴¹ Ibid., 4: 416, 27.

holding for the will of every rational being.”¹⁴² Practical reason is the faculty determined by the will. The second *Critique* follows the *Groundwork* in establishing the determination of such laws by the will as an ‘imperative.’¹⁴³ Because these laws are laws of the will, they are categorical, and established without reference to (empirical) causality or circumstance. By focusing on the categorical and not the causal, practical reason is a completely rational affair: considering law only in its form rather than by material circumstance.¹⁴⁴ By posing practical reason in the domain of pure reason, the categorical imperative is deployed universally. Insofar as the conditions of judgement put forward in the first *Critique* hold universally, so too must the normative, moral judgements of practical reason hold for every rational being.

Kant informs several aspects of humanism that inspire later models. These develop in what might be termed Kant’s ethico-onto-epistemology.¹⁴⁵ First, humans are ontologically distinct from ‘nature’ (or ‘non-humans’) in at least two ways: 1) ‘human’ rationality is transparent to itself and can derive the conditions of its own existence through synthetic judgments, while ‘nature’ is opaque and reduced to otherness as noumena; 2) ‘human’ rationality is capable of deriving ends and should thus be considered as an end, while ‘nature’ is reduced to being a means for human ends. Second, in line with this ontological distinction, humanity adopts a reflective epistemology towards nature. Because nature is totally other to humanity, human reason can observe nature at a distance. This distance enables reflective developments of conceptual models or organization by the understanding. Humans provide laws and meaning to nature. Third, human reason serves as the ground for a deontological or universal system of morality. Because morality is rendered categorically, the normative laws derived through rational deduction can be applied regardless of circumstances. Thus,

¹⁴² Immanuel Kant, *Critique of Practical Reason*, trans. Mary Gregor (Cambridge: Cambridge University Press, 2015): 5:19, 17.

¹⁴³ *Ibid.*, 5:20, 18.

¹⁴⁴ *Ibid.*, 5:27, 24.

¹⁴⁵ A term adopted from Karen Barad

the aims derived by human reason apply universally across the totality of nature. Through these three commitments, Kant's transcendental humanism promotes human rationality as the 'transcendental architect' of experience and the 'midwife' of normative valuation.

Steering Humanity: German Idealism, Marxism, Cybernetics, and 'Transhumanism'

Humanity's domination of 'nature' (as 'things' or 'non-humans') depends on an understanding of 'nature' as being outside the sphere of rationality. In Kantian parlance, human reason is justified in its manipulation of natural 'things' towards human ends. Yet, as deployed in the transcendental aesthetic, this promotion of reason moves in two directions: outwards to phenomenal objects in experience and appearance, and inwards through a self-knowledge of the conditions of possible experience. The desire for transparent self-knowledge is integral to humanism. French philosopher Gilbert Simondon suggests that rationalization emerges through the promotion of self-knowledge as a technical self-knowledge.¹⁴⁶ Tracing humanism through the Renaissance and Enlightenment, Simondon argues that both periods brought together technics and rationality. He describes older forms of technical expertise as relying on a 'technical subconscious,' consisting in habit and skill or 'technical know-how,' which occurs through active participation with living nature.¹⁴⁷ The Renaissance introduces a "rational, theoretical, scientific, and universal" technical knowledge.¹⁴⁸ Simondon identifies this new type of technical knowledge with humanism, which aims to be encyclopedic and universal in its design. This is an attempt to use the power of reason "to discover all of human thought in order to be freed from a limitation of knowledge."¹⁴⁹ This position certainly fits with Kant's later political writings, in which he defends the use of the 'lower faculty'

¹⁴⁶ Gilbert Simondon, "Humanisme Culturel, Humanisme Négatif, Humanisme Nouveau," in *Sur La Philosophie: 1950-1980*. 71-76 (Paris: PUF, 2016).

¹⁴⁷ Gilbert Simondon, *On the Mode of Existence of Technical Objects*, trans. Cecile Malaspina and John Rosgove (Minneapolis: Univocal Press, 2017), 107. Henceforth *MEOT*.

¹⁴⁸ *Ibid.*, 109

¹⁴⁹ *Ibid.*, 113.

(philosophy) and the promotion of free thought in the public sphere.¹⁵⁰ Centring the rational and universal design of this project, Simondon writes, “every encyclopedism is a humanism, if by humanism one means the will to return the status of freedom to what has been alienated to man, so that nothing human should remain foreign to man.”¹⁵¹ Humanism seeks to know the human and extend human potential. As deployed in this manner, humanism constitutes a technical knowledge of the human, and the rational capacity to determine and support human ends.

As Simondon suggests, encyclopedism is often linked to the Enlightenment period, in which Kant played a major role. Alongside the developments of Kant’s critical period, the 18th century saw the development of both the French *Encyclopédie* and the Scottish *Encyclopedia Britannica*, which worked to connect disparate sciences into an organized whole. These attempts towards a human science came under critique in post-Kantian German thought, most notably by Friedrich Schlegel, who argued for an Idealistic epistemology. From this critique, German encyclopedism in the romantic period sought Idealism as the basis for connecting knowledge.¹⁵² Idealism, as used here, has been “defined as a specifically philosophical movement committed to dialectical totalization, identity, and system.”¹⁵³ It can be roughly understood as the attempt to systematize the production of appearances through the faculty of reflection. As will be discussed in more depth in chapter 2, for a thinker such as G.W.F. Hegel, this production is more process-oriented and open than what is found in Kant: a focus on ‘fluidity’ that undoes stable separation.¹⁵⁴ Hegel’s encyclopedia, which consists in the *Logic*, *Philosophy of Nature*, and *Philosophy of Mind*, is less an attempt to produce a catalogue of the sciences, and much more an attempt to systematize the processual production of

¹⁵⁰ Kant, *The Conflict of the Faculties*. See also Immanuel Kant, “An Answer to the Question: What is Enlightenment?” trans. HB Nisbet, in *Kant Political Writings*, ed. HS Reiss. 58-60. (Cambridge: Cambridge University Press, 2018).

¹⁵¹ Simondon, *MEOT*, 117.

¹⁵² Tilottama Rajan, “The encyclopedia and university of theory: idealism and the organization of knowledge,” *Textual Practice* 21, no. 2 (2007): 336. <https://doi.org/10.1080/09502360701264519>.

¹⁵³ *Ibid.*, 353n10.

¹⁵⁴ *Ibid.*, 348.

knowledge.¹⁵⁵ Going further than Kant, philosophy becomes the key cog in the development of this systematicity. The dialectic plays a key role: “Following his larger system, Hegel wants to make irritability the prelude to reintegration. He therefore narrativizes his three-part schema as a dialectic, and ends with reproduction as the return to a productive movement.”¹⁵⁶ One sees the development of Hegel’s tripartite dialectic: the lesser *Logic* begins in the abstraction of metaphysics (being, essence, concept [*Begriff*]); the *Philosophy of Nature* moves towards concrete materiality (in mechanism, physics, and organics); while the *Philosophy of Mind* finds their sublated unity as a science of spirit [*Geist*] moving towards the absolute. This processual unfolding shows a more fluid instantiation of human subjectivity as moving through a dialectical trajectory. For Hegel, the human sciences are grounded in the fluid movement of subjectivity’s intellectual capacities as they move towards self-understanding. To understand the ‘human’ is to understand this development.

Marx follows Hegel in understanding the development of humanity as fluid and dialectic. While Marx’s discussion of ‘species being’ in the *1844 Manuscripts* could be taken as a fixed human essence, both his “Theses on Feuerbach” and *The German Ideology* from 1845 are critical of a fixed notion of human subjectivity. For instance, thesis VI of the former text argues against Feuerbach by stating that “the human essence is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations.”¹⁵⁷ In the latter text, Marx stresses that the structure of human society is consistently evolving. He thus emphasizes the need for epistemology to study these fluid conditions “as they *really* are,” rather than “as they may appear in their own or other people’s imaginations.”¹⁵⁸ Here, Marx offers a distinct shift away from Hegel’s Idealism.¹⁵⁹ Where Hegel’s

¹⁵⁵ Ibid., 339.

¹⁵⁶ Ibid., 346.

¹⁵⁷ Karl Marx, “Theses on Feuerbach,” in *The Marx-Engels Reader*, second edition, ed. Robert C. Tucker (New York: W.W. Norton & Company, 1978), 145.

¹⁵⁸ Karl Marx, *The German Ideology*, trans. S. Ryazanskaya, in *The Marx-Engels Reader*, second edition, ed. Robert C. Tucker (New York: W.W. Norton & Company, 1978), 154.

¹⁵⁹ As evidenced by Marx’s famous statement, “In direct contrast to German philosophy which descends from heaven to earth, here we ascend from earth to heaven.” Ibid.

human science began from the development of ideas in the lesser *Logic*, Marx deployment of a human science begins from the material production of humanity. For Marx, ideology emerges out of material conditions: “Life is not determined by consciousness, but consciousness by life.”¹⁶⁰ Marxist humanism, popularized by thinkers such as György Lukács, stresses the need to emancipate humanity from the process of reification. In *History and Class Consciousness*, Lukács discusses reification through the development of ‘commodity fetishism.’ In the first volume of *Capital*, commodity fetishism is described as a substitution where commodities are understood as having inherent value, independent of the labour that produced them.¹⁶¹ Reification, as discussed by Lukács, consists in a simultaneous movement where a person’s “labour becomes something objective and independent of him, something that controls him by virtue of an autonomy alien to man.”¹⁶² In both commodity fetishism and reification, some element (the commodity, labour) is abstracted as independent from the human processes that have produced it. Marxist humanism seeks to better understand the material, human production of these developments.

This shift towards a more process-oriented understanding of humanity continues in the development of 20th century cybernetics. Writing in 1958 and noting his affection for Norbert Wiener, Simondon likely has first-order cybernetics in mind when discussing encyclopedism.¹⁶³ For instance, he writes, “Cybernetics grants man a new type of majority, one that penetrates the relation of authority by distributing itself across the social body, and discovers the maturity of reflection beyond the maturity of reason, thereby giving man, in addition to the freedom to act, the power to

¹⁶⁰ Ibid., 155.

¹⁶¹ See Karl Marx, *Capital Volume 1*, trans. Ben Fowkes, (London: Penguin, 1990), 165.

¹⁶² György Lukács, *History and Class Consciousness*, trans. Rodney Livingstone (Cambridge: The MIT Press, 1968), 87.

¹⁶³ Simondon organized of the 1962 Royaumont Conference on *Le concept d'information dans la science contemporaine* [The concept of information in contemporary science], which Wiener attended. This conference has been equated with the Macy Conferences in New York. See Andrew Iliadis et al., “Book Symposium on *Le concept d'information dans la science contemporaine* : Cahiers de Royaumont, Les Éditions de Minuit/Gauthier-Villars 1965,” *Philosophy & Technology* 29 (2016): 269-291. <https://doi.org/10.1007/s13347-015-0205-z>.

create organization by establishing teleology.”¹⁶⁴ Like Kant’s transcendental project, Hegel’s Idealistic encyclopedism, and Marx’s materialistic empiricism, cybernetics aims to discover the boundaries of human possibility, so as to extend them. All these movements seek to produce “schemas of intelligibility that are endowed with a latent power of universality.”¹⁶⁵

Adopting this understanding of rationalized and universalized ‘self-knowledge’ as the criterion of humanism, cybernetics might be considered the culmination of humanism through technics. The pursuit of a transparent knowledge of humanity (as object) exists in both cybernetic attempts that treat humanity as analogous to machines,¹⁶⁶ and those which take humanity as identical to machines.¹⁶⁷ Both positions take humans and machines as ‘feedback systems.’ In cybernetics, ‘feedback’ is introduced as a category of purposive behavior. As I discuss in the second half of chapter 2, philosophy takes purpose as bound to ‘finality’ or ‘end’ [*telos*]. While adopting this language from philosophy, including the use of the term ‘teleology,’ cybernetics tends to take a less cosmological approach. Feedback is understood as a form of communication that draws upon output data, which is returned to a sender. This output data then alters future communication. Wiener stresses that feedback is a break from Cartesian physics, given that it works through statistical probability measurements rather than automata.¹⁶⁸ Modern computing machines are distinct from clockwork automata because they work through statistical probability measurements

¹⁶⁴ Simondon, *MEOT*, 120.

¹⁶⁵ Gilbert Simondon, “Technical Mentality,” in *Gilbert Simondon: Being and Technology*, ed. Arne De Boever, Alex Murray, Jon Roffe, and Ashley Woodward. (Edinburgh: Edinburgh University Press, 2013): 1.

¹⁶⁶ As in the work of Norbert Wiener who suggests that “the physical functioning of the living individual and the operation of some of the newer communication machines are precisely parallel in their analogous attempts to control entropy through feedback.” Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (Boston: De Capo Press, 1954), 26.

¹⁶⁷ As in the work of Warren Sturgis McCulloch, who offered a mechanistic model of neuropsychological processes. See, for instance, Warren S McCulloch, *Embodiments of Mind* (Cambridge: The MIT Press, 2016). On the distinction between Wiener and McCulloch, see Simon Mills, *Gilbert Simondon: Information, Technology, and Media* (London: Rowman and Littlefield, 2016), 16.

¹⁶⁸ Norbert Wiener, *Cybernetics, or Control and Communication in the Animal and the Machine* (Cambridge: The MIT Press, 2013), 40.

where input data necessarily alters output data. Feedback processes allow machines to produce the sort of complex responses Descartes understood as impossible.

In the foundational paper “Behavior, Purpose, and Teleology,” Arturo Rosenblueth, Wiener, and Julian Bigelow argue for a ‘behaviorist’ approach to purposive activity. Behaviorism is distinct from functionalism, which originates in studies of the philosophy of mind. Functionalism, which is based in Aristotle’s conception of the soul and Hobbesian psychology, understands the mind as a calculating machine. A rough definition is that functionalism posits that the mind or mental states are determined by the role they play in a cognitive system. “Functionalist theories take the identity of mental states to be determined by its causal relations to sensory stimulations, other mental states, and behavior.”¹⁶⁹ Mechanistic accounts of humanity tend to be functionalist. Behaviorism emerges as an antecedent of functionalism in the 20th century. It differs from functionalism insofar as it “attempts to explain behavior without any reference whatsoever to mental states and processes.”¹⁷⁰ Where functionalism holds that mental states are caused through mechanistic processes (and sometimes the inverse), behaviorism focuses on analyzing actions and behavior to determine purpose without any account of thinking, feeling, or belief.

Taking a behaviorist approach, Rosenblueth, Wiener, and Bigelow attempt to distinguish purposeful action (namely, action that seeks to attain an end or a goal) from random noise or purposeless action. Because this is a behaviorist approach, it makes no presumption regarding mental states.¹⁷¹ There is no attempt to determine the intrinsic organization of the actor. Purposeful, active behavior is further divided into categories of ‘feedback’ and ‘non-feedback.’ Feedback aligns with teleology and is defined as ‘purpose controlled feedback.’ Teleological, purpose-driven

¹⁶⁹ Janet Levin, “Functionalism,” *Stanford Encyclopedia of Philosophy*, ed. Edward N Zalta and Uri Nodelman. 2023. URL: <https://plato.stanford.edu/archives/sum2023/entries/functionalism/>.

¹⁷⁰ Ibid.

¹⁷¹ Arturo Rosenblueth, Norbert Wiener, and Julian Bigelow, “Behavior, Purpose, and Teleology,” *Philosophy of Science* 10, no. 1 (1943): 18-24. <https://www.jstor.org/stable/184878>.

feedback consists in the return of some part of the system's output energy as input.¹⁷² Purposive behavior is 'feedback' when the observer identifies that that actor modifies their behavior due to the response of a previous behavior. Wiener uses the example of a mis-aligned car. Initially, a driver will not recognize the misalignment, leading to the car veering off the road. Due to the car's response to their initial behavior, the driver will then modify their behavior to adjust the wheel to account for the misalignment.¹⁷³ Behavior changes due to the response to previous behavior. Feedback is further divided into positive and negative feedback: positive feedback denotes new information provided by the system, while negative feedback imposes some conditions that limit the system's output.¹⁷⁴ Information is a central component of positive feedback: the system receives some information that impacts future output. This can work in both predictive and non-predictive manners. Animals, for instance, offer examples of predictive behavior. A first-order prediction can be seen through a cat's attempt to predict the pathway of a mouse it chases. The cat will alter its behavior based on the mouse's earlier movements. A second-order prediction goes a step further. Throwing a stone at a moving target requires the thrower to both predict the trajectory of the stone and the trajectory of the target, using that information to alter how far, how fast, and at what angle they should throw the stone.¹⁷⁵ Prediction is both spatial and temporal: reflexive to the input data (or information) in the feedback process.

Etymologically, the term 'cybernetics' is derived from the Ancient Greek *kubernētēs*, meaning 'steersman' and relating to governance.¹⁷⁶ These etymological ties to governance and steering relate to the title of Wiener's 1948 text *Cybernetics or Control and Communication*. Control, as a form of governance or steering, is integrated within a field of communication. Control requires effective

¹⁷² Ibid., 19.

¹⁷³ Wiener, *The Human Use of Human Beings*, 26.

¹⁷⁴ Rosenblueth, Wiener, Bigelow, "Behavior, Purpose, and Teleology," 20

¹⁷⁵ Ibid., 20-21.

¹⁷⁶ Wiener, *The Human Use of Human Beings*, 15.

communication. The categories of communication, control, and feedback rely on a theory of information. Cybernetic theories of information, driven in part by Claude Shannon's mathematical theory of information, are concerned with how to code information against the problem of background noise and randomness. Shannon was largely interested in an engineering problem: how to reproduce a message sent at one point without that message being distorted by the process of transmission.¹⁷⁷ Unlike theories of communication devoted to the transmission of meaning, Shannon is only interested in a direct transmission of data, not semantics. This is like how cyberneticians are interested in behavior, not any meaning behind that behavior. As N Katherine Hayles notes, "Shannon defined information as a probability function with no dimension, no materiality, and no necessary connection with meaning." Hayles connects this position with cybernetics more generally through Wiener: "Like Shannon, Wiener thought of information as representing a choice [...] of one message from among a range of possible messages."¹⁷⁸ In cybernetics, information is the use of probability to select patterns amidst random activity. In the transmission between signal and receiver, information remains prone to noise. Shannon poses this as an engineering problem, largely driven by his work in cryptanalysis. Here, information is solely the communication between source and receiver, without any reference to semantics or meaning.

This digression into behaviorism and non-semantic information theory in cybernetics is necessary for framing first-order cybernetics as a humanistic study. With a behaviorist model of human action, cybernetics might seem to work in clear distinction from the Kantian model of

¹⁷⁷ "The fundamental problem of communication is that of reproducing at one point either exactly or approximately a message selected at another point. Frequently the messages have meaning; that is they refer to or are correlated according to some system with certain physical or conceptual entities. These semantic aspects of communication are irrelevant to the engineering problem. The significant aspect is that the actual message is one selected from a set of possible messages. The system must be designed to operate for each possible selection, not just the one which will actually be chosen since this is unknown at the time of design." Claude Shannon, "A Mathematical Theory of Communication," *The Bell Systems Technical Journal* 27, no. 3 (1948): 379. <https://doi.org/10.1002/j.1538-7305.1948.tb01338.x>.

¹⁷⁸ Hayles, *How We Became Posthuman*, 52.

humanism. Kant's transcendental project is aimed completely at internal states. Behaviorism does the opposite, as it is focused on external action. Furthermore, where Kant produces an apparent separation between human rationality and the natural world, cybernetic theories of behaviorism and feedback information systems take human action as integrated within a broader system. Yet, at least in its first-order variation, cybernetics maintains an ontological separation between observer and observed, which in turn allows for epistemic reflection. Hayles' account in *How We Became Posthuman* argues that cybernetics maintains the separation of the 'person,' as observer, from the 'noumenal body.' Rather than providing a strictly reductionistic account of feedback systems, the material body is taken as the 'original prosthetic' of human rationality. This ontological separation of the rational mind from the mechanical body promotes the body as something to be steered, governed, and controlled. According to Hayles, the body is taken as a prosthetic "we all learn to manipulate so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born."¹⁷⁹ First-order cybernetics maintains the rational human subject as separate from the determinable though purposeful system of feedback that comes under observation. First-order cybernetics does not fundamentally alter the ontological or epistemological conditions of the Kantian project, it merely proposes a more developed understanding of the body.¹⁸⁰ This aligns with humanism, insofar as it maintains that a superior understanding provides new ways to manipulate and control human ends. Rather than automata, the human body can be taken "primarily as information-processing entities who are essentially similar to intelligent machines."¹⁸¹ First-order cybernetics maintains an ontological separation, epistemic reflection, and normative domination.

¹⁷⁹ Ibid., 3.

¹⁸⁰ Carl B Sachs argues that the work of Wilfred Sellars can be read as naturalizing Kant through Wiener's behaviorism and feedback systems. Such a naturalized approach to Kant suggests clear affiliations between these seemingly distinct humanistic projects. See Carl B Sachs, "A cybernetic theory of persons: how Sellars naturalized Kant," *Philosophical Inquiries* 10, no. 1 (2022): 97-123. <https://doi.org/10.4454/philing.v10i1.389>

¹⁸¹ Hayles, *How We Became Posthuman*, 7.

At least since the 1950s, there has been an increased interest in the use of biotechnology to aid the progression, alteration, and sometimes overcoming of humanity. In 1957, Julian Huxley proposed the meeting of rationalized self-knowledge and biotechnology as the means to drive humanity into a better future. With a steadfast focus on the progressive advances of human understanding, Huxley poses that humanity has become the ‘managing director’ of evolution.¹⁸² Aided by developments in cybernetics and human science, humanity’s techno-scientific understanding of both humanity and the external world place humanity at the forefront of evolutionary history. With a superior capacity for rational development, humanity can ‘steer’ its own evolution. Yet, as Huxley suggests, humanity is only at the earliest stages of this advancement. Given that the powers of reason have only recently been freed from dogma—a freedom Kant so stridently pursued in his political writings—there is much more to discover. The current stage of human rationality brings it to the precipice of further development: “A vast new World of uncharted possibilities awaits its Columbus.”¹⁸³ For Huxley, like Kant, human rationality and scientific progress hold the keys to a more enlightened and more equitable humanity: one without hunger or chronic disease. Huxley takes this next stage of human evolution as a normative imperative. His Promethean event consists in the emancipation from institutions that limit both the possibilities of rational thought, and which condemn humanity to “poverty, disease, ill-health, over-work, cruelty, or oppression.”¹⁸⁴ This emancipation might be found, he suggests, in the capacity of humanity to evolve beyond humanity. For Huxley, this is no longer ‘humanism,’ but instead ‘transhumanism.’ He writes,

The human species can, if it wishes, transcend itself—not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps

¹⁸² Julian Huxley, “Transhumanism,” *Ethics in Progress* 6, no. 1 (2015): 12-16. <https://doi.org/10.14746/eip.2015.1.2>.

¹⁸³ *Ibid.*, 13.

¹⁸⁴ *Ibid.*, 14.

transhumanism will serve: man remaining man but transcending himself, by realizing new possibilities of and for his human nature.¹⁸⁵

While offering the novel language of ‘transhumanism,’ Huxley’s position maintains humanistic elements. It is both a defense of rational humanity and a normative imperative that this rationality should steer human development towards equitable ends. Huxley’s epistemic rationalism retains an assumed, ontological superiority of a humanity capable of controlling evolutionary history. By framing this as an imperative, Huxley maintains a moral position that designates a political end. Huxley *does* differ from humanism in positing something distinct from humanity as the object and aim—the final cause—of his study. Where humanism takes the ‘human’ as its subject, object, and end, Huxley’s early notion of ‘transhumanism’ blurs humanity’s position as object and end, while retaining its place as steersperson. Yet, the object has changed. For Huxley, the human becomes a transitional cog in the development of something later thinkers call the ‘posthuman.’

The role of ‘humanity’ remains debated in contemporary works on ‘transhumanism.’ Tracing the history of the term, Nick Bostrom suggests Max More is the first to offer a contemporary definition.¹⁸⁶ More defines ‘transhumanism’ as “a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its current human form and human limitations by means of science and technology, guided by life-promoting principles and values.”¹⁸⁷ More’s work follows Huxley in arguing for an end that transcends humanity. Biotechnology enables an evolutionary push “towards posthuman conditions.”¹⁸⁸ More retains a humanist valorization of rationality as an exceptional capacity for steering evolution. Going further

¹⁸⁵ Ibid., 15.

¹⁸⁶ Nick Bostrom, “A History of Transhumanist Thought,” *Journal of Evolution and Technology* 14 (2005): 1-25. URL: <<https://nickbostrom.com/papers/history.pdf>>. [Accessed October 20, 2023]

¹⁸⁷ Max More quoted in Humanity+, “What is Transhumanism?” (n.d.) URL: <<https://whatistranshumanism.org/>>. [Accessed October 20, 2023]

¹⁸⁸ Max More, “Transhumanism: Toward a Futurist Philosophy,” (1990) URL: <<https://web.archive.org/web/20051029125153/http://www.maxmore.com/transhum.htm>>. [Accessed October 20, 2023]

than Huxley, his pursuit of ‘radical alterations’ to humanity through bio-technical research, such as life extension and ultra-intelligence, pose a break from humanity. Under More’s project, humanity serves as a transitional figure in the pursuit of a ‘posthuman’ end. ‘Transhumanism’ thus describes an ‘entropic’ intermediary stage in the development of ‘posthumanity.’ Stefan Lorenz Sorgner offers a similar, entropic understanding of a ‘transitional humanity’ through his reading of Nietzsche. Drawing upon F.M. Esfandiary, Sorgner reflects More in equating the ‘transhuman’ with Nietzsche’s ‘higher humans.’ These ‘higher humans’ are integral to the development of ‘posthuman’ ends: “Higher humans wish to permanently be overcome themselves, to become stronger in the various aspects which can get developed in a human being, so that finally the Overhuman can come into existence.”¹⁸⁹ The ‘transhuman’ steers the development of a ‘posthuman’ *Übermensch*.

Not all scholars of ‘transhumanism’ agree on this ‘posthuman’ end. The developments of biotechnology are often promoted as a continuation and defense of the human condition: an attempt to prolong and extend humanity’s cognitive capacities and lifespan. Bostrom, for instance, tends to align ‘transhumanism’ with humanism. He suggests that his project is rooted in both Renaissance and Enlightenment thinking.¹⁹⁰ While acknowledging that bio-technical enhancement could inaugurate “‘posthuman’ modes of being,” Bostrom maintains that the ‘human’ and ‘posthuman’ should not be understood as ontologically distinct.¹⁹¹ Instead, he writes, “One might well take an expansive view of what it means to be human, in which case ‘posthuman’ is to be understood as denoting a certain possible type of human mode of being.”¹⁹² Such an end by and for humanity is designated as ‘worthwhile’ given the benefits to “health, cognition, and emotion.”¹⁹³

¹⁸⁹ Stefan Lorenz Sorgner, “Nietzsche, the Overhuman, and Transhumanism,” *Journal of Evolution and Technology* 20, no. 1 (2009): 29-42. URL: <<https://jetpress.org/v20/sorgner.htm>>. [Accessed October 20, 2023].

¹⁹⁰ Bostrom, “A History of Transhumanist Thought,” 2.

¹⁹¹ Nick Bostrom, “Why I Want to be a Posthuman When I Grow Up,” in *Medical Enhancement and Posthumanity*, ed. Bert Gordijn and Ruth Chadwick. (Springer, 2008). URL: <<https://nickbostrom.com/posthuman.pdf>>. [Accessed October 20, 2022].

¹⁹² Ibid., 24.

¹⁹³ Ibid., 23.

This drives a normative impetus to instantiate and steer evolutionary changes, which allow humans to determine evolutionary history to their advantage.¹⁹⁴

In these configurations, which constitute an incredibly limited sample, proponents of ‘transhumanism’ tend to take the body as a technical prosthetic to be mechanically altered and technologically replaced. Bio-technical augmentation and alteration enables humanity to transcend itself in the deployment of ‘posthuman’ ends. Rather than the end of humanism, ‘transhumanism’ tends to extend its central aspects. For instance, even where More and Sorgner pose the ‘posthuman’ as ontologically distinct from the ‘human,’ they do not break from the humanistic impetus drawn from ontological separation, epistemic rational self-knowledge, or deontological normative purpose. Rather than undo humanism, their deployment of a transitional humanity towards posthuman ends exemplifies these aspects of humanism. Both seek to understand humanity to transform it. Any differences between Kant, Huxley, More, Sorgner, and Bostrom are differences in content rather than structure. There is a consistent vision of humanity ‘steering’ its evolutionary development. Whether these developments promote a ‘human’ or ‘posthuman’ end, proponents maintain a similar logical unfolding. Scholars working in ‘post-humanism’ have often taken this position, arguing that ‘transhumanism’ should be understood as an extension of humanism. Pramod Nayar and Hayles each make the case that ‘transhumanism’ maintains the ontological separation of humanity by promoting the ‘posthuman’ as a “separate and self-contained,”¹⁹⁵ rational and autonomous liberal subject, only now with the promise of immortality.¹⁹⁶ For similar reasons, Wolfe suggests “transhumanism should be seen as an *intensification* of humanism.”¹⁹⁷ Roden, furthermore, has suggested that ‘transhumanism’ aims at the “perfection of human nature and cultivation of human

¹⁹⁴ Bostrom, “A History of Transhumanist Thought,” 21.

¹⁹⁵ Pramod Nayar, *Posthumanism* (Cambridge: Polity, 2014).

¹⁹⁶ Hayles, *How We Became Posthuman*, 287.

¹⁹⁷ Wolfe, *What is Posthumanism?*, xv.

personal autonomy by teleological means.”¹⁹⁸ ‘Transhumanism’ can, thus, be taken as the expansion of humanism’s ontological, epistemological, and normative dimensions: not a break but a continuation.

Onto-Epistemic Lineages: Post-Structuralism and Second Order Cybernetics

Critical post-humanism emerges from the confluence of several philosophical lineages, which respond to humanism. These include structuralism, ‘post-structuralism,’ anti-humanism, second-order cybernetics, feminism, de-colonialism, post-colonialism, and Black studies. Together, these areas of thought constitute ‘parallel genealogies’¹⁹⁹ that inform critical post-humanism’s critique of humanism. For instance, where first-order cybernetics and ‘transhumanism’ tend to maintain the rational ‘human’ as the operator who steers the development of nature, both structuralism and second-order cybernetics attest to a more ‘allagmatic’ rendering of humanity. The term ‘allagmatic,’ which I adopt from Simondon, centres the process of a being’s becoming (or its ‘individuation’) rather than its being (as an ‘individual’).²⁰⁰ An allagmatic rendering of humanity focuses on the processes through which the human is constituted and continues to be constituted. This presents the human as constituted through natural processes, rather than (ontologically) separated from them. The developments of structuralism as a methodological approach in 20th century social sciences centred the processes of development within a structure rather than essential, hidden truths. For example, Claude Lévi-Strauss’ structural anthropology applied the linguistic method of Ferdinand de Saussure to the study of myth. Rather than a strictly hermeneutic or exegetical interpretation, Lévi-Strauss analyzed myth by comparing the various iterations of a particular myth across its history.

¹⁹⁸ David Roden, *Posthuman Life*, 9.

¹⁹⁹ This phrasing is adopted from Zakiyyah Iman Jackson, “Animal: New Directions in the Theorization of Race and Posthumanism,” *Feminist Studies* 39, no. 3 (2013): 670. <https://doi.org/10.1353/fem.2013.0024>.

²⁰⁰ The term ‘allagmatic’ comes from the Greek *allagma* meaning ‘change’ or ‘vicissitude.’ It is aligned with a “theory of operations” and attempts to describe the relationship constitutive through process and structure. See Gilbert Simondon, *Individuation in Light of Notions of Form and Information, vol II: Supplementary Texts*, trans. Taylor Adkins (Minneapolis: University of Minnesota Press, 2020), 663.

The ‘truth’ of the myth was identified through the repetitions in its structure, which account for changes across iterations.²⁰¹ The central aim of Lévi-Strauss’ anthropology is to discover the structure from which the myth repeats through a study of those iterations.

Louis Althusser’s approach to Marxism has often been described as ‘structuralist’ due to his critique of Marxist humanism (as found in Lukács). Althusser argues that Marx’s work undertakes a profound shift between the *1844 Manuscripts* and *Capital*.²⁰² Where the former provides an account of human essence through the concept of a ‘species being’ that is subject to estrangement through alienation, the latter takes the ‘subject’ as conditioned through the material deployments of capitalism.²⁰³ Marx’s *Grundrisse* promotes such an understanding in the “Fragment on Machines,” where social individuals are understood as being produced through the machinations of capital and the social body.²⁰⁴ Althusser’s concept of ‘interpellation’ poses a similar materialist rendering of the human subject as structurally conditioned. For Althusser, the human subject “exists in his actions, or ought to exist in his actions” rather than as an immaterial, rational being.²⁰⁵ ‘Interpellation’ poses a material basis for ideology as instantiated through a structural inscription. Althusser’s structural rendering of human subjectivity can be aligned with a ‘philosophical anti-humanism,’ insofar as the human subject is instantiated through structural (or natural) relations. For instance, he writes on Marx’s “*theoretical anti-humanism* [as] the absolute (negative) precondition of the (positive) knowledge of the human world itself.”²⁰⁶ For Althusser, humanism is only ideology.

²⁰¹ See Claude Lévi-Strauss, *The Savage Mind*, trans. Unknown (Chicago: Chicago University Press, 1966).

²⁰² Louis Althusser, *Marxism and Humanism*, trans. Ben Brewster, in *For Marx* (New York: Verso, 2006).

²⁰³ On species being, see Karl Marx, “Economic and Philosophical Manuscripts of 1844,” in *The Marx-Engels Reader*, ed. Robert C Tucker (New York: W.W. Norton and Company, 1978).

²⁰⁴ Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, trans. Martin Nicolaus (London: Penguin, 1993), 704-706.

²⁰⁵ Louis Althusser, “Ideology and the Ideological State Apparatus,” trans. Ben Brewster, in *On Ideology* (New York: Verso, 2020).

²⁰⁶ Althusser, *For Marx*, 229.

The history of philosophical anti-humanism runs parallel with structuralism, finding its origins in the work of 19th century thinkers like Max Stirner and Friedrich Nietzsche. For instance, Nietzsche attacks Kant's division of 'appearance' and 'thing-in-itself' by posing a more allagmatic depiction of their mutual becoming. Nietzsche suggests that we require "a genetic history of thought" to promote a more process-oriented understanding of human subjectivity, recognizing both 'appearance' and 'thing-in-itself' as empty categories.²⁰⁷ Nietzsche is, furthermore, critical of the "fable of intelligible freedom" that ignores the production of ideas through sensation.²⁰⁸ For Nietzsche, one's nature and actions are determined by the structural conditions of habit and instinct. Offering a more physiological account of the human subject—which I return to in Chapter Three—he writes: "In order to pursue physiology in good conscience we must insist that the sense organs are *not* appearances in the sense of idealistic philosophy [...] the external world is *not* the work of our organs."²⁰⁹ One is not determined by an internal rational capacity, but the material productions of the 'will to power':²¹⁰ "There is no 'being' behind the doing, effecting, becoming; the 'doer' is merely tacked on as a fiction to the doing – the doing is everything."²¹¹ Nietzsche's anti-Kantianism informs an anti-humanistic position: 'humanity' is not separate but emerges from the processes of 'nature.'

Developments in so-called 'post-structuralism' bring together elements of structuralism and anti-humanism. Herbrechter et al., for instance, suggest that the application of Darwin, Marx, Nietzsche, and Freud into structuralism brings out the anti-humanistic impulses of 'post-structuralism.' The use of the term 'post-structuralism' is tenuous at best: it is the product of United States literary criticism and used to describe certain tendencies of post-war French philosophy. The

²⁰⁷ It is important to recognize this as not only the recognition of 'appearance' but *also* the recognition of 'thing-in-itself'. Both categories are simultaneously ruptured. Friedrich Nietzsche, *Human, All too Human*, trans. Gary Handwerk (Stanford: Stanford University Press, 1995), 26-28.

²⁰⁸ *Ibid.*, 47-49.

²⁰⁹ Friedrich Nietzsche, *Beyond Good and Evil*, in *Beyond Good and Evil / On the Genealogy of Morality*, trans. Adrian Del Caro (Stanford: Stanford University Press, 2014), 17.

²¹⁰ *Ibid.*, 39.

²¹¹ Nietzsche, *Genealogy*, 236.

way that ‘post-structuralism’ is described by ‘critical post-humanists’ often betrays a general misunderstanding of structuralism. Take the following description:

Posthumanism builds on various precursors, most importantly on the work of ‘poststructuralist’ thinkers like Foucault, Lacan, Kristeva, Barthes, Irigaray, Althusser, Derrida, Cixous, Deleuze and Guattari, by radicalizing and extending their antihumanist stance. The poststructuralists, in turn, were reacting against structuralism and its attempts to produce ‘objective’ and ‘scientific’ knowledge of humans and their cultures.²¹²

Given the general ambiguity surrounding both ‘structuralism’ and ‘post-structuralism’ this description is both quick and callous. While the claim that structuralism seeks both ‘objective’ and ‘scientific’ knowledge might be true of Saussure’s linguistic philosophy, it is more difficult to apply these criteria to the structuralism of later thinkers. Take, for instance, Derrida’s seminal critique of Lévi-Strauss in “Structure, Sign, and Play.” Notably, Derrida is not critical of Lévi-Strauss for developing a structural account of anthropology, but only for limiting the conditions of play within the structure through an appeal to a ‘centre.’²¹³ In fact, Derrida praises Lévi-Strauss for bringing to light “the play of repetition and the repetition of play.”²¹⁴ Derrida’s aim is not the undoing of the structure and its repetition, but an attempt to reconsider these repetitions through the ‘loss of centre.’ The issue is not with structuralism itself, but that Lévi-Strauss does not go far enough in the development of its implications: to discover not an origin, but an aporia at the ~~centre~~. Furthermore, given the ambiguity of the term ‘structuralism’ and the list of thinkers provided—which includes Lacan, Barthes, Althusser, and even Foucault, who tend to be associated *with* structuralism—it is difficult to grasp what ‘structuralism’ these scholars have in mind. In his analysis of structuralism, in which he lists Roman Jakobson, Lévi-Strauss, Lacan, Foucault, Althusser, and Barthes as structuralist thinkers, Deleuze aligns the structural object not with a fixed or objective centre, but

²¹² Stefan Herbrechter et al., “Critical Posthumanism,” 8.

²¹³ Jacques Derrida, “Structure, Sign and Play in the Discourse of the Human Sciences,” in *Writing and Difference*, trans. Alan Bass. (Chicago: University of Chicago Press, 1978), 278.

²¹⁴ *Ibid.*, 292.

with the Lacanian symbolic.²¹⁵ As one might recall, for Lacan, the symbolic is the order of signifiers, which is the unconscious. This symbolic order determines the subject by its signifying chains, undermining egoic autonomy.²¹⁶ By aligning the symbolic as the structural object, Deleuze strips the structural ‘centre’ of both form and essence. Instead, as we see in the work of Althusser and Lacan, structuralism considers the subject as determined through “topological and relational” repetitions.²¹⁷ For Deleuze (who, like these others, is all too often named a ‘post-structuralist’) it is structuralism that “is inseparable from a new materialism, a new atheism, a new humanism.”²¹⁸ Like Derrida, Deleuze offers less an affront to ‘structuralism’ than a shift in the symbolic ordering: against a fixed organ towards a more allagmatic (Deleuze) or supplementary play (Derrida) in the symbolic order. This is ironic, given that much of what post-humanism finds useful in the so-called ‘post-structuralists’—namely the critique of human separation and promotion of relation—emerges in structuralism.

For the sake of brevity, we might take Foucault, Deleuze, and Derrida as a tri-partite source of inspiration for critical post-humanism. Foucault’s anti-humanism is often identified as a key contribution to the development of ‘post-humanism’ with many looking to the conclusion of *The Order of Things* as a key point in anti-humanism.²¹⁹ Foucault suggests a future in which “Man would be erased, like a face drawn in sand at the edge of the sea.”²²⁰ In both his archaeological and genealogical periods, Foucault’s work traces the socio-material conditions that work to produce the ‘individual’ through a process of ‘subjectivization.’ In *Discipline and Punish*, for instance, he writes that “the individual is no doubt the fictitious atom of an ‘ideological’ representation of society, but he is

²¹⁵ Gilles Deleuze, “How do we Recognize Structuralism?” in *Desert Islands and Other Texts 1953-1974*, trans. Michael Taormina, ed. David Lapoujade (Los Angeles: Semiotexte, 2004), 171.

²¹⁶ See Jacques Lacan, “The Instance of the Letter in the Unconscious,” in *Écrits*, trans. Bruce Fink. (New York: W.W. Norton and Company, 2006), 426.

²¹⁷ Deleuze, “How Do We Recognize Structuralism?” 174.

²¹⁸ *Ibid.*, 175.

²¹⁹ For instance, Braidotti, *The Posthuman*, 23; Cary Wolfe, *What is Posthumanism?*, xii.

²²⁰ Foucault, *The Order of Things*, 387.

fabricated by this specific technology that I have called discipline.”²²¹ Like Althusser and Lacan, Foucault’s understanding of ‘discipline’ promotes the individual as the product of technological intervention. Whether this production occurs through the ‘disciplinary’ apparatus of the ‘panopticon’ (as in *Discipline and Punish*) or shifts to ‘control’ and ‘biopolitics’ (as it does in the later parts of Foucault’s work), human subjectivity is the product of allagmatic developments: “in relation to sovereignty, what I call the subject moves and circulates above and below somatic singularities, and conversely, bodies circulate, move around, rest on something here, and take flight.”²²² While Foucault’s process-oriented consideration of subjectivization is taken up by some critical post-humanists, such as Barad (who attempts to extend Foucault’s analysis of materialization beyond human bodies),²²³ his work is often denounced (often too quickly) for the emphasis on a ‘symbolic death’ in *The Order of Things*.²²⁴

Instead, proponents tend to congregate around Deleuze and Derrida. The Deleuzian contingent is sometimes identified with a ‘(neo)vitalist’ position,²²⁵ that extends to those working not only with Deleuze, but also Spinoza, Nietzsche, Henri Bergson, Michel Serres and others. This contingent, as named by Patricia MacCormack, would include thinkers such as “Rosi Braidotti, Anna Hickey-Moody, Elizabeth Grosz, Claire Colebrook and Felicity Colman,” who tend to emphasize the ‘flesh’ and ‘embodiment’ in the contestation of posthuman worlds.²²⁶ This contingent is sometimes expanded to include the work of Karen Barad and Vicki Kirby,²²⁷ and might also be

²²¹ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage, 1995), 67.

²²² Michel Foucault, *Psychiatric Power: Lectures at the Collège de France, 1973-1974*, trans. Graham Bruchell, ed. Jacques Lagrange and Arnold I. Davidson (London: Picador, 2008), 44.

²²³ Barad, *Meeting the Universe Halfway*, 204.

²²⁴ For instance, Nayar, *Posthumanism*, 24.

²²⁵ Herbrechter, *Posthumanism*, 219.

²²⁶ MacCormack, *Posthuman Ethics*, 14. See also Braidotti, *The Posthuman*; Anna Catherine Hickey-Moody, *Unimaginable Bodies: Intellectual Disability, Performance and Becomings* (Leiden: Brill, 2009); Elizabeth Grosz, *The Incorporeal: Ontology, Ethics, and the Limits of Materialism* (New York: Columbia University Press, 2017); Claire Colebrook, *Death of the PostHuman: Essays on Extinction, Vol. 1* (Ann Arbor: Open Humanities Press, 2014); Felicity Colman, *Deleuze and Cinema* (Oxford: Berg Publishers, 2011).

²²⁷ This expansion is made by Herbrechter. See for instance, Vicki Kirby, “Originary *différance*: ‘A quantum vitalism,’” *Journal for the theory of social behavior* 48, no. 2 (2018): 162-166. <https://doi.org/10.1111/jtsb.12164>.

expanded to include the work of Jane Bennett and William Connolly, who stress both ‘entanglement’ and ‘connection.’²²⁸ These thinkers tend to work from concepts such as ‘larval subjectivity,’ the ‘rhizome,’ ‘assemblages,’ and ‘becoming’ to think through the heterogeneous ‘connection’ of distinct forms of life. For instance, while Foucault’s subjects are the product of allagmatic processes, they tend to be more ‘human’ than the ephemeral processes of ‘larval subjectivity,’ which emerges from the various ‘machinic’ processes of ‘difference’ or ‘spatio-temporal dynamisms’ across being in Deleuze’s work.²²⁹ The ‘subject’ is ‘rhizomatic’ or constituted by and through heterogeneous singularities that can connect (or disconnect) at any point.²³⁰ Deleuze and Félix Guattari stress a principle of ‘becoming,’ which they define in *A Thousand Plateaus*: “movement occurs not only, or not primarily, by filiative productions but also by transversal communications between heterogeneous populations. Becoming is a rhizome, not a classificatory or genealogical tree.”²³¹ ‘Becoming’ is an attempt to address the parameters of non-hereditary development, such as the role of ecological niche. Thus, concepts like ‘becoming-animal’ or ‘becoming-machine’ describe the psycho-somatic affectation or ‘alliance’ that emerge symbiotically. For Braidotti, ‘becoming’ is central to a post-human relationality: to view being as “an affective assemblage” and to view knowledge as “a relational vitalist entity.”²³² For MacCormack, ‘becoming’ is centred as the liminal encounter between natural entities.²³³ Posthuman ethics thus works towards the relation found in liminal encounters of mutual co-becoming (see chapter 3). For these theorists, the inherent interconnection of ‘being’ through the mutually entangled processes of life in ‘becoming’ serve to

²²⁸ See Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke University Press, 2010); Jane Bennett, *Influx and Efflux: Writing Up with Walk Whitman* (Durham: Duke University Press, 2020); William Connolly, *The Fragility of Things: Self-Organizing Processes, Neoliberal Fantasies, and Democratic Activism* (Durham: Duke University Press); and William Connolly, *Facing the Planetary: Entangled Humanism and the Politics of Swarming* (Durham: Duke University Press, 2017)

²²⁹ Deleuze, *Difference and Repetition*, 118.

²³⁰ See Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987).

²³¹ *Ibid.*, 239.

²³² Braidotti, *The Posthuman*, 171.

²³³ MacCormack, *Posthuman Ethics*, 3.

undo ontological separation and epistemic reflection. Humanity is instead entangled in these inter-relations with life: constituted in and through its connections.

Across the aisle, thinkers in the Derridean contingent tend to work from what MacCormack terms “a more ‘American’ theoretical framework,” involving thinkers like Emmanuel Levinas, Donna Haraway, Judith Butler, and Bruno Latour.²³⁴ Those working in the Derridean vein would include people like Badmington, Ferrando,²³⁵ Hayles, Herbrechter, Nayar, and Wolfe. This work tends to emerge out of animal studies, with Derrida’s *The Animal That Therefore I Am* as a central focus. There, Derrida stresses the difficulty of introducing any ontological pretense for not only a separation between human and animal, but also the difficulty in attributing the condition of ‘humanity’ as a “pure, rigorous, indivisible concept” onto any human.²³⁶ For Wolfe, Derrida troubles any attempt at a ‘scientific’ and ‘materialist’ rendering of human consciousness as non-metaphysical.²³⁷ For Derrida, then, the animal introduces the “abyssal limit of the human: the inhuman or the ahuman, the ends of man.”²³⁸ As Wolfe notes, this is not to suggest that human and nonhuman are collapsed, but rather that any ‘difference in kind’ is always ‘metaphysically’ (rather than materially) instantiated.²³⁹ Beyond animal studies, however, Derrida’s “The Ends of Man” offers a critique of human essence that refuses a dialectical sublation with anti-humanism. This essay, which I discuss in more depth in chapter 4, provides a critique not only of Enlightenment humanism (which might be identified with Kant), but also the humanism emergent in Sartre, Hegel, Husserl, and Heidegger. For instance, Derrida is critical not only of sublation [*Aufheben*] as humanity’s *telos* or *eschaton* in Hegel, but also of Heidegger’s work in the *Letter on Humanism*, which

²³⁴ MacCormack, *Posthuman Ethics*, 14.

²³⁵ Francesca Ferrando, “Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations,” *Existenz* 8, no. 2 (Fall 2013): 32.

²³⁶ Jacques Derrida, *The Animal That Therefore I Am*, trans. David Wills, ed. Marie-Luise Mallet (New York: Fordham University Press, 2008), 135.

²³⁷ Wolfe, *What is Posthumanism?*, 43.

²³⁸ Derrida, *The Animal That Therefore I Am*, 12.

²³⁹ Wolfe, *What is Posthumanism?*, 45.

retains a “thinking *of man*.”²⁴⁰ While Heidegger is critical of a certain appeal to human essence, his positioning of an overcoming of humanity’s ‘homelessness’ serves as a return to essence.²⁴¹

For scholars in the Derridean contingent of critical post-humanism, Derrida’s reading of humanity offers a more complicated picture than the anti-humanism of Foucault or Deleuze. For these thinkers, Derrida recognizes the difficulty of overcoming ‘hierarchical humanistic presumptions.’²⁴² This allows certain theorists to use the term ‘humanimal’ to think through the implications of humanity and animality, though without collapsing those distinctions.²⁴³ This is less the sublation of the human and animal (or humanism and anti-humanism) than an attempt to remain in the porosity of their liminal border. For those working with Derrida, both the Foucauldian and Deleuzian approaches tend to remain too dialectical in their tendency. Herbrechter, for instance, locates the ‘(neo)vitalism’ of Braidotti, Kirby, and Barad as “‘the other side’ of the current critique of thanatopolitics.”²⁴⁴ For Herbrechter, these theorists are too quick in choosing to side with life against death, re-integrating a dialectical tendency towards sublation. Derrida, in contrast, is posed as describing “the very impossibility of being able to ‘choose’ sides,”²⁴⁵ to remain in the porosity of aporia. Wolfe takes a similar perspective, suggesting that Derrida’s position more accurately encompasses the impossibility of the life/death relation to think not only ‘connection’ but at once the “open *and* closed” conditions of autopoiesis.²⁴⁶ Putting to the side any misreading of Deleuze and Guattari in these accounts, these thinkers would tend to align their contingent with a certain dialectical tendency. This would fit with Simon Susen’s reading of Braidotti, through which the

²⁴⁰ Jacques Derrida, “The Ends of Man,” in *Margins of Philosophy*, trans. Alan Bass (Chicago: Chicago University Press, 1982), 128.

²⁴¹ *Ibid.*, 128-129.

²⁴² Ferrando, “Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms,” 32.

²⁴³ Nayar, *Posthumanism*, 126. The term ‘humanimal’ has been heavily by Black theorists work on post-humanism. See, for instance Jackson, “Animal.”

²⁴⁴ Herbrechter, *Posthumanism*, 219.

²⁴⁵ *Ibid.*, 220.

²⁴⁶ Wolfe, *What is Posthumanism?*, xxiv-xxv.

‘post-human’ emerges in a dialectical sublation of humanism and anti-humanism: “Humanism (thesis) + Anti-Humanism (antithesis) → Posthumanism (synthesis).”²⁴⁷ Herbrechter, Wolfe and others seem less interested in such a sublation and more interested in focusing on the liminal threshold of humanism and anti-humanism. Work from the Deleuzian position appears to be less antagonistic towards these Derridean thinkers. Perhaps this is due to a certain emphasis of a ‘joyful’ or ‘affirmative’ reading of Deleuze, as is exemplified in the work of Braidotti. One exception is MacCormack who holds some suspicion towards those working with Levinas and Derrida. MacCormack critiques *The Animal that Therefore I Am* for remaining too humanistic in its purview. She writes, “No matter how hard Derrida admonishes that observation by his cat makes him naked [...] the gaze is a human conceit and affording the animal a gaze continues to hold equality (albeit sensitive to alterity) as the mark of ethical attention toward animals.”²⁴⁸ Here, Derrida remains still anthropocentric: with the (human) gaze maintained as the nexus of ‘right.’

Given the strong influence of these thinkers on ‘critical post-humanism,’ it is worth questioning how scholars differentiate themselves from so-called ‘post-structuralism.’ The most common refrain appears to be the refusal of a continuation between ‘humanism’ and ‘anti-humanism.’ Braidotti for instance, writes that “Posthumanism is the historical moment that marks the end of the opposition between Humanism and anti-humanism.”²⁴⁹ Wolfe affirms: “The posthumanist perspective rests on the assumption of the historical decline of Humanism but goes further in exploring alternatives, without sinking into the rhetoric of the crisis of Man.”²⁵⁰ Unlike those working in anti-humanism, these scholars are not antagonistic towards humanism. Braidotti,

²⁴⁷ Simon Susen, “Reflections on the (Post-)Human Condition: Towards New Forms of Engagement with the World?” *Social Epistemology: A Journal of Knowledge, Culture, and Policy* 36, no. 1 (2022): 79.

<https://doi.org/10.1080/02691728.2021.1893859>

²⁴⁸ MacCormack, *Posthuman Ethics*, 67.

²⁴⁹ Braidotti, *The Posthuman*, 37.

²⁵⁰ Wolfe, *What is Posthumanism?*, 37.

for instance, has no issue affirming certain humanist values.²⁵¹ Critical post-humanism reads less as a direct affront to the human and humanism than a ‘re-writing’ or ‘re-evaluation’ of these concepts. The persistent use of the prefix ‘re-’ to describe post-humanism’s methodological undertaking attests to this. Herbrechter’s definition of ‘critical post-humanism,’ for instance, suggests “an anamnesis and a *rewriting* of the human and humanism.”²⁵² Unlike structuralist anti-humanism, critical post-humanism emphasizes a reworking of humanism; not the overcoming of humanism. Yet, insofar as these various thinkers tend to work against Hegelian dialectics (through their use of Deleuze and Derrida), it is difficult to think through this ‘re-writing’ as anything other than the sublation of humanism and anti-humanism. This issue will be taken up in more depth in the next chapter.

Of course, ‘post-structuralism’ is far from the only influence on critical post-humanism. Like the ‘post-structuralists,’ critical post-humanism is inspired by second-order cybernetics, which offers a more relational epistemology and connected ontology than transcendental humanism would allow. Rather than a strictly separate observer, second-order cybernetics integrates the observer within the feedback system. Margaret Mead and Gregory Bateson, for instance, note that while Wiener and other cybernetic theorists offered an understanding of systems as ecological (i.e. that the totality of the system consisted in a single circuit), they tended to leave unacknowledged the observer’s participation within the larger circuit.²⁵³ Mead’s keynote address for the 1967 American Society of Cybernetics (ASC) is often taken as foundational to second-order cybernetics: focused on the ecological dimension of cybernetics and maintaining the need to integrate cybernetic findings into society.²⁵⁴

²⁵¹ See Simon Susen’s analysis, Susen, “Reflections,” 79. Braidotti, *The Posthuman*, 11.

²⁵² Herbrechter, “Critical Posthumanism,” 94.

²⁵³ Steward Brand, Gregory Bateson and Margaret Mead, “For God’s Sake, Margaret,” *CoEvolutionary Quarterly* 10, no. 21 (1976): 32-44.

²⁵⁴ Margaret Mead, “Cybernetics of Cybernetics,” in *Purposive Systems*, ed. H. von Foerster, J. White, L. Peterson, and J. Russel (New York: Spartan Books, 1968).

Bateson's anthropological work similarly considered feedback mechanisms through symmetrical and complementary differences. Already in the 1930s, Bateson posed 'schismogenesis' "as a process of differentiation in the norms of individual behavior resulting from cumulative interaction between individuals."²⁵⁵ Drawing from cybernetics, Bateson's later work considered these unchecked escalations as derived through systems of positive feedback.²⁵⁶ Using the example of alcoholism, Bateson suggests that alcoholics are driven by systems of 'symmetrical difference,' which designate systems of differences that rest on an agreed disagreement. Symmetrical differences occur in a 'double bind:' a system of adaptive change that depends on positive feedback.²⁵⁷ Alcoholism goes through various symmetrical relationships: competition with drinking buddies, antagonism with their spouse or authority figures, until reaching the point of challenging the alcohol to kill them. Bateson's example provides a cybernetic rendering of alcoholism as determinate of the alcoholic through systems of positive feedback and loops of symmetrical contestation. Rather than a direct affront to their drinking, the symmetrical confrontation tends to increase behavior in a process-oriented feedback system of rapid escalation.²⁵⁸ Breaking the process requires a different sort of contestation, aligned with negative feedback and 'complementary differentiation.' Unlike symmetrical differentiation, complementary differentiation describes a fundamental difference that produces a breakdown in the system. Alcoholics Anonymous' (AA) rhetoric of 'rock bottom' functions as a complementary break. AA attempts to introduce complementary differences to rupture symmetrical systems of positive feedback. This largely works by putting in place epistemological boundaries, that break from the continued contestation.²⁵⁹ Using the language of cybernetics, Bateson suggests that an alcoholic is not a rational actor driven by the rational choice

²⁵⁵ Gregory Bateson. *Naven*. (Cambridge: Cambridge University Press. 1936), 175.

²⁵⁶ Gregory Bateson. *Steps to an Ecology of Mind*. (Chicago: University of Chicago Press, 1972), 324.

²⁵⁷ *Ibid.*, 274.

²⁵⁸ *Ibid.*, 326-327.

²⁵⁹ *Ibid.*, 336.

towards alcoholism. Instead, the alcoholic is formed through social circuits of positive feedback in a symmetrical system. To block the escalation of positive feedback, the alcoholic cannot be rationally convinced to change: the system of feedback loops must be blocked through the introduction of negative feedback or complementary schismogenesis. This constitutes a fundamental alteration in the system, not a change in rational steering.

Humberto Maturana and Francisco Valera's monumental *Autopoiesis* offers a similar outlook, ascertaining that 'cognition' is the result of complex 'autopoietic' processes.²⁶⁰ Rational activity, *qua* thinking, is dependent on neurophysiological processes, which can be described as 'operations' of the nervous system.²⁶¹ Humans, and human rationality, are dependent on processes of complex feedback and interaction. Drawing upon their work in autopoiesis, the systems theorist Niklass Luhmann conceived of rational and 'psychic' activity as an autopoietic system at once operationally closed but structurally coupled with social or collective systems. As operationally closed, both psychic systems and social or communicative systems persist as autopoietic feedback systems. Yet, to stave off the resulting entropy of rapid escalation, each system 'interpenetrates' its structural pair. Interpenetration is not a mixing but instead allows each system to select and exclude information from the coupled system.²⁶²

The developments of second-order cybernetics speak to a shift in thinking through the human and subjectivity. Bateson poses the example of alcoholism against a separated notion of subjectivity, understanding such a subjectivity or 'self' as a 'reification' that ignores the more complex feedback processes.²⁶³ Maturana and Valera promote this as an epistemological shift: "The observer is a living system and an understanding of cognition as a biological phenomenon must account for the

²⁶⁰ Humberto Maturana and Francisco Valera, *Autopoiesis and Cognition: The Realization of the Living*, (Dordrecht: D. Riedel Publishing Company, 1980), 122-123.

²⁶¹ *Ibid.*, 23-24.

²⁶² Niklass Luhmann, *Introduction to Systems Theory* (Cambridge: Polity, 2013).

²⁶³ Bateson, *Steps to an Ecology of Mind*, 313, 331

observer and his role in this.”²⁶⁴ Luhmann even begins his discussion of ‘Psychic and Social Systems’ by describing the ‘dominant tradition’ of the ‘subject,’ which has led to centre “the rationality of the disposition to act.”²⁶⁵ Systems theory, and cybernetics as a whole, takes the human and rationality as emerging from environmental systems. Second-order cybernetics offers a shift away from an onto-epistemological separation and reflection while maintaining a commitment to self-knowledge and understanding. Yet, insofar as it conceives of the ‘human’ and ‘non-human’ as operationally distinct entities, second-order cybernetics can maintain the ‘functional difference’ that is desired by thinkers like Wolfe. Whatever the case, anti-humanism and second-order cybernetics provide an integral shift in the onto-epistemic understanding of humanity’s generation that informs aspects of critical post-humanism.

Ethico-Political Lineages: De-colonial, Post-colonial, Black, and Feminist Theories

Scholarship has long attested to the way Kant’s hierarchical distribution of the ‘kingdom of nature’ subjugated to a ‘kingdom of reason’ promotes the exclusion of some humans from the category of personhood. For instance, Frantz Fanon’s *Black Skins/White Masks* addresses how Blackness is simultaneously incorporated into a ‘universal bodily schema’ akin to a universal humanity, and a ‘historical-racial schema’ that inscribes the individual as representative of their ancestry and race.²⁶⁶ Black subjects are both a part of a universal humanity and separated from it as a universal Black subject. For Fanon, Black people are persistently mediated between this inclusion and exclusion: constructed within the universal humanistic order as self-reflexive rational beings but never quite granted access to that order insofar as they are racialized by the white gaze.²⁶⁷ While Black subjects can attempt to access the first universality, they are consistently obstructed by the

²⁶⁴ Maturana and Valera, *Autopoiesis*, 9.

²⁶⁵ Luhmann, *Introduction to Systems Theory*, 184.

²⁶⁶ Frantz Fanon, *Black Skins/White Masks*, trans. Richard Philcox (New York: Grove Press, 2008), 91.

²⁶⁷ *Ibid.*, 89. The principles of inclusion and exclusion in (post-)humanity are of central concern in chapter 5.

second: one may be a teacher or physician but only ever “the Negro teacher, the Negro physician.”²⁶⁸ The white gaze fixes Blackness as “savages, morons, and illiterates” that are inherently ‘non-human.’²⁶⁹ Edward Said notes a similar (though by no means identical) homogenizing reduction in his study of the Orient. Defining ‘Orientalism’ as “a way of coming to terms with the Orient that is based on the Orient’s special place in European Western Experience,”²⁷⁰ Said notes a structural reduction: “Orientalism approaches a heterogeneous, dynamic and complex human reality from an uncritically essentialist standpoint.”²⁷¹ For both Fanon and Said, the category of colonial subjectivity is imposed on the colonized subject. For instance, Fanon writes: “It is the colonist who *fabricated* and *continues to fabricate* the colonized subject. The colonist derives his validity, i.e. his wealth, from the colonial system.”²⁷² Said notes a similar fabrication, understanding the epistemological distinction between ‘Occident’ and ‘Orient’ as a Western imposition: a “historically and materially defined [...] Western style for dominating, restructuring, and having authority over the Orient.”²⁷³ For Sylvia Wynter, this fabrication is part and parcel of the humanistic domination found in the modern period:

For the expansion of the Western self, the auto-creation in the sixteenth century was only made possible by the damming up of the potentiality of non-Western man, by the negation of his Being. Once the idea of the Christian medieval ethnos of the West had broken down, it was replaced by another universal, the secular ideology of the bourgeoisie, the concept of HUMANISM. This was the new conceptualization of the new ethnos of Western man, as compared to his former Christian ethnicity. It would be part of the ideology that whilst it saw itself as a universal, it was universal only in the context of a WESTERN-DOMINATED WORLD. To quote Orwell, and to paraphrase: ALL MEN WERE EQUAL BUT WESTERN MAN WAS MORE EQUAL THAN OTHERS.²⁷⁴

²⁶⁸ Ibid., 97.

²⁶⁹ Ibid., 96.

²⁷⁰ Edward Said, *Orientalism* (New York: Vintage, 1979), 1

²⁷¹ Ibid., 333.

²⁷² Frantz Fanon, *Wretched of the Earth*, trans. Richard Philcox (New York: Grove Press, 2004), 2.

²⁷³ Said, *Orientalism*, 3.

²⁷⁴ Sylvia Wynter, “Ethno, or Sociopoetics?” *Alcheringa/Ethnopoetics* 2, no. 2 (1976): 8. Emphasis in original.

Across its various instances, ‘critical post-humanism’ attempts to think past these universalistic means of subordination. For instance, Herbrechter et al., suggest that the common denominator across ‘critical post-humanism’ is the “shared critique of humanism’s anthropocentrism and the white, Western, colonial, patriarchal structures that underpin it.”²⁷⁵ Theorists of this exclusion recognize the position of ‘non-human’ as a necessary and structural support for humanity. For instance, Braidotti opens *The Posthuman* by stating, “Not all of us can say, with any degree of certainty, that we have always been human, or that we are only that.”²⁷⁶

Charles W. Mills argues that Kant’s racial views are central to his larger critical and political scholarship. Kant pioneers a modern theory of racism based in science rather than theology.²⁷⁷ Modern expressions of ‘equality’ are “not extended equally to everybody.”²⁷⁸ Kant’s writing on race provides a map of human hierarchy, with superior and inferior groups of humans, including an emphasis on the subordinate status of Black and First Nations populations. He notably writes, “[Native] Americans and Blacks cannot govern themselves. They thus serve only for slaves.”²⁷⁹ Kant’s racial hierarchy refuses to treat all humans as equally human. Kant’s defenders are quick to suggest that this racial theory does not necessarily affect his critical and political philosophy. Yet, as Mills notes, Kant’s ethico-political imperative—one where human ‘persons’ are justified in their domination of non-human ‘things’—does not hold space for a middle category. For Mills, there is no reforming Kant without first recognizing Kant’s inherently racist, sexist, and Eurocentric project.²⁸⁰ The introduction of an intermediate category for excluded populations (a status of not

²⁷⁵ Herbrechter et al., “Critical Posthumanism: An Overview,” 6

²⁷⁶ Braidotti, *The Posthuman*, 1.

²⁷⁷ Charles W. Mills, “Kant and Race, Redux,” *Graduate Philosophy Journal* 35, no. 1-2 (2014): 132.

<https://doi.org/10.5840/gfpi2014351/27>

²⁷⁸ *Ibid.*, 138.

²⁷⁹ Kant quoted in Charles W. Mills, *Black Rights/White Wrongs: The Critique of Racial Liberalism* (Oxford: Oxford University Press, 2017), 96.

²⁸⁰ See Dilk Huseynzadegan, “Charles Mills’ ‘Black Radical Kantianism’ as a Plot Twist for Kant Studies and Contemporary Kantian-Liberal Political Philosophy,” *Kantian Review* 27, no. 4 (2022): 651-665.

<https://doi.org/10.1017/S1369415422000310>.

quite ‘person’ and not quite ‘thing’) would require rewriting not only Kant’s racial work but the “moral, political, and theological claims” as well.²⁸¹ As recent work suggests, Kant treats ‘Black slaves’ [*Negersklaven*] as equivalent to money.²⁸² Furthermore, Kant notably argued against the abolition of slavery in the 18th century.²⁸³ This distribution of Blackness as ‘non-human’ maintains the categorical division where ‘things’ lack not only the self-reflexive rationality of humanity but are subordinated to human use as currency.²⁸⁴ While universal in its scope, humanism is inherently restricted to those designated as human.

It is not enough to simply bring excluded populations into the sphere of humanity. Fanon notes how the colonized intellectual attempts to promote a defense of national culture through colonial values. Trained in the European methods of rationality and universality, colonized intellectuals risk severing themselves from their people.²⁸⁵ In *Wretched of the Earth*, Fanon proposes the need to develop a national consciousness through immanent forms of decolonial resistance without recourse to white transcendence. Critical post-humanism is often quick to identify Blackness as an area of humanist exclusion and post-humanist inclusion. For instance, Barad suggests that the conditions of ‘entanglement’ are often racialized,²⁸⁶ and notes race among a number of other ‘material-social factors’ and exclusions.²⁸⁷ Nevertheless, it is curious that while this scholarship is quick to invoke the work of Black and post-colonial scholars, there is little to no engagement with

²⁸¹ Mills, *Black Rights*, 98.

²⁸² See for instance, Sean Capener, “Every Man Has His Price: Money and Slavery in Immanuel Kant’s Doctrine of Right,” *Philosophy Today*, First Online October 7 (2023):1-17. <https://doi.org/10.5840/philtoday2023105508>

²⁸³ See, for instance, Huaping Lu-Adler, “Kant and Slavery—or Why He Never Became a Racial Egalitarian,” *Critical Philosophy of Race* 10, no. 2 (2022): 263-294. <https://doi.org/10.5325/critphilrace.10.2.0263>

²⁸⁴ Mills, “Kant and Race,” 138.

²⁸⁵ For example: “History, of course, written by and for Westerners, may periodically enhance the image of certain episodes of the African past. But faced with his country’s present-day status, lucidly and ‘objectively’ observing the reality of the continent he would like to claim as his own, the intellectual is terrified by the void, the mindlessness, and the savagery. Yet, he feels he must escape this white culture” Ibid., 157.

²⁸⁶ Karen Barad, “Troubling Time/s and Ecologies of Nothingness: Re-turning, Re-membering and Facing the Incalculable,” in *Eco-Deconstruction: Ecological Issues in Philosophy and Theology*, ed. Matthias Frisch, Philippe Lynes, and David Wood. (New York: Fordham, 2018), 227

²⁸⁷ Barad, *Meeting the Universe*, 224.

more recent scholarship working through the ontological structuring of Blackness in relation to humanity, despite the fact that Black scholars note this engagement would “deepen posthumanist thought.”²⁸⁸ Several theorists have criticized critical post-humanism for failing to adequately engage with racial histories. Jasbir Puar notes the tendency of ‘posthumanism’ (as well as object-oriented ontology and new materialism) to offer ‘unraced genealogies.’²⁸⁹ Critical post-humanism has, furthermore, been accused of failing to work through Blackness in its pursuit of a universal inclusion.²⁹⁰ As Stephanie Polsky notes, “Blackness remains relegated to the substructure of the world.”²⁹¹ I will return to this issue in Chapter Five.

For theorists like Braidotti, the production of Blackness is often aligned with coloniality. As described by Wynter, the colonial project was justified through Western humanism as a “Coloniality of Being.”²⁹² Braidotti draws upon post-colonial notions of cosmopolitanism to promote a planetary design.²⁹³ This attempt draws specifically upon Paul Gilroy’s ‘planetary cosmopolitanism,’²⁹⁴ which works through a continuous critique of race and colonization.²⁹⁵ Braidotti’s plea for a ‘becoming-world’ thus starts from a plea towards interconnection to mend the colonial divisions. Despite the fact that a ‘becoming-world’ appears to collapse colonized differences into an undifferentiated sameness, Braidotti argues that ‘becoming-world’ offers a critique of both liberalism and universalism, stating “a new agenda needs to be set, which is no longer that of European or Eurocentric identity, but rather a radical transformation of it, in a process of rupture from Europe’s

²⁸⁸ Jackson, “Animal,” 676

²⁸⁹ Jasbir Puar, *The Right to Maim: Debility, Capacity, Disability* (Durham: Duke University Press, 2017), 25-26.

²⁹⁰ Butler, “Making Enhancement Equitable.”

²⁹¹ Polsky, *The Dark Posthuman*, 151.

²⁹² Wynter, “Unsettling the Coloniality of Being/Power/Truth/Freedom.”

²⁹³ Rosi Braidotti, “Becoming-world,” in *After Cosmopolitanism*, ed. Rosi Braidotti, Patrick Hanafin, and Bolette Blaagaard (London: Routledge, 2013).

²⁹⁴ Braidotti, *The Posthuman*, 47.

²⁹⁵ Steven Gregory, “Review of *Against Race: Imagining Political Culture Beyond the Color Line*,” *American Ethnologist* 30, no. 2 (2003): 314.

imperial, fascistic, and undemocratic tendencies.”²⁹⁶ To do so, Braidotti draws on theorists like Fanon, Said, Gilroy, Avtar Brah, Edouard Glissant, Homi Bhabha, Vandana Shiva, bell hooks, and Cornell West. Like Braidotti, Maneesha Deckha stresses the need of postcolonial approaches to undercut humanist divisions: a critique of humanism involves a critique of Western hierarchy.²⁹⁷ Despite continually noting critical post-humanism as an inclusive project, some remain suspicious. Md Monirul Islam suggests that post-humanism adopts the ‘subaltern’ subject as the new object of discourse for post-humanist usage: like Blackness, colonized people become an example for critical post-humanist possibility.²⁹⁸ One might extend Sandra Harding and Matthew C. Watson’s writings on Bruno Latour to critical post-humanism. Harding argues that while Latour’s project sits between Western and postcolonial positions, he does so “without fully appreciating the content or power of the postcolonial criticisms of the West.”²⁹⁹ For Watson, Latour’s project cannot fully integrate critiques of science nor the structural experiences of marginalized subjects within his consideration of the social because it provides an inadequate account of externalization.³⁰⁰ While both Harding and Watson suggest that feminism (and we might suggest by extension critical feminist post-humanism) provide a more adequate account of externalization, it isn’t at all clear that this is the case. Harding’s statement that “Latour errs through omission”³⁰¹ could easily be applied to critical post-humanists who tend to invoke post-colonial (and less so de-colonial) writings that affirm their inclusive political agenda. Kier Martin suggests, for instance, that one risks flattening “a variety of subaltern perspectives by forcing them into the singular narrative of a colonial/postcolonial account that often

²⁹⁶ Braidotti, “Becoming-world,” 17.

²⁹⁷ Maneesha Deckha, “Toward a Postcolonial, Posthumanist Feminist Theory: Centralizing Race and Culture in Feminist Work on Nonhuman Animals.” *Hypatia* 24, no. 3 (2012): 536. <https://doi.org/10.1111/j.1527-2001.2012.01290.x>.

²⁹⁸ M.d Monirul Islam, “Posthumanism: Through the Postcolonial Lens,” in *Critical Posthumanism and Planetary Futures*, ed. D. Banerji and M. Paranjape (New Delhi: Springer). https://doi.org/10.1007/978-81-322-3637-5_7.

²⁹⁹ Sandra Harding, *Sciences from Below: Feminisms, Postcolonialities, Modernities* (Durham: Duke University Press, 2008), 26.

³⁰⁰ Matthew C Watson, “Cosmopolitics and the Subaltern: Problematizing Latour’s Idea of the Commons,” *Theory Culture & Society* 28, no. 3 (2011): 64, 72. <https://doi.org/10.1177/0263276410396913>.

³⁰¹ *Ibid.*, 66.

favours elite voices.”³⁰² The inclusion of all differences within a ‘becoming-world’ risks promoting a liberal inclusion that abandons opposition in favor of Western-generated ontological structures.

William Brown notes that critical post-humanism often “involves a kind of neocolonial mining of postcolonial ideas.”³⁰³ The role white theorists play in mining post- and de-colonial scholarship and the role of inclusion in the sphere of post-humanism are worthy of further consideration.³⁰⁴

Like Fanon and Said, Simone de Beauvoir’s *The Second Sex* attests to women’s subordination and fabrication within the humanist project. Women are granted a place of structural negativity in the division of society by sexual difference. Beauvoir argues that within this division, ‘man’ is taken as both positive and neutral, while ‘women’ are understood only negatively in relation to man’s positive element.³⁰⁵ This subordination goes back much further than the modern period. Aristotle, for instance, defines ‘female inferiority’ within his justification of slavery: “Again, the male is by nature superior, and the female inferior; and the one rules, and the other is ruled.”³⁰⁶ ‘Man’ is subject, woman is ‘Other.’³⁰⁷ While women’s bodies are factual and impact her existence, these facts do not explain her social position. For Beauvoir, women’s position as ‘Other’ is not grounded in biology or essence, but through sociological imposition. The often-quoted statement “One is not born but rather becomes a woman” attests to this sociological imposition of difference.³⁰⁸ This difference attests to female subordination as ‘thing.’ Historically, feminism has often sought to bring women into the status of humanity. For instance, Mary Wollstonecraft’s *A Vindication of the Rights of Women*

³⁰² Keir Martin, “Subaltern Perspectives in Post-Human Theory,” *Anthropological Theory* 20, no. 3 (September 2020): 378. <https://doi.org/10.1177/1463499618794085>.

³⁰³ William Brown, “Subaltern’ imagining of artificial intelligence: *Entbiran* and *CHAPPIE*,” in *From Deleuze and Guattari to Posthumanism: Philosophies of Immanence*, ed. Christine Daigle and Terrance H. McDonald (London: Bloomsbury, 2022), 175

³⁰⁴ See Claire Colebrook, “Deleuze after Afro-pessimism,” in *From Deleuze and Guattari to Posthumanism: Philosophies of Immanence*, ed. Christine Daigle and Terrance H. McDonald (London: Bloomsbury, 2022).

³⁰⁵ Simone de Beauvoir, *The Second Sex*, trans. H.M. Parshley (New York: Vintage, 1989), xxi.

³⁰⁶ Aristotle, *Politics*, trans. Benjamin Joewtt, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: The Modern Library, 2000), 1254b10-15, 1132.

³⁰⁷ Beauvoir, *The Second Sex*, xxii.

³⁰⁸ *Ibid.*, 267.

largely appeals to male rationality in its argument for women's rights.³⁰⁹ Yet, as bell hooks notes, Black women were often excluded from and discouraged from participating in white feminist organizations.³¹⁰ Noting these issues, third wave feminist scholars pursue a 'critical feminist post-humanism' that break from humanistic logics: the "humanistic genre of gender [...] is binary, dualistic, and based on the dynamics of mastery of subordination."³¹¹ Humanistic renderings of feminism attempt to bring (some) subordinated populations up to human status. For instance, while Wollstonecraft seeks equal standing between women and men, she does not challenge humanity's superiority.³¹² Rather than simply raise women from the status of 'nature' to the status of 'human,' critical feminist post-humanisms challenge the status of the 'human' itself. For instance, Plumwood argues that "to simply repudiate the old tradition of feminine connection with nature, and to put nothing in its place, usually amounts to the implicit endorsing of an alternative master model of the human, and of human relations to nature, and to female absorption into this model."³¹³ Prioritizing connection with nature is equated with deprioritizing humanism. Braidotti concurs, suggesting that it is not enough to merely 'extend human rights': "Feminism today cannot only be a revised or updated version of humanism, but needs to look farther and make an extra effort to rise to the contemporary challenges of the posthuman convergence."³¹⁴ This requires a shift in the theory of emancipation: no longer women's emancipation from subordination but emancipation from

³⁰⁹ See Mary Wollstonecraft, *A Vindication of the Rights of Men and A Vindication of the Rights of Women*, trans. Sylvana Tomaselli (Cambridge: Cambridge University Press, 1995), 78.

³¹⁰ Writing on the 20th century struggle for universal suffrage, hooks notes "Like their predecessors, white women consciously and deliberately supported white racial imperialism, openly disavowing feelings of empathy and political solidarity with black people. In their efforts to secure the ballot, white women's rights advocates willingly betrayed the feminist belief that voting was the natural right of every woman." Voting rights for white women took precedence over any universal suffrage. See bell hooks, *Ain't I a Woman: Black Women and Feminism* (Boston: South End Press, 1981), 171.

³¹¹ Nandita Biswas Mellamphy, "Challenging the Humanist Genre of Gender: Posthumanisms and Feminisms," in *Different Voices: Gender and Posthumanism*, ed. Paola Partenza, Özlem Karadağ, Emanuela Ettore. (Göttingen: Brill, 2022): 16-17.

³¹² See *Ibid.*, 18-19.

³¹³ Plumwood, *Feminism and the Mastery of Nature*, 23.

³¹⁴ Braidotti, *Posthuman Feminism*, 41.

humanism itself.³¹⁵ For Braidotti, this brings together feminist ‘post-structuralism’ and ‘anti-humanism’ to think a ‘postanthropocentric feminism’ that works towards ‘sexuality beyond gender.’ Those working within the ‘feminist posthumanities’ argue for the need to ‘transgress’ institutional norms by proposing a feminism without gender as an anti-foundationalist feminism no longer bound to identity.³¹⁶ Through this promotion, theorists argue in favor of intersectional analyses that tie together issues of gender, post-coloniality, race, and speciesism.³¹⁷

Critical Post-Humanism

At the conjunction of these lineages, critical post-humanism works to think connection, relation, and situatedness where Kant’s transcendental humanism offered separation, reflection, and deontological universality. The intersection of these ontological, epistemic, and ethical categories is itself posed as ‘connected,’ or what Barad terms ‘intra-active.’ Barad argues in favor of an ‘ethico-onto-epistemology’ as the “intertwining of ethics, knowing and being.”³¹⁸ Bringing ethics, ontology and epistemology together, Barad poses that each necessarily effects the others. This could be posed—through the Deleuze-Guattarian lexicon—as a process of ‘becoming.’ Rather than a ‘filiation,’ these processes are co-individuated as an ‘invocation.’ For critical post-humanists like Barad, it is impossible to totally separate ontology, epistemology, and ethics. While they remain analytically distinct categories, each necessarily impacts the others. To close the chapter, I will diagram these in more depth.

Ontological Connection

Connection works in contradistinction to the ontological separation promoted in Kant’s account of the relationship between the rational human mind (‘persons’ or ‘subjects’) and the non-

³¹⁵ See Rosi Braidotti, “Posthuman Feminist Theory,” in *The Oxford Handbook of Feminist Theory* (Oxford: Oxford University Press, 2016): <https://doi.org/10.1093/oxfordhb/9780199328581.013.35>

³¹⁶ Åsberg, “Feminist Posthumanities in the Anthropocene,” 198.

³¹⁷ Maneesha Deckha, “Toward a Postcolonial, Posthumanist Feminist Theory.”

³¹⁸ Barad, *Meeting the Universe Halfway*, 185.

rational, non-human realm of appearances ('things' and 'objects'). Yet, as Quentin Meillassoux notes, Kant's 'separation' simultaneously constitutes a perverse connection: the subject is inherently correlated and connected to the appearance, while totally separated from the 'thing-in-itself'.³¹⁹ Unlike Meillassoux, who is largely interested in disrupting the theory of 'correlation' between persons and appearances to think that which is outside relation, critical post-humanists largely pursue a deeper relationship between human 'subjects' and non-human 'things' by collapsing this distinction. Jill Didur coined the term 'critical posthumanism' to question the supposition of an 'originary divide' between 'human' and 'nature'.³²⁰ To do so, Didur draws upon Haraway's refusal of binary categories (such as animal/human, human-animal/machine, and physical/non-physical) in favor of a transgressive overlapping. Here, critical post-humanism bridges the work of 'post-structuralism' and second order cybernetics with studies of exclusion from Black, feminist, decolonial, and post-colonial literature. This enables the attempt to think a more 'eco-centric' or ecologically centred ontology of 'connection' against more 'human-centric' or 'anthropocentric' ontologies.³²¹ As noted, 'anthropocentrism' and 'humanism' are not necessarily identical, though they are often treated as such in this scholarship.

The promotion of more 'eco-centric' ontologies work by 'de-centring' the human from its place of species supremacy and then 're-centring' more ecologically oriented perspectives. Connection-oriented perspectives promote the 'human' as "an open-ended category and the product of ongoing processes of collective bio-social-technical individuation."³²² This can occur as a form of 'interspecies solidarity'³²³ and through notions of a 'pan-humanity,' defined as "a global sense of

³¹⁹ Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (London: Continuum, 2008), 5.

³²⁰ Didur, "Re-Embodying Technoscientific Fantasies."

³²¹ See, for example, Helen Kopnina, "Anthropocentrism and Post-Humanism," in *The International Encyclopedia of Anthropology*, ed. Hilary Callan, 1st ed (Wiley, 2019): 1–8, <https://doi.org/10.1002/9781118924396.wbiea2387>.

³²² Biswas Mellamphy, "Humans 'in the Loop?'," 20.

³²³ Giulia Carabelli, "Plants, Vegetables, Lawn," *Lateral* 10, no. 2 (2021) <https://www.jstor.org/stable/10.2307/48671655>

inter-connection among all humans, but also between the human and non-human environment, including the urban, social and political, which creates a web of intricate interdependencies.”³²⁴ As Cristin Ellis notes, this promotion aims towards a sort of liberal inclusion,³²⁵ with some going so far as to think ‘post-humanism’ as an extension of intersectionality to not only humanity but plants and animals as well.³²⁶ Considerations of intelligence, ontological status, and sometimes moral worth are thus extended beyond the confines of humanity, bringing animals³²⁷ and plants³²⁸ into the conversation.

‘De-centring’ works to critique the position of the ‘human’ as separate and self-contained.³²⁹ The promotion of ‘de-centring’ works less towards human abolition (as in ‘anti-humanism’) and more in terms of ‘re-writing’ the human as ‘interwoven’ with the ‘material world.’³³⁰ One recent text suggests that “posthumanism seeks to radically rethink the human rather than do entirely without it.”³³¹ As I suggested in the introduction, ‘critical post-humanism’ might be considered a form of constructivism: an attempt to identify and understand the ‘human’ and ‘humanity’ in novel and distinct ways. ‘De-centring’ the human recognizes the human as inherently connected. Many are inspired by Latour, who takes issue with Kant’s attempt to distinguish ‘culture’ and ‘nature’ to enable ‘rational humans’ the ability to reflexively determine the natural world.³³² For Latour, “The Kantian formulation is still visible today every time the human mind is credited with the capacity to impose

³²⁴ Braidotti, *The Posthuman*, 40.

³²⁵ Ellis, *Antebellum Posthumanism*.

³²⁶ Francesca Ferrando, “Towards a Posthumanist Methodology. A Statement,” *Frame, Journal of Literary Studies* (2012): 9-18.

³²⁷ Notably in Willett, *Interspecies Ethics*.

³²⁸ Such as Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University Press, 2013); or Myers Natasha Myers, “Conversations on Plant Sensing,” *Nature Culture*, no. 3 (2015): 35–66; Natasha Myers, “From the Anthropocene to the Planthropocene: Designing Gardens for Plant/People Involution,” *History and Anthropology* 28, no. 3 (May 27, 2017): 297–301, <https://doi.org/10.1080/02757206.2017.1289934>.

³²⁹ Nayar, *Posthumanism*, 17.

³³⁰ Herbrechter, *Posthumanism*, 48.

³³¹ Christine Daigle and Terrance H. McDonald, “Introduction,” in *From Deleuze and Guattari to Posthumanism: Philosophies of Immanence*, ed. Christine Daigle and Terrance H. McDonald (London: Bloomsbury, 2022), 4.

³³² Latour, *We Have Never Been Modern*, 10.

forms arbitrarily on amorphous but real matter.³³³ The pursuit of separation turns humans into an independent arbiter, ignoring their structural inter-dependent integration. ‘De-centring’ is an attempt at re-integration through ‘entanglement’ and ‘connection.’ The ‘connectionist’ model challenges human-centrism and anthropocentrism by understanding the human as connected and integrated.³³⁴ A variety of terms are used towards this end: ‘embeddedness,’³³⁵ ‘intra-connection’ and ‘entanglement,’³³⁶ ‘making kin,’ ‘staying with the trouble,’ and ‘symbiogenesis,’³³⁷ ‘trans-corporeality,’³³⁸ and ‘transversal interconnection’³³⁹ name only a few.

Connection instills something akin to a ‘flat ontology’ among participants. For example, Christine Daigle writes “there is no such autonomous separate bodies and objects; they are always intermingled.”³⁴⁰ They argue that this entanglement necessarily instills a ‘posthuman ethics’ by noting that such an ethics “ought to encompass all being and all elements of the web of relations and rests on an ontology of the human in terms of transjectivity.”³⁴¹ Bringing together ethics and ontology, Daigle presents all being as operating on equal footing by adopting the term ‘flat ontology.’ Originally coined by Manuel DeLanda, ‘flat ontology’ posits “unique singular individuals differing in spatio-temporal scale but not ontological status.”³⁴² While Daigle and other theorists of ‘entanglement’ might take issue with the term ‘singular individual’ (posing instead something more phenomenal or relational), the aim towards ontological flatness is maintained. While some have

³³³ Ibid., 56.

³³⁴ Biswas Mellamphy, “Humans ‘in the Loop?’”, 19.

³³⁵ MacCormack, *Posthuman Ethics*.

³³⁶ Barad, *Meeting the Universe Halfway*.

³³⁷ Haraway, *Staying with the Trouble*.

³³⁸ Stacy Alaimo, *Bodily Natures: Environment and the Material Self* (Bloomington: Indiana University Press, 2010).

³³⁹ Braidotti, *The Posthuman*.

³⁴⁰ Christine Daigle, “Deleuzian traces: The self of the polyp,” in *From Deleuze and Guattari to Posthumanism: Philosophies of Immanence*, ed. Christine Daigle and Terrance H. McDonald (London: Bloomsbury, 2022), 47.

³⁴¹ Ibid., 54.

³⁴² Manuel DeLanda, *Intensive Science and Virtual Philosophy* (London: Continuum, 2002), 51.

argued there are clear distinctions between ‘entanglement’ and ‘object oriented ontology,’³⁴³ a bridge exists through the work of Levi Bryant. Bryant describes his project as an attempt at synthesizing distinct trends that ‘de-centralize’ humanity through technology and nature. His notion of connection imparts two claims: “First, humans are not at the center of being, but are *among* beings. Second, objects are not a pole opposing a subject, but exist in their own right.”³⁴⁴ Bryant offers four theses of ‘flat ontology’ that align with Daigle and other post-humanist theories of connection: 1) a rejection of ontological transcendence; 2) the refusal of a single harmonious unity; 3) a refusal to privilege the subject over the object (or ‘persons’ over ‘things’); and 4) the position that “all entities are on equal ontological footing and that no entity [...] possesses greater ontological dignity than other objects.”³⁴⁵

Considering this ‘de-centring,’ connection moves to then ‘re-centre’ a greater ecological awareness. For example, drawing upon Jane Bennett’s ‘neo-vitalist metaphysics,’ Braidotti argues for the ‘re-centring’ of an inter-connected web or a unity of matter that connects all residents of earth. She argues that “‘We’ —the dwellers of this planet at this point in time—are interconnected, but also internally fractured.”³⁴⁶ This ‘we’ is fractured due to the hierarchical tendencies of humanism, which instill divisions between humans. The solution is, then, always already present in the recognition of an inherent interconnection, which constitutes the ‘centre’ of such a re-centring. For Braidotti, this vision builds towards a ‘pan-humanity’ or ‘cosmopolitan posthumanism.’³⁴⁷ Similarly, arguing against ‘anthropocentrically-motivated conservation’ and ‘eco-modernism’ (which remain ‘essentially anthropocentric’), Helen Kopnina et al., argue for a shift towards an ‘ecocentric’ axiology

³⁴³ For instance, Jordi Vivaldi argues that OOO advocates for the opposite of the ‘affirmational relationality’ of critical post-humanism. See Jordi Vivaldi, “The Twofold Limit of Objects: Problematising Timothy Morton’s Rift in Light of Eugenio Triás’s Notion of Limit,” *Open Philosophy* 3, no. 1 (2020). <https://doi.org/10.1515/opphil-2020-0102>

³⁴⁴ Levi Bryant, *Democracy of Objects* (Ann Arbor: Open Humanities Press, 2011), 249.

³⁴⁵ *Ibid.*, 246.

³⁴⁶ Braidotti *Posthuman Knowledge*.

³⁴⁷ I discuss this in more depth in chapter 2. See also, Jacob Vangeest, “Philosophical Health in Entangled Cosmopolitan Posthumanism,” in *Philosophical Health: Thinking as a Way of Healing*, ed. Luis de Miranda. (London: Bloomsbury, 2024).

on the ethico-ontological scale.³⁴⁸ Cynthia Willett outlines the issues of liberal binary ontologies, promoting the ‘connection’ of ‘multispecies communities:’ “A posthumanist lens ventures beyond modern and post-modern binaries, as in sympathy for the ‘other’ or Nietzschean affirmation of whatever, to engage multilayered symbiotic agencies and biosocial communities.”³⁴⁹ Speaking on the relation of humans and plants, Natasha Myers promotes a theory of connected ‘involution:’ “Involution describes a ‘reciprocal capture’ that binds plants and people in projects of co-becoming. Turning tropically to one another, plants and people are both in-the-making in sites like gardens.”³⁵⁰

Throughout, attempts at ‘de-centring’ humanity towards a ‘re-centred’ model of connection strive to undermine the structure of ‘mastery/subjugation’ outlined in the strong anthropocentrism of Kant’s transcendental humanism.³⁵¹ Connection displaces separation, offering a more relational ontology. Connection asserts the impossibility of separating humanity from nature. Whether such ‘de-centring’ adequately ‘disconnects’ from the project of anthropocentrism, or merely instills a ‘weak anthropocentrism’ akin to liberal sentimentality remains an issue of debate.³⁵² Both ‘de-centring’ and ‘connection’ attest to the desire for an alternative ontology that focuses on human connection with the rest of nature: to make the human one actor within a diverse field of actors (or ‘actants’).

Epistemic Relation

Given the emphasis on connection, critical post-humanism builds a theory of epistemic relation. For Kant, epistemic reflection inaugurates the possibility of humanity’s capacity as lawgiver: to reflexively judge and organize being or ‘matter’ into categories or ‘form.’ Like ontological connection, epistemic relation finds inspiration from Haraway. In *Modest-Witness*, Haraway discusses

³⁴⁸ Kopnina et al., *Anthropocentrism*

³⁴⁹ Willett, *Interspecies Ethics*, 7.

³⁵⁰ Myers, “From the anthropocene to the planthropocene,” 297.

³⁵¹ See Biswas Mellamphy, “Humans ‘in the Loop?’,” 19-21

³⁵² See *Ibid.*, 21-24.

the tendencies of reflection and reflexivity to displace the same elsewhere. They note that ‘critical reflexivity’ is often posed as an alternative to the ‘strong objectivity’ of reflective epistemology. The promotion of reflexivity—at least in the social sciences—attempts to circumnavigate the correlational objectivity of reflection by promoting a more circular relationship between cause and effect. Reflexivity thus attempts to undermine the internalism of the cogito. As Pierre Bourdieu writes,

One cannot talk about such an object without exposing oneself to a permanent mirror effect: every word that can be uttered about scientific practice can be turned back on the person who utters it. This echo, this reflexivity, is not reducible to the reflexion on itself of an ‘I think’ (*cogito*) thinking an object (*cogitatum*) that is nothing other than itself.³⁵³

Bourdieu’s appeal to reflexivity invokes something akin to feedback: the observer is not separate from the object under observation but connected to the observation through feedback mechanisms. Yet, for Haraway this appeal to reflexivity is insufficient, insofar as it merely looks to displace a ‘strong objectivity’ or neutrality. Instead, they pose ‘diffraction’ as presenting a meaningful difference. ‘Diffraction,’ as they note, is the process where a beam of light runs through an opening, resulting in interference between waves. Rather than a displaced mimesis, diffraction results in a swerve or difference instituted through interference.³⁵⁴

Alternatives to reflection are integral to science and technology studies. Latour’s distinction between ‘matters of fact’ and ‘matters of concern’ provides an example. Taking aim at the critical ‘generals’ of French theory (among them Foucault and Bourdieu, but also Baudrillard) for moving too far in their critique of empirical science, Latour offers an attempt at ‘renewing empiricism’ and ‘realism.’³⁵⁵ He notes that ‘fact’ is not all that is given in experience. Rather, as Martin Heidegger

³⁵³ Pierre Bourdieu, *Science of Science and Reflexivity*, trans. Richard Nice (Chicago: Polity Press, 2004): 4

³⁵⁴ Haraway, *Modest_Witness*, 16.

³⁵⁵ Bruno Latour, “Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern,” *Critical Inquiry* 30 (Winter 2004): 231.

notes, there is an ‘issue’ in experience. Human engagement with the *thing* [*das Ding*] always occurs with a withdrawal from the thing: “A thing is, in one sense, an object out there and, in another sense, an *issue* very much *in* there, at any rate, a *gathering* [...] the same word *thing* designates matters of fact and matters of concern.”³⁵⁶ Latour’s use of Heidegger’s term ‘concern’ [*Besorgen*] in reference to empiricism is telling. Heidegger’s use of ‘concern’ [*Besorgen*] and ‘care’ [*Sorgen*] are connected in *Being and Time*. For Heidegger, these terms are used in a special sense to designate a certain relationship with being³⁵⁷ and relate to *Dasein*’s ‘pre-ontological’ way of interpreting itself.³⁵⁸ Care and concern are, thus, integral to an epistemic self-grasping. Latour is less interested in the ontic-ontological grounding of care and concern than he is in the way concern shapes empirical discovery. For Latour, ‘matters of concern’ are integral to scientific investigation. Given the duality of the object (as both ‘object’ and ‘issue’), Latour aims to grant the object something of a middle position: “Objects are much too strong to be treated as fetishes and much too weak to be treated as indisputable causal explanations of some unconscious action.”³⁵⁹ In other words, both the position of epistemic reflection (Kant) and the position of skepticism (Foucault), are too strong. The middle position asserts facts as neither wholly ‘fact’ (that is, as fully given in appearance) nor ‘fetishized’ (that is, in Marxist parlance, that the object is granted magical attributes by humanity) but as closer to what he elsewhere terms ‘factishes.’³⁶⁰ Isabelle Stengers notes the term ‘factish’ expresses that empirical findings are both real and fabricated. Where some might adopt a sort of sophistry towards ‘antifetishistic critical thinking,’ Stengers believes the promotion of ‘factishes’ is the only way forward: “to introduce the *possible* ambiguity of its position.”³⁶¹ Here, measurement does tell the

³⁵⁶ Ibid., 233.

³⁵⁷ See Martin Heidegger, *Being and Time*, trans. John MacQuarrie and Edward Robinson (New York: HarperPerennial, 2008), 83-84

³⁵⁸ Ibid., 241-244. In *Being and Time*, Heidegger’s use of *Dasein* refers to humanity’s ‘Being-there.’ This shifts in Heidegger’s later work towards *da-sein*, with Heidegger’s critique of humanism.

³⁵⁹ Latour, “Why Has Critique Run out of Steam?,” 18.

³⁶⁰ Bruno Latour, *On the Modern Cult of the Factish Gods* (Durham: Duke University Press, 2010).

³⁶¹ Isabelle Stengers, *Cosmopolitics I*, trans. Robert Bononno (Minneapolis: University of Minnesota Press, 2010), 19.

observer something about the object, but it is also fetishized by the conditions of measurement determined by the observer and the histories of disciplinary interest.

While critical post-humanists are likely to affirm the shift towards ‘factishes,’ the appeal to ‘diffraction’ arguably goes a step further. Barad, for instance, promotes diffraction as a tool for re-considering epistemic relation. As noted, diffraction emerges through wave interference. Where reflection and reflexivity assume the copy of an original, diffraction is “marked by patterns of difference,” placing it closer to the regime of simulacrum than copy or original.³⁶² Where Haraway poses diffraction against the false binary choice of realism or relativism, to think diffraction as a difference without point of origin,³⁶³ Barad argues that diffraction patterns are the “fundamental constituents that make up the world.”³⁶⁴ Classical physics would hold that “only waves produce diffraction patterns; particles do not (since they cannot occupy the same place at the same time).”³⁶⁵ Yet, as Barad notes, the Davisson-Germer experiments from 1927 show that electrons are capable of diffraction and display wavelike behavior. Electron diffraction is profound insofar as it offers a materially spatial superposition. This means that the spatial position of an electron, when placed in certain parameters, is spatially indeterminate: its spatial dimension is only determined under conditions of measurement:³⁶⁶ both factual but also fabricated.

Here, one finds Barad’s notion of ‘intra-action’ distinguished from ‘inter-action:’ where ‘inter-action’ assumes a prior separation (like reflection or reflexivity), intra-action begins from a position of the ontological inseparability, entanglement, or connection of phenomena.³⁶⁷ All bodies are

³⁶² Barad, *Meeting the Universe Halfway*, 71.

³⁶³ Haraway, *Modest_Witness*, 16.

³⁶⁴ Barad, *Meeting the Universe Halfway*, 72.

³⁶⁵ *Ibid.*, 81.

³⁶⁶ Barad’s more recent work attempts to think electron diffraction with Derrida’s hauntology to promote a spatio-temporal indeterminacy that “exhibits a material ghostly non/presence in *multiple places at the same time.*” Karen Barad, “What Flashes Up: Theological-Political-Scientific Fragments,” in *Entangled Worlds: Religion, Science, and New Materialisms*, ed. Catherine Keller and Mary-Jane Rubenstein (New York: Fordham University Press, 2017), 33.

³⁶⁷ Barad, *Meeting the Universe Halfway*, 139.

determined through the dynamic, diffractive intra-activity. Distinct phenomena are generated through the differential diffraction patterns. Barad describes intra-activity as a ‘cut’ that undoes any distinction between subject and object: “the agential cut enacts a resolution *within* the phenomena of the inherent ontological (and semantic) indeterminacy.”³⁶⁸ Entanglement and intra-action constitute Barad’s theory of individuation: “individuation is not given but the result of specific cuts enacted in the experimental arrangement.”³⁶⁹ In this manner, Barad’s ‘diffraction’ goes a step beyond Latour’s ‘factishes.’ Where for Latour the value is epistemically determined in the act of measurement, Barad posits that the act of measurement epistemically *and ontologically* determines the value. The epistemological claim—that knowledge is entangled—is itself entangled with Barad’s ontological appeal to connection. Knowledge is inherently relational.

The move away from both reflection and reflexivity attempts a break from what Denise Ferreira da Silva terms the ‘transparency thesis:’ “the ontoepistemological account that institutes ‘being and meaning’ as effects of interiority and temporality.”³⁷⁰ Transparency works through both the development of the ‘transparent I,’ which is aligned with Kant’s subject or the attempt to “(re)present the ‘I as a self-determined being’” capable of both representing and regulating the exterior world or nature,³⁷¹ as well as the ‘transcendental poiesis,’ which is aligned with Hegel’s ‘Spirit’ as “the transcendental (interior or temporal) ‘I,’ which guides his version of the play of reason.”³⁷² For da Silva, both the transparent I and transcendental poiesis operate through the refashioning of a rational self-consciousness that maintains a ‘universal reason’ as the grounds for scientific knowledge. The combination of the refusal of a self-transparent subjectivity and reflective/reflexive epistemology in favor of a relational or diffracted epistemology attempts to show

³⁶⁸ Ibid., 140.

³⁶⁹ Ibid., 174.

³⁷⁰ Denise Ferreira da Silva, *Toward a Global Idea of Race* (Minneapolis: University of Minnesota Press, 2007), 4.

³⁷¹ Ibid., xxxviii

³⁷² Ibid., xxxix.

the poverty of transparency as a theoretical framework. Perhaps it is no wonder that da Silva's more recent work has drawn on Barad's theory of 'intra-action' to consider the development of an 'intra-structure.'³⁷³ Yet, as will be discussed more thoroughly in chapter 5, there remains a question of whether the promotion of entanglement adequately separates itself from the structures of transparency. As da Silva notes near the close of *Towards a Global Idea of Race*, those who attempt to think outside of transparency often most clearly "have but (re)produced its (highly productive) effects."³⁷⁴

Wolfe expresses the difficulty in such an epistemological appeal. In *What is Posthumanism?* he recognizes the difficulty in overcoming Kant's humanism due to the matter/form distinction within Kant's epistemology. In his writings on the Kantian sublime, Jean-François Lyotard notes that the 'sublime' challenges humanity's ability to produce form out of appearance. For Kant, the sublime is that which escapes human comprehension, it is formless. Yet, Wolfe suggests, Kant does not take this as an adequate rupture of the form/matter division. Instead, he uses the sublime to show the limits of rationality within rationality. Wolfe argues that the human subject remains transcendental in its failure: that humanity's failure to give form to the sublime "reontologizes the subject/object split."³⁷⁵ Even with Lyotard's rendering, the "subject remains installed at the center of the universe, only now its failure is understood [to] be a kind of success."³⁷⁶ Wolfe's critique of a Kantian humanism aims to 'connect' the subject to the object with the use of deconstruction to trouble the binary of reflective epistemology. This appeals to a liminal space troubling any ontological distinction between human and non-human.

³⁷³ Denise Ferreira da Silva, *Unpayable Debt*, (London: Sternberg Press, 2022).

³⁷⁴ Da Silva, *Toward a Global Idea of Race*, 260.

³⁷⁵ Wolfe, *What is Posthumanism?*, 218.

³⁷⁶ *Ibid.*

The difficulty addressed by da Silva and Wolfe speak to the task of ‘diffraction’ and epistemic relation. Where reflection takes a separated human as acting upon nature, a relational epistemology—in diffraction—begins from an onto-epistemic recognition of the human as connected or entangled to think knowledge as bound to the processes co-mediated through interaction. Human and object are diffracted together in a play or dance. Both being and knowledge are constituted through this process. Neither can be understood independently of the other. Relation, rather than reflection, promotes these distinct phenomena as necessarily connected on a primordial ontological level that serves as the basis of any epistemological claim.

Situated Ethics

‘Situated’ theories derive from feminist attempts to think through the critique of ‘objectivity’ and ‘universality.’ As Haraway notes “Situated knowledges are about communities, not about isolated individuals. The only way to find a larger vision is to be somewhere in particular.”³⁷⁷ Rather than focus on the universal from the perspective of the individual, a situated knowledge focuses on the particularities which are studied. Knowledge is bound to the situations in which it emerges; knowledge is not generalizable. Situated ethics entails something like ‘standpoint ethics,’ which is driven by feminist theory in standpoint epistemology. As Sandra Harding describes it, ‘standpoint epistemology,’ especially within feminism, tends to place itself in distinction with a ‘strong objectivity.’³⁷⁸ Yet, as they note, standpoint epistemology stands less in distinction to objectivity than it does to universality or generalizability: “strong objectivity requires that scientists and their communities be integrated into democracy advancing projects for scientific and epistemological reasons as well as moral and political ones.”³⁷⁹ For Harding, it is precisely by being ontologically

³⁷⁷ Donna Haraway, “Situated Knowledge: The Science Question in Feminism and the Privilege of Partial Perspective,” *Feminist Studies* 14, no. 3 (Autumn 1988): 590. <https://www.jstor.org/stable/3178066>.

³⁷⁸ Sandra Harding, “Rethinking Standpoint Epistemology: What is ‘Strong Objectivity,’” *The Centennial Review* 36, no. 3 (Fall 1992): 438. <https://www.jstor.org/stable/23739232>

³⁷⁹ *Ibid.*, 459.

connected with the object of observation that one is justified in their commitment to objectivity. Standpoint epistemology, here, is inherently bound to a normative project: ethics emerges from one's standpoint.

The onto-epistemic developments, however, mandate a distinction between the situated ethics of critical post-humanism and other attempts at projects that merely think humanity in solidarity with 'non-humans.' For instance, while Timothy Morton's *Humankind* poses a notion of 'solidarity' with 'non-human' others, suggesting that "Solidarity requires having something in common,"³⁸⁰ such a solidarity assumes inherently symbiotic and yet distinct beings. Morton's form of solidarity connects with the liberal sentimentality described by Biswas Mellamphy: a form of solidarity that "sought to protect individual freedom by borrowing from nineteenth- and twentieth-century ideals of social equality as minimal capabilities that the state must guarantee and should extend to nonhuman animals, people with disabilities, and noncitizens."³⁸¹ Morton's rhetoric assumes such a primordial separation despite their appeals to symbiosis: "Humans can achieve solidarity among themselves as between themselves and other beings because solidarity is the default affective environment."³⁸² Such forms of solidarity are common to 'alter-humanist' approaches, which push back against human-centrism/anthropocentrism. 'Alter-humanism', here, refers to attempts at an alternative humanism: one which is open to re-centring the nexus of value while maintaining some component of ontological separation.³⁸³ The work of political theorists Jane Bennett and William Connolly work towards such ends: Bennet by articulating "a vibrant materiality that runs alongside and inside humans to see how analyses of political events might change if we gave the force of

³⁸⁰ Timothy Morton, *Humankind: Solidarity with Nonhuman People* (New York: Verso, 2017), epub.

³⁸¹ Biswas Mellamphy, "Humans 'in the Loop?'," 16.

³⁸² Morton, *Humankind*, epub.

³⁸³ Biswas Mellamphy and Vangeest. "*Human All too Human?*"

things more due;”³⁸⁴ Connolly by offering a ‘transfiguration of humanism’ which refuses a ‘new universal’ through a pluralistic ‘entangled humanism.’³⁸⁵

Instead, the ethico-onto-epistemology of critical post-humanism poses an ethics not in terms of solidarity or inter-relation of humanity with others, but rather a primordial entanglement or intra-relation from which ethics is instantiated. This is a further appeal to the situatedness of ethical and normative commitments. Ethics is not the pejorative of humans acting upon the world, whether through mastery or in solidarity. For instance, MacCormack poses primordial inseparability as the basis for any ethical impetus: “The field of posthuman Ethics deals with life which resembles nothing except itself and not consistent with itself temporally, only tactically. Posthuman ethics sees the dividuation of life in opposition to identity [...] the individual is constituted only by its connection to other individuals.”³⁸⁶ This is not about solidarity with things in common but a primordial basis constitutive of ethics. It works closely with what Stengers’ terms ‘obligation:’ the obligation towards that which one is diffractively bound.³⁸⁷ For María Puig de la Bellacasa, this binding of epistemology and ethics sees a shift from Latour’s ‘matters of concern’ to a theorization of ‘matters of care.’ Leaving unacknowledged any theoretical relation between ‘care’ [*Sorgen*] and ‘concern’ [*Besorgen*],³⁸⁸ Puig de la Bellacasa sees ‘matters of care’ as a contrast and extension of Latour’s project by reading it with the situated and standpoint epistemologies of Haraway and Harding. For Puig de la Bellacasa, ‘care’ contrasts with ‘concern’ by mandating that knowledge is not only social, “but also that ‘our’ knowledge is intrinsically politically and ethically situated.”³⁸⁹ In doing so, they stress the need to remain critical despite Latour’s critique of the French ‘generals.’ This, they suggest, enables the extension of concern through care: “Attention to concern brings us

³⁸⁴ Bennett, *Vibrant Matter*, viii

³⁸⁵ Connolly, *Facing the Planetary*, 168.

³⁸⁶ MacCormack, *Posthuman Ethics*, 4.

³⁸⁷ Stengers, *Cosmopolitics*, 55.

³⁸⁸ Let alone any discussion of Heidegger whatsoever.

³⁸⁹ Puig de la Bellacasa, *Matters of Care*, 41.

closer to putting forward the need of a practice of care as something we can *do* as thinking and knowledge creators, fostering more awareness about what we care for and about how this contributes to mattering the world.”³⁹⁰ By means of a ‘de-centred’ humanity, the ‘re-centring’ of a connected ontology thus promotes an attempt at ‘care’ through ‘repair’ under eco-centric parameters. This might be posed as a ‘re-paration’ through “open-ended actions, practices, and modes of amendment of what is seen or felt as broken. It is within this process of care where life emerges with creative intensity despite destruction and ecological damage.”³⁹¹ ‘Care’ thus takes on an ethical dimension that emerges through its onto-epistemic commitments.

Braidotti, for instance, emphasizes Haraway’s dislocating of “the centrality of humanity [which informs] the in/non/post-human and [a] bio-centered egalitarianism.”³⁹² Braidotti shifts this towards a ‘*zoe*-egalitarianism’ that takes “the simultaneously materialist and vitalist force of life itself, *zoe* as the generative power that flows across all species.”³⁹³ Such an ethics takes “the primacy of the relation, of interdependence, values [of] *zoe* in itself” as the basis for any normative theorization.³⁹⁴ The primordial interconnection of *zoe* serves as the axiological basis of Braidotti’s ethics. Centring *zoe*, Braidotti posits life itself as something like an entangled intra-relation constitutive of subsequent instantiations. This “post-anthropocentric and non-Kantian ethics of codetermination” is promoted as an ‘ethics of sustainability’ distinct from ‘moral philosophy of rights.’³⁹⁵ For Barad, the Kantian institution of separation is understood as a form of violence: “The violence of cuts that draw distinctions and boundaries in ways that seek to circumscribe, capture, limit, and otherwise position

³⁹⁰ Ibid.

³⁹¹ Blanco-Wells, “Ecologies of Repair,” 2.

³⁹² Rosi Braidotti, “Posthuman, All too Human: Towards a New Process Ontology,” *Theory, Culture & Society* 23, no. 7-8 (2006): 199. <https://doi.org/10.1177/0263276406069232>.

³⁹³ Braidotti, *The Posthuman*, 103.

³⁹⁴ Ibid., 95.

³⁹⁵ Ibid., 93-94.

the other as the Other.”³⁹⁶ Like the promotion of care, Barad’s ethical commitment speaks to a situated relationship with others, which refuses the ‘violence’ of reflection from the outside.³⁹⁷ Barad’s notion of ‘response-ability’ begins from the promotion of an inherent intra-action: “an ongoing responsiveness to the entanglements of self and other.”³⁹⁸ Unlike MacCormack and Braidotti—for whom Spinoza, Deleuze and Guattari are prominent influences—it is Emmanuel Levinas who frames Barad’s ethical commitments. While noting a distinction with Levinas, insofar as their commitment to an ‘ethico-onto-epistemology’ cannot align with Levinas’ account of ethics as first philosophy,³⁹⁹ Barad draws upon the ‘face of the other’ to pose responsibility: “A humanist ethics won’t suffice when the ‘face’ of the other that is ‘looking’ back at me is all eyes, or has no eyes, or is otherwise unrecognizable in human terms. What is needed is a posthumanist ethics, an ethics of worlding.”⁴⁰⁰ For Willett, attempts to express alterity ethics, both from the Deleuze-Guattarian and Derrida-Levinasian traditions, speak to a ‘postmoral framework’ based in situatedness and an alternative origin.⁴⁰¹ Where deontology works from a universal pretention that centres the human, a situated ethics starts from onto-epistemic condition to think humanity *with* nature. Here, ‘ethics’ emerges from entanglements towards more holistic ends.

This chapter has provided a diagram of ‘critical post-humanism’ by tracing its development through humanism, cybernetics, transhumanism, ‘post-structuralism,’ feminist, and de-colonial theory. Understanding critical post-humanism in contradistinction to Kant, I have stressed the principles of ontological connection, epistemological relation, and situated ethics against separation, reflection, and deontology, respectively. Posing these conceptualizations as themselves intra-related,

³⁹⁶ Karen Barad and Daniela Gandorfer, “Political Desirings: Yearnings for Mattering (,) Differently,” *Theory & Event* 24, no. 1 (2021): 45, <https://doi.org/10.1353/tae.2021.0002>,

³⁹⁷ *Ibid.*, 24.

³⁹⁸ Barad, *Meeting the Universe Halfway*, 394.

³⁹⁹ Karen Barad, “After the End of the World: Entangled Nuclear Colonialisms, Matters of Force, and the Material Force of Justice,” *Theory & Event* 22, no. 3 (July 2019): 550n40. <https://muse.jhu.edu/article/729449>

⁴⁰⁰ Barad, *Meeting the Universe Halfway*, 392.

⁴⁰¹ Willett, *Interspecies Ethics*, 154.

I have shown that critical post-humanism takes ontology, epistemology, and ethics as ‘entangled.’ Even the terms I have used attest to their mutual intra-action: ‘relation’ could easily be used to discuss the ontological commitment, while ‘situated’ is a term derived from feminist epistemology. None of this is to suggest that these terms are identical: ethics is not identical to ontology nor epistemology, and vice versa. Instead, each is co-constituted in a mutual ‘diffraction’ or ‘intra-relation’ that sees them as akin to a structural coupling. Nevertheless, I remain curious about whether these principles—of ontological connection, epistemological relation, and situated ethics—pose a sufficient break with the assumptions of rationalist transparency deployed under humanism. In what follows I attempt to challenge these principles on several fronts. To begin, the next chapter questions whether it is possible to promote a humanism that follows the principles associated, here, with post-humanism: can we conceive a humanism that is ontologically connected, epistemologically relational, and poses a more situated ethics?

Chapter 2, Political Ontologies and Critical Post-Humanism

In the previous chapter, I diagrammed critical post-humanism by offering it in contradistinction to humanism's principles of ontological separation, epistemological reflection, and deontological morality through the promotion of ontological connection, epistemological relation, and a situated or standpoint ethics. In what follows I would like to problematize this diagram by challenging the sufficiency of these principles. To do so, I centre the question of critical post-humanism's political ontology. Given critical post-humanism's defined principles, any political ontology rendered as 'post-humanistic' must necessarily be at odds with the ontological, epistemological, and moral presuppositions underlying a humanistic politics. Thus, it is worthwhile to ask: What constitutes an individual, an actor, and a relationship in critical post-humanism? What measures of valuation matter? And, who gets to make political decisions?⁴⁰² By centring the study of political ontology in critical post-humanism, this chapter focuses on the question: Do the ontological, epistemic, and ethical commitments of critical post-humanism constitute a sufficient break from the political-ontological developments that have, hitherto, been promoted as humanistic? In other words, are the principles of ontological connection, epistemic relation, and situated ethics enough to posit a break from humanism when considered through the political lens? Politics is used here, given its emphasis on questions of inclusion and exclusion.

In this chapter, I argue that while connection, relation, and situatedness are at odds with the political-ontological formulations (or perhaps 'politico-ethico-onto-epistemological' formulations) of liberal thinkers like Immanuel Kant, there remain under-theorized similarities between critical post-humanism and the political work of G.W.F. Hegel. Hegel's political and teleological work in *The*

⁴⁰² For an extended discussion of political ontology see Colin Hay, "Political Ontology," in *The Oxford Handbook of Political Science*, ed. Robert Goodin (Oxford: Oxford University Press, 2013) <https://doi.org/10.1093/oxfordhb/9780199604456.013.0023>.

Elements of the Philosophy of Right and *The Science of Logic*, respectively, are notable for their critique of Kant's ontological, epistemological, and moral positions. For this reason, it is worth asking why Hegel is so seldom discussed in critical post-humanist scholarship, with the few references tending to take him as a figure of opposition: either as being too deterministic,⁴⁰³ too hegemonic,⁴⁰⁴ or lacking in necessary self-contingency.⁴⁰⁵ The desire to produce distance from Hegel is understandable (even beyond the various critiques of Hegel's dialectic that are adopted from 'post-structuralism'): if the critiques of humanism offered by critical post-humanism are largely resonant with the critique of Kant offered by Hegel—whom many critical post-humanists maintain is a humanist—then the triptych critique of separation-reflection-deontology is insufficient as a critique of humanism. If this is the case, then critical post-humanism requires a more thorough critique than initially thought: a critique speaking to the commonality of Kant and Hegel's mutual projects.

This chapter consists of two parts. The first continues the critique of Kant begun in chapter one. Here, I trace how critical post-humanism addresses Kant's cosmopolitan and ethico-political philosophy in pursuit of an alternative political ontology. Drawing out this alternative—a 'critical cosmopolitan post-humanism'—I suggest that there is resonance with Hegel's own critique of, and alternative to, Kant. This begins by discussing Kant's cosmopolitanism through both the *Critique of Judgement* and the essay on "Perpetual Peace." Next, I examine the development of a 'critical cosmopolitan post-humanism' as it works through de-colonial and post-colonial renderings of a

⁴⁰³ Debashish Banerji, "Individuation, Cosmogenesis and Technology: Sri Aurobindo and Gilbert Simondon," in *Critical Posthumanism and Planetary Futures*, ed. Debashish Banerji and Makarand R Paranjape (Springer: India, 2016), 257.

⁴⁰⁴ Braidotti, *The Posthuman*, 4.

⁴⁰⁵ Wolfe, *What is Posthumanism?*, 110-111. In addition, two references are made to Hegel in the collection *Posthumous Life*. The first, Jeffrey T Nealon's, "The Plant and the Sovereign," in *Posthumous Life: Theorizing beyond Posthumanism*, ed. Jami Weinstein and Claire Colebrook (New York: Columbia University Press, 2017) is more focused on Derrida's particular reading of Hegel than on Hegel himself. The second, Eugene Thacker, "Darklife: Negation, Nothingness, and the Will-to-Life in Schopenhauer," in *Posthumous Life: Theorizing beyond Posthumanism*, ed. Jami Weinstein and Claire Colebrook (New York: Columbia University Press, 2017) notably recognizes that for the German idealists, including Hegel, Kant is the problem to overcome. For Thacker, the ultimate issue with idealism is that it remains bounded to Kant. In this chapter I reach a similar conclusion to Thacker: that the issue remains one of teleology.

‘critical’ or ‘dialogic’ cosmopolitanism. As expressed in chapter 1, this critique works through the anti-Kantian alternative in connection, relation, and situatedness. Finally, I turn to Hegel’s work on ‘ethical life’ [*Sittlichkeit*] to suggest that, like the critical post-humanists, Hegel’s political project offers a framework for connection, relation, and situatedness in the ontological, epistemological, and ethical domains. Given this congruence, the second part of the chapter sets the stage for an alternative critique of humanism by centring Kant and Hegel’s mutual use of rationalism and teleology. This begins with an examination of natural teleology in Aristotle’s *Physics* and *Metaphysics*, drawing out its role in the development of causality and individuation. Next, I continue a study of the third *Critique* to focus on Kant’s rationalistic use of regulative teleology as the determination of political purposiveness. Finally, returning to Hegel, the chapter closes with a discussion of the *Science of Logic*’s use of teleology as a theory of individuation through the deployment of a formal *telos* in and for the state. I conclude that critical post-humanism requires a more thorough critique of rationalism, teleology, and purposiveness.

Towards Connection: The Critique of Kantian Cosmopolitanism

Critical post-humanism critiques dominant forms of liberalism found in figures such as Kant.⁴⁰⁶ Building from its ontological, epistemological, and normative principles, this scholarship seeks political ontologies grounded in connection and relation rather than individualism. Cynthia Willett, for instance, argues for the need to “step beyond modernism’s binaries of reason and sentiment, based as they are on modern models of atomic individualism.”⁴⁰⁷ Willett adopts Diogenes of Sinope’s term ‘cosmopolitan’ [*kosmopolitês*] to think a theory of right that is inclusive of non-human animal species based in solidarity rather than sentimentality: “solidarity among animals as

⁴⁰⁶ For the sake of brevity and consistency, I focus on Kant rather than someone like John Rawls. This decision is due to the adoption of cosmopolitanism by critical post-humanists. Given Rawls’ general disdain for cosmopolitanism, Kant is a figure of more central importance. On Rawls’ critique of cosmopolitanism, see John Rawls, “The Laws of Peoples,” *Critical Inquiry* 20, no. 1 (1993): 36-68, <https://www.jstor.org/stable/1343947>.

⁴⁰⁷ Willett, *Interspecies Ethics*, 37.

coworkers and friends.”⁴⁰⁸ Speaking in the context of India, Yamini Narayanan and Sumanth Bindumadhav suggest that attempts at a ‘cosmopolitan posthumanism’ would “radically expand cosmopolitanism to include all life.”⁴⁰⁹ This vision stresses the political engagements of poor humans and non-humans in a “plea for [a] post-*privileged* conception of the cosmopolis.”⁴¹⁰ Similarly, Rosi Braidotti stresses the need for a ‘critical cosmopolitan post-humanism,’ which would inform the “immanence of structural relationality so as to account for the atrocities and structural injustices, as well as for the many benefits, of pan-human perspectives today.”⁴¹¹ For each of these, a post-humanist political ontology is necessarily inclusive of non-humanity. Following the developments in the previous chapter, which traced critical post-humanism’s antagonistic relationship to Kant, it is integral to understand the push for a ‘cosmopolitan post-humanism’ in relation and opposition to Kantian cosmopolitanism. While some might be content to merely extend the borders of Kantian cosmopolitanism—through reformed approaches inclusive of animal rights—critical post-humanism attempts to critique the ontological foundation of Kant’s politics.

Kantian Cosmopolitanism

Influenced by 18th century thought, Kant adopts a liberal persuasion.⁴¹² Paul Guyer notes that Kant’s liberalism takes political regulation as necessary only to preserve human freedom.⁴¹³ This is

⁴⁰⁸ Ibid., 63. Willett grounds the distinction between liberal sentimentalism and solidarity through the work of Frederick Douglass: “Douglass explains to his white readership the limits of an ethical appeal to moral sentiments in the context of American slavery and abolitionism. White people could not generate sympathy for a slave unless that slave asserted some significant degree of agency and demanded, through that assertion of agency, recognition from others, he argued. For Douglass, that agency was staged as a call for solidarity and would eventually take shape as a catalyst for the abolitionist movement. [...] Douglass extended the range of his moral concern not only to the emancipation of all slaves everywhere and to nineteenth-century women’s movements but also, implicitly, to nonhuman animals.” Ibid., 38.

⁴⁰⁹ Yamini Narayanan and Sumanth Bindumadhav, “Posthuman cosmopolitanism’ for the Anthropocene in India: Urbanism and human-snake relations in the Kali Yuga,” *Geoforum* 106 (2019): 408.
<https://doi.org/10.1016/j.geoforum.2018.04.020>.

⁴¹⁰ Ibid., 407.

⁴¹¹ Braidotti, “Becoming-world,” 9.

⁴¹² For an account of liberalism on Kant’s thought, see Georg Cavallar, “Sources of Kant’s Cosmopolitanism: Basedow, Rousseau, and Cosmopolitan Education,” *Studies in Philosophy and Education* 33, no. 4 (2014): 369-389,
<https://doi.org/10.1007/s11217-013-9383-2>.

⁴¹³ Paul Guyer, *Kant on Freedom, Law, and Happiness* (Cambridge: Cambridge University Press, 2000), 236.
<https://doi.org/10.1017/CBO9781139173339>.

supported by §83 of the *Critique of Judgement*, where Kant aligns the ultimate purpose of nature with the freedom of humans to pursue rational activity:

It is a formal and subjective condition, namely, man's aptitude in general for setting himself purposes and for using nature (independently of [the element of] nature in man's determination of purposes) as a means [for achieving them in conformity with the aims of his free purposes generally. Producing in a rational being an aptitude for purposes generally (hence [in a way that leaves] that being free) is culture. Hence, only culture can be the ultimate purpose that we have caused to attribute to nature with respect to the human species.⁴¹⁴

Culture enables humans the freedom to determine their purpose based in rational judgement, rather than through mere mechanism. Despite discussions of 'duty' in the categorical imperative (see chapter 1), Kant aims at a politics of negative freedom: where one is free from the devastating and detrimental hinderances on free action and reason.⁴¹⁵ Humanity must seek ends which further ends seeking activities (namely freedom). This is only possible by installing political regulations that enable humanity to keep various hinderances to that freedom at bay.

War is a chief hinderance to freedom. Kant suggests that within an international system, war is an inevitable occurrence that must be limited by cosmopolitanism.⁴¹⁶ Kant's "Perpetual Peace: A Philosophical Sketch" aims to produce this order by providing grounds for an international system that would not only suspend war but guarantee peace.⁴¹⁷ The second section of the essay provides three articles on the 'Doctrine of Right,' which distills a deontological moral system for international politics composed of 1) the rights of citizens within a republic, 2) the rights of nations within a

⁴¹⁴ Immanuel Kant, *Critique of Judgement*, trans. Werner S. Pluhar (Indianapolis: Hackett, 1987), 319.

⁴¹⁵ One definition of positive and negative freedom notes, "Negative freedom involves removing obstacles from people's pursuit of their goals, including obstacles created by government action. Positive freedom involves enabling the capacities that allow people to develop and execute plans of life and exercise self-government individually and collectively." Carmen E Pavel and David Schmidtz, "Introduction," in *The Oxford Handbook of Freedom*, ed. David Schmidtz and Carmen E Pavel (Oxford: Oxford Academic, 2018), 2-3, <https://doi.org/10.1093/oxfordhb/9780199989423.013.35>.

⁴¹⁶ Kant, *Critique of Judgement*, 320.

⁴¹⁷ Immanuel Kant, "Perpetual Peace: A Philosophical Sketch," in *Kant: Political Writings*, ed. HS Reiss, trans. HB Nisbet (Cambridge: Cambridge University Press, 2018), 98.

federation of states, and 3) cosmopolitan right as the necessary condition of universal hospitality. Given the 18th century conditions of Kant's writing, there were no legal precedents for cosmopolitan right nor an international federation of states (such as the League of Nations or the United Nations). Thus, Kant could not ground his cosmopolitanism in legal or political frameworks but only moral ones.⁴¹⁸ According to Kant the cosmopolitan system requires a federation of republican states because republican constitutions are the only political constitutions capable of developing a 'concept of right.'⁴¹⁹ Only states where the rights of citizens take political precedence can develop and enforce rights of nations and cosmopolitan right. All three aspects of right take an individual, negative freedom for persons as the ultimate purpose and value of the international system. For Kant, freedom must take precedence over any political desire that might hinder it (such as state expansion): "the right of man must be held sacred, however great a sacrifice the ruling power may have to make [...] politics must bend the knee before right."⁴²⁰ Kant's political philosophy promotes rational freedom above any other political desire.

In contemporary scholarship, Kant's emphasis on moral right is associated with 'moral cosmopolitanism' and distinguished from political and legal forms of cosmopolitanism.⁴²¹ Proponents of a Kantian influenced moral cosmopolitanism argue for a universal framework where "every human being has a global stature as the ultimate unit of moral concern;"⁴²² emphasizing the universal and global implications of cosmopolitanism as both individualistic and inclusive,⁴²³ and stating that each individual, regardless of identifying characteristics, is taken as equal in their

⁴¹⁸ This is a position argued by Jürgen Habermas in defense of a political cosmopolitanism. See Jürgen Habermas, "Kant's Idea of Perpetual Peace, with the Benefit of Two Hundred Years' Hindsight," in *Perpetual Peace: Essays on Kant's Cosmopolitan ideal*, ed. James Bohman and Matthias Lutz-Bachmann (Cambridge: The MIT Press, 1997).

⁴¹⁹ Kant, "Perpetual Peace," 99.

⁴²⁰ *Ibid.*, 125.

⁴²¹ See Angela Taraborelli, *Contemporary Cosmopolitanism* (London: Bloomsbury, 2015).

⁴²² Thomas Pogge, *World Poverty and Human Rights* (Cambridge: Polity Press, 2002), 169.

⁴²³ See for instance Charles Beitz, "Cosmopolitanism and Global Justice," *The Journal of Ethics* 9 (2004): 11-27, <https://www.jstor.org/stable/25115813>.

humanity.⁴²⁴ Martha Nussbaum provides the following definition: “To count people as moral equals is to treat nationality, ethnicity, religion, class race, and gender as ‘morally irrelevant’—as irrelevant to that equal standing.”⁴²⁵ Nussbaum’s statement attests to a universal politics embracing an individualistic liberty. It is worth noting that while, for Kant, this liberty is limited, Nussbaum extends certain considerations of right. Kant writes, for example: “hospitality means the right of the stranger to not be treated with hostility when he arrives on someone else’s territory. He can indeed be turned away, if this can be done without causing his death, but he must not be treated with hostility, so long as he behaves in a peaceable manner.”⁴²⁶ This is a limited freedom, rendered negatively as the freedom from external constraint, which allows political and moral obligation only in the pursuit of greater freedom. Nussbaum, in contrast, offers something of a liberal sentimentalist position. As Willett notes, “Nussbaum retools liberalism’s classical aim of protecting individual liberty by incorporating nineteenth- and twentieth-century ideas of social equality in terms of minimal capabilities that should be guaranteed by the state and, moreover, extended to include animals, the disabled, and noncitizens.”⁴²⁷ Yet, even here, Nussbaum’s liberalism works on the basis of minimal capacities: any restraints on freedom must be pushed to the wayside.

Using reflective judgement, Kant’s limited and negative liberty is simultaneously adopted as a universal, deontological position and a regulative category.⁴²⁸ Kant’s limited notion of freedom within the cosmopolitan order prioritizes the existence of an essential, individual subject and valorizes that subject within a political system. Kant’s political ontology favors the individual subject

⁴²⁴ See Martha Nussbaum, “Kant and Cosmopolitanism,” in *Perpetual Peace: Essays on Kant’s Cosmopolitan Ideal*, ed. In James Bohman and Matthias Lutz-Bachmann (Cambridge: MIT Press, 1997).

⁴²⁵ Martha Nussbaum, *For Love of Country*, ed. Joshua Cohen (Boston: Beacon Press, 2002), 133.

⁴²⁶ Kant, “Perpetual Peace,” 106.

⁴²⁷ Willett, *Interspecies Ethics*, 36.

⁴²⁸ Reflective judgement is discussed in more depth below. For now, it is enough to note that Kant’s regulative concepts emerge through intuited experience. Using the powers of reason to better understand empirical sensations, regulative concepts are reflexively used to regulate or organize appearances. Regulative concepts are not objective but nevertheless treated as if they are constitutive.

and proclaims a valorized liberty for that subject as the ultimate measure of moral concern for the cosmopolitan order. As per chapter 1, this subject is at once individualized, distinct, and the universal bearer of value: the subject whose 'end' all of nature must serve as means. Kant's political ontology oscillates this individual, who only enters the cosmopolitan order out of self-interest. The pursuit of a universal peace is, after all, only instituted for the good of each, individual participant. Furthermore, the aim of the state is grounded in self-interest, even when it might appear altruistic, given that the best interest of each individual state is to avoid war. The function of the whole is not originally an invocation of the general onto the particular but works reflexively to build from the interests of individuals. This interest is only to subsequently institute a regulative concept of legal precedent through the faculty of reflection. Where universal rights are taken as the final cause of Kant's political structure, political pragmatism among its participants remains the efficient cause of his cosmopolitanism.

Some have attempted to draw out the use of hospitality to provide stronger notions of political right within the international system. For instance, Seyla Benhabib uses the concept of hospitality to consider the rights of refugees, asylum seekers, and migrants in the contemporary global order.⁴²⁹ Benhabib uncovers a tension between state sovereignty and hospitality that, she claims, must be addressed through an iterative democratic process: sovereignty is questioned by the need to extend hospitality to the stateless refugee. Cosmopolitan right takes precedence over sovereign right, as the three definitive articles of "Perpetual Peace" are read together.⁴³⁰ While some critical post-humanists have taken Benhabib as emphasizing "situated and context-specific practices,"⁴³¹ her neo-Kantian politics remain grounded in the abstract and universal categories of hospitality and cosmopolitan right. Here, right remains the regulative basis of any commitment towards others.

⁴²⁹ Seyla Benhabib, *Another Cosmopolitanism*, The Berkley Tanner Lectures (Oxford: Oxford University Press, 2006), 46.

⁴³⁰ *Ibid.*, 148.

⁴³¹ Braidotti, *The Posthuman*, 53.

Critical Cosmopolitan Post-Humanism

Scholarship in critical post-humanism sometimes draws upon the discourse ethics of Benhabib and Jürgen Habermas to develop a cosmopolitan political ontology both through and beyond Kant. Where theorists like Nussbaum provide a moral basis for cosmopolitanism, Benhabib and Habermas offer a political basis: that the condition of cosmopolitan right, or hospitality, is generated politically.⁴³² For example, Willett draws upon Habermas to promote a discourse ethics inclusive of animals. They claim that Habermas' communicative basis for ethics challenges liberal individualism.⁴³³ Yet, where Habermas takes morality as an objective principle governed by rational communicative structures, which are based in rational principles, bureaucracy, and institutional procedure,⁴³⁴ Willett promotes a communicative ethics grounded in "social materiality and existential depth."⁴³⁵ Where some might critique Habermas' account of deliberative democracy for failing to account for agonistic differences and contestation in the political,⁴³⁶ Willett's centring of material communication promotes 'affect,' 'cross-modal,' and 'multimodal' forms of sensory communication that do not require a shared rational basis.⁴³⁷ This serves as the foundation for a trans-species cosmopolitical formula which takes a relational communicability as the basis for ethics.⁴³⁸ Braidotti also draws upon Benhabib and Habermas to pursue a situated political framework that goes beyond the neo-Kantian imposition of universal rights. While she praises Benhabib's adaptation of

⁴³² See Taraborelli, *Contemporary Cosmopolitanism*.

⁴³³ Willett, *Interspecies Ethics*, 80.

⁴³⁴ See for instance, Jürgen Habermas, *Communication and the Evolution of Society*, trans. Thomas McCarthy (Boston: Beacon Press, 1979).

⁴³⁵ Willett, *Interspecies Ethics*, 92.

⁴³⁶ This is the basis of Chantal Mouffe's, *The Democratic Paradox* (New York: Verso, 2000). For Willett, the emphasis is similarly on Julia Kristeva's concept of 'abjection' and 'alterity.' See Willett, *Interspecies Ethics*, 156. It is also worth pondering the ability of discourse ethics and communicative rationality to deal with distinct phrase families, as discussed in Jean-François Lyotard, *The Differend: Phrases in Dispute*, trans. Georges Van Den Abbeele (Minneapolis: University of Minnesota Press, 1988). I have in mind here the concept of the 'differend,' which Lyotard takes from litigation. He describes it as "a case of conflict, between (at least) two parties, that cannot be equitably resolved for lack of a rule of judgment applicable to both parties" (xi). He also offers the following definition: "I would like to call a *differend* [*diffrènd*] the case where the plaintiff is divested of the means to argue and becomes for that reason a victim" (9).

⁴³⁷ Willett, *Interspecies Ethics*, 88-93.

⁴³⁸ *Ibid.*, 160.

Habermas, Braidotti stresses the need to move beyond the human in a “pan-human cosmopolitan bond.”⁴³⁹ Here, ‘pan-human’ consists in a Deleuze-Guattarian ‘becoming-minoritarian’ as a “new political and ethical project” stressing the importance of non-human others.⁴⁴⁰ Despite using the Kantian language of ‘cosmopolitanism,’ both Willett and Braidotti seek a cosmopolitanism grounded in non-rational, non-Kantian foundations. Neither promoting a ‘moral’ nor a ‘political-legal’ cosmopolitanism, which are both universal in their structure, these theorists seek inspiration from animal rights scholarship, decolonial literature, and ‘post-structuralism’ to denounce universalism and individualism.

Given this emphasis, proponents of a ‘critical cosmopolitan post-humanism’ are most closely associated with the ‘critical cosmopolitanism’ of de-colonial and post-colonial scholarship, which is often critical of moral and political-legal cosmopolitanism for ignoring the neo-colonial implications of their deontological impositions.⁴⁴¹ For instance, Walter D. Mignolo argues that universal forms of cosmopolitanism remain indebted to Kant’s colonial race distribution insofar as not all people are included in its universal design.⁴⁴² The reduction to equal standing promoted by liberal theorists like Nussbaum repeats the universalizing tendencies of colonization and capitalism given that its universal positions are distributed in a top-down manner. Critical and dialogic cosmopolitan alternatives seek to stress diversity and difference rather than universal sameness.⁴⁴³ Drawing upon Julia Kristeva, Homi Bhabha stresses a paradoxical and differential cosmopolitanism:

To propose an ethics of cosmopolitanism not based primarily on our dignity as human beings—the assumption of the Universal Declaration of Human Rights—but on our psychic alienations, moral ambivalences, and personal agonisms as ‘speaking beings’ is an idea that privileges cosmopolitan memory

⁴³⁹ Braidotti, *The Posthuman*, 149.

⁴⁴⁰ *Ibid.*, 53.

⁴⁴¹ See Taraborelli, *Contemporary Cosmopolitanism*, 111. For a more in-depth introduction to ‘critical cosmopolitanism’ see Sheldon Pollock, Homi K Bhabha, Carol A Breckenridge, and Dipesh Chakrabarty, “Cosmopolitanisms,” in *Cosmopolitanism*, ed. CA Breckenridge, Sheldon Pollock, and Homi K Bhabha (Durham: Duke University Press, 2002).

⁴⁴² Walter Mignolo, *The Darker Side of Western Modernity* (Durham: Duke University Press, 2011), 163.

⁴⁴³ See Pollock et al., “Cosmopolitanisms,” 13.

[...] and asks the speaker to lift her smoky mirror so that she can see, in her own image, the alterity of the Other.⁴⁴⁴

Critical cosmopolitanism is thus framed as a counter to globalization: bottom up rather than top down.⁴⁴⁵ These critiques are integral to building a ‘cosmopolitan post-humanism’ in a non-rational, non-universal, non-Kantian manner. For instance, Pramod K. Nayar argues in favor of a ‘species cosmopolitanism,’ which is defined as a communitarian politics where humans are understood as ‘co-evolving,’ ‘symbiotic,’ and ‘interconnected’ with nature: “sharing an ontology and a teleology with other species.”⁴⁴⁶ For Nayar, the plea of posthumanism is that humanity might recognize this ontology and teleology, and ‘self-consciously’ act in accordance with it. Isabelle Stengers suggests “we need to start not like Kant from promises the West might flatter itself in propagating, but from the price others have paid for this self-definition.”⁴⁴⁷ Stengers distances her *Cosmopolitics* from Kant’s imposed universality, including the imposition of universal rights. Braidotti, furthermore, emphasizes de-colonial scholarship to consider a ‘ground-up’ model for “a situated cosmopolitan posthumanism.”⁴⁴⁸ For Braidotti, this aim brings together “Western post-humanism on the one hand and non-Western neo-humanism on the other [to] transpose hybridity, nomadism, diasporas, creolization processes into means of re-grounding claims to connections and alliances among different constituencies.”⁴⁴⁹ Rather than universal rights, the development of a cosmopolitan post-humanism begins by refusing not only deontological moralism but also universalist politics by instead emphasizing a situatedness in the totality of its ethico-political ontology.

⁴⁴⁴ Homi Bhabha, “Cosmopolitanism: Reflections at the Commemoration of Ulrich Beck, 30 October 2015,” *Theory, Culture, & Society* 35, no. 7-8 (2018): 137, <https://doi.org/10.1177/0263276418812941>.

⁴⁴⁵ Walter D. Mignolo, “The Many Faces of Cosmo-polis: Border Thinking and Critical Cosmopolitanism,” In *Cosmopolitanism*, ed. CA Breckenridge, Sheldon Pollock and Homi K Bhabha (Durham: Duke University Press, 2002).

⁴⁴⁶ Pramod K Nayar, *Posthumanism* (Cambridge: Polity, 2014), 170.

⁴⁴⁷ Stengers, *Cosmopolitics I*, 79.

⁴⁴⁸ Braidotti, *The Posthuman*, 46.

⁴⁴⁹ Braidotti, “Becoming-world,” 18.

With the goal of an alternative cosmopolitan political ontology, critical post-humanism continues its critique of Kant's ontological, epistemic, and moral principles through the emphasis on connection, relation, and situatedness.⁴⁵⁰ Ethico-politically this is expressed in terms of 'obligation' or 'responsibility' rather than 'right.'⁴⁵¹ 'Obligation,' in this sense, finds its origin in science and technology studies.⁴⁵² It derives from a particular understanding of scientific concern: actors are obligated to their milieu, and their milieu is reciprocally obligated towards them. Each is obligated in their intra-actions. For Stengers, obligation is grounded in a relational ontology: a situated ethics found in ontological connection and relational knowledge.⁴⁵³ For a theorist like María Puig de la Bellacasa, who centres obligation in care-based post-humanism, obligation is "inseparable from the material continuation of life."⁴⁵⁴ Similarly, in their use of Emmanuel Levinas, Karen Barad's ethical vision of 'response-ability' poses the need to recognize the entangled violence of "colonialism, racism, [and] nationalism [...to] come to terms with the infinite depths of our humanity, and our resulting devastation, to nourish the infinitely rich grounds of possibilities for living and dying otherwise."⁴⁵⁵ For these theorists, obligations are not external, nor rationally derived abstract moral conditions but are immanent and entangled aspects of one's relational existence. Any political ontology must begin from the condition of an inherent or primordial togetherness. Recognizing 'entanglement' is necessary for emancipating the whole from the destructive tendencies of domination found in humanism's ontological separation. Cosmopolitanism, in a post-humanist sense, begins with entanglement: the cosmopolitan whole serves as the primordial condition of individual phenomenon, informing the possibility of more inclusive political intra-action.

⁴⁵⁰ See chapter 1.

⁴⁵¹ This is a position I have advanced in Jacob Vangeest, "Philosophical Health in Entangled Cosmopolitan Posthumanism."

⁴⁵² 'Obligation' in STS can be distinguished from moral theories of obligation found in the study of ethics.

⁴⁵³ Stengers, *Cosmopolitics I*.

⁴⁵⁴ Puig de la Bellacasa, *Matters of Care*, 155.

⁴⁵⁵ Barad, *Meeting the Universe Halfway*, 241-242.

By beginning with a foundation in connection and obligation, critical post-humanism outlines a political ontology aligned with an extended, ‘pan-human’ cosmopolitanism. This political project takes life, in Braidotti’s terms *zoe*, as the central political figure, with various inter-relations or intra-actions serving to constitute the diverse actors or actants within its political constitution. Here, entanglement becomes the ground of value. *Zoe*’s flourishing takes the place of human flourishing. The central decision maker—so it is claimed—is *zoe*, as the totality of life itself.⁴⁵⁶ In practice, this formulation is informed by something like a ‘political ecology,’ and ends up developing something akin to a ‘democracy of life.’ While ‘political ecology’ is a popular turn of phrase, Bruno Latour argues that it “has *not yet begun to exist*.”⁴⁵⁷ For Latour, political ecology is not an attempt to bring nature into the *polis*. Rather, it is an attempt to bring humans back into a ‘common dwelling’ or ‘*demos*’ that the Kantian constitution precludes humans from.⁴⁵⁸ In this manner, political ecology constitutes “the right way to compose a common world, the kind of world the Greeks called a *cosmos*.”⁴⁵⁹ In this sense, political ecology promotes a democracy of all life that is far more political than the ‘democracy of objects’ discussed in the work of object oriented ontology, which maintains itself merely as an ontological thesis.⁴⁶⁰ Rather than a thesis on the ontology of distinct objects, Latour promotes a democracy of ‘actants’ (a term that provides a ‘less rigid, less still’ understanding of agency)⁴⁶¹ and ‘hybrids’ (understood as “mixtures of nature and culture”)⁴⁶² without an emphasis on subjectivity or internal states.

⁴⁵⁶ For a critique of such an assertion, see chapter 3.

⁴⁵⁷ Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy*, trans. Catherine Porter (Cambridge: Harvard University Press, 2004), 2. Emphasis in original.

⁴⁵⁸ *Ibid.*, 224.

⁴⁵⁹ *Ibid.*, 8.

⁴⁶⁰ See Bryant, *The Democracy of Objects*, 19.

⁴⁶¹ See Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005), 54-55.

⁴⁶² Latour, *We Have Never Been Modern*, 30

Like Latour, Braidotti thinks politics in terms of a political ecology and cosmology. Yet, for Braidotti, Latour's lack of emphasis on the 'subject' fails to allow for an "ethical and political accountability."⁴⁶³ Latour's 'actants' and 'hybrids' do not attain the height of 'subjectivity' necessary for Braidotti's consideration of the *polis* or the *demos*. Here, it is Haraway's subject—and not Latour's 'actant'—that is favored in a post-humanist political ontology: the 'cyborg,' the 'companion species' and the 'nomad.' Despite its centrality to her project, Braidotti's descriptions of this 'subjectivity' are incredibly vague, often aligned with 'process ontology,'⁴⁶⁴ 'life,' and 'ζωε.'⁴⁶⁵ It is clear that, for Braidotti, subjectivity is "enfleshed and extended, [a] relational self."⁴⁶⁶ As Simon Susen notes in their study of Braidotti, the notion of a 'posthuman subject' might be indebted to a Foucauldian nominalism, where the 'subject' is understood as something that is produced rather than given.⁴⁶⁷ Yet, Susen notes, Braidotti maintains something of a quasi-essentialist assumption about humanity: that humans have "traits that are inherent in *our* species-specific conditions."⁴⁶⁸ Nevertheless, the push for 'post-human subject' (rather than human ones) would define "*all* living beings [as] 'a work-in-progress,'" constitutive of Braidotti's notion of subjectivity.⁴⁶⁹ The 'we' constitutive of the critical post-humanist (*cosmo-*)*polis* is, in Braidotti's sense, all living being or life (ζωε) itself. Cosmo-politically, both the actor and end of Braidotti's political ontology is this subject, the totality of life itself.

The Derridean contingent of critical post-humanism also provides an account of a cosmopolitan critical post-humanism. Matthew Leep suggests it is possible to bring together Derrida's work on hospitality with his work on animals, which arose around the same point in his

⁴⁶³ Braidotti, "Posthuman, All too Human: Towards a New Process Ontology," 197.

⁴⁶⁴ *Ibid.*, 199.

⁴⁶⁵ Braidotti, *The Posthuman*, 50.

⁴⁶⁶ *Ibid.*, 90.

⁴⁶⁷ Susen, "Reflections on the (Post-)Human Condition," 73.

⁴⁶⁸ *Ibid.*, 74, emphasis in original.

⁴⁶⁹ *Ibid.*

career.⁴⁷⁰ As Bonnie Honig notes, “Derrida casts hospitality as belonging to two, discontinuous and radically heterogeneous orders, conditional and unconditional, whose conflict and asymmetrical necessity render ethical-political life (im)possible.”⁴⁷¹ Hospitality is marked by the paradoxical reality that, as a universal obligation (in the Kantian sense), it is impossible not to limit the scope of hospitality. To be hospitable to one jeopardizes the ability to be hospitable to another:⁴⁷² “[we are] responsible to any one (that is to say to the other) only in failing [our] responsibilities to all others, to the ethical or political generality.”⁴⁷³ Simultaneously, Derrida will align ethics with hospitality:

Hospitality is culture itself and not simply one ethic amongst others. Insofar as it has to do with the *ethos*, that is, the residence, one’s home, the familiar place of dwelling, insofar as it is a manner of being there, the manner in which we relate to ourselves and to others, to others as our own or as foreigners, *ethics is hospitality*; ethics is so thoroughly coextensive with the experience of hospitality.⁴⁷⁴

Ethics, as Derrida poses it here, is closer to the ethics of Levinas than the moralism of Kant. In *Adieu*, for instance, he notes that Levinas’ work concerns “the relationships between an *ethics* of hospitality (an ethics *as* hospitality) and a *law* or a *politics* of hospitality.”⁴⁷⁵ The former concerns ethics, the second a Kantian politics. According to Honig, Derrida’s stresses that this paradox identifies an “*alienness* of a universalism that seeks to subsume the new or the foreign under categories.”⁴⁷⁶ For Leep, this ‘alienness’ involves a form of interspecies hospitality: an appeal to “say yes to who or what turns up... whether or not the new arrival is the citizen of another country, a

⁴⁷⁰ Matthew Leep, “Stray Dogs, Post-Humanism and Cosmopolitan Belongingness: Interspecies Hospitality in Times of War,” *Millennium: Journal of International Studies* 47, no. 1 (September 2018): 45–66, <https://doi.org/10.1177/0305829818778365>.

⁴⁷¹ Bonnie Honig, “Another Cosmopolitanism? Law and Politics in the New Europe,” in *Another Cosmopolitanism*, The Berkley Tanner Lectures, ed. Robert Post (Oxford: Oxford University Press, 2006), 105.

⁴⁷² *Ibid.*, 105.

⁴⁷³ Derrida quoted in Leep, “Stray Dogs,” 53.

⁴⁷⁴ Jacques Derrida, *On Cosmopolitanism and Forgiveness*, trans. Mark Dooley and Michael Hughes (London: Routledge, 2001), 16-17.

⁴⁷⁵ Jacques Derrida, *Adieu: To Emmanuel Levinas*, trans. Pascale-Anne Brault and Michael Nass (Stanford: Stanford University Press, 1999), 19.

⁴⁷⁶ Honig, “Another Cosmopolitanism?,” 110.

human, animal.”⁴⁷⁷ Dogs and other species are ‘foreigners without papers’ towards which the universal demand for hospitality is invoked in war zones.⁴⁷⁸ Such a cosmopolitan vision would build on similar principles to Braidotti and Willett—namely to extend the conditions of hospitality outward on the basis of non-rational inclusion—though largely by retaining the human subject as the central political actor for the cosmopolitan vision.

One might note that, in both these formulations, there is some distance from Marxist political thought.⁴⁷⁹ It is not immediately clear why this is the case: aside from Foucault, many of the key figures in ‘post-structuralism’ were inspired by Marx (e.g. Derrida), if not explicitly Marxists (e.g. Deleuze). It may be that the influence of Haraway has led to this separation, as they are critical of Marx in ‘A Cyborg Manifesto.’ But even Haraway speaks favorably of Marx in *Modest_Witness*, only suggesting that we extend Marx “to remember all the nonhuman actors too.”⁴⁸⁰ Perhaps the issue is Marx’s apparent humanism? Yet, several recent texts attempt to bridge the gap between Marxism and the political ontological (or political ecologies) of critical post-humanism. Jason Moore’s *Capitalism in the Web of Life* argues against Kant’s nature/culture dichotomy to think a more entangled, process-oriented formulation: “Put simply, humans make environments and environments make humans—and human organization.”⁴⁸¹ While much more clearly invigorated with Marxist language, Moore’s statement that “this dualism drips with blood and dirt, from its sixteenth-century origins to capitalism in its twilight,” feels at home with the critical post-humanist literature.⁴⁸² While Marxist thought has historically been tied to a certain Prometheanism and hyper industrialization, recent work by Kohei Saito follows earlier works by Paul Burkett and John Bellamy Foster in stressing the political ecological dimensions of Marx’s work. Saito links alienation in Marx’s

⁴⁷⁷ Derrida quoted in Leep, “Stray Dogs,” 54.

⁴⁷⁸ Leep, “Stray Dogs,” 66.

⁴⁷⁹ Even Barad’s “Troubling Time/s” discussion on Derridean ‘hauntology’ fails to mention Marx at all.

⁴⁸⁰ Donna Haraway, *Modest_Witness*, 143.

⁴⁸¹ Jason Moore, *Capitalism in the Web* (New York: Verso, 2015), 14.

⁴⁸² *Ibid.*, 16.

1844 Manuscripts to an initial estrangement from nature. Communism is tied to a more suitable relational structure:

Marx depicts the historical movement toward the transcendence of self-alienation and the loss of object under the system of private property as a process of the true reconciliation of humanity and nature. As a condition for this realization, he points to the necessity of a radical transformation of the existing mode of production and the abolition of private property. The ‘society’ to come is nothing but a collective and conscious organization and regulation of the relationship between humans and nature.⁴⁸³

Saito’s continued work on ecology, Marxist anti-capitalism, and ‘degrowth’ suggests that “Marx’s call for a ‘return’ to non-capitalist society demands that any serious attempt at overcoming capitalism in Western society needs to learn from non-Western societies.”⁴⁸⁴ This position largely fits within critical post-humanist demands for de-colonial or post-colonial integration. It is indeed perplexing that the scholarship often simply ignores Marx rather than properly engages with his writings.⁴⁸⁵ Further literature is needed to explore the fertile ground on this engagement.

In summary, where the Kantian cosmopolitan project issues a deontological political ontology grounded in categories of abstract right, critical post-humanism attempts to build towards critical and dialogic cosmopolitanisms. These alternatives begin with a moral condition of ‘obligation’ or ‘responsibility’ that emerges from situated connections and entanglements. Rather than presenting the subject as an ‘individual’ with abstract rights and duties, a critical cosmopolitan post-humanism would think through reciprocally entangled humans endowed with responsibilities or obligations towards their entanglements. The critique of the principles of Kantian humanism established in chapter 1 provide the basis for an emergent and dialogic political formulation that asserts a more inclusive and responsible political ontology than the commitments of Kant’s transcendental

⁴⁸³ Kohei Saito, *Karl Marx’s Ecosocialism: Capital, Nature, and the Unfinished Critique of Political Economy* (New York: Monthly Review Press, 2017), 44.

⁴⁸⁴ Kohei Saito, *Marx in the Anthropocene: Towards the Idea of Degrowth Communism* (Cambridge: Cambridge University Press, 2023), 208.

⁴⁸⁵ I attempt to answer the question of why the project at hand ultimately turns to the work of Gilbert Simondon rather than Marx in chapter 4.

humanism allow. Critical post-humanism's alternative principles aim at a divergent political ontology at odds with Kant's cosmopolitanism. Yet, while a critical cosmopolitan post-humanism does offer an alternative to Kant's ethico-political commitments, it is worth questioning whether it poses an integral break with the rationalist and enlightenment form of humanism.

Hegel's Ethical Life and Critique of Kant

The critique of ontological separation, epistemic reflection, and deontological moralism is not unique to recent critical-theoretical scholarship. In fact, the positions asserted by critical post-humanism are largely resonant of the critique of Kant made by G.W.F. Hegel. Like Kant, Hegel's political and ethical writings centre freedom. Yet, as Axel Honneth notes, Hegel's positive use of freedom is quite distinct from Kant's negative rendering.⁴⁸⁶ In a study of Kant and Hegel, Habermas reconstructs several Hegelian critiques of Kantian moral theory: Hegel dismisses the categorical imperative as an 'empty formalism,' deontology as a 'abstract universalism,' and notes Kant's incapacity to truly separate 'is' from 'ought.'⁴⁸⁷ While Hegel praises Kant for passages offering insight into the movement of spirit [*Geist*], he often critiques Kant's overall positions as fixed. Kant's deontology, for instance, imposes fixed, abstract, and universal rules onto particular, localized, and concrete situations.⁴⁸⁸ Hegel emphasizes freedom as a positive freedom that is mediated with the social: a freedom 'in and through' others.⁴⁸⁹ Neither bound to an 'abstract right,' nor to 'formal moral principles,' Hegel's notion of freedom promotes reciprocal and reflexive "ethical relationships with the social."⁴⁹⁰

⁴⁸⁶ Axel Honneth, *The Pathologies of Individual Freedom: Hegel's Social Theory*, trans. Ladislaus Löb (Princeton: Princeton University Press, 2010) <https://doi-org.proxy1.lib.uwo.ca/10.1515/9781400835027>.

⁴⁸⁷ Jürgen Habermas, "Morality and Ethical Life: Does Hegel's Critique of Kant Apply to Discourse Ethics," *Northwestern University Law Review* 83, no. 1&2 (1989): 38-53.

⁴⁸⁸ For instance, Robert Fine suggests that Hegel critiques Kant's cosmopolitanism for offering a fixed understanding of both life and the state. See Robert Fine, "Kant's Theory of Cosmopolitanism and Hegel's Critique," *Philosophy and Social Criticism* 29, no 6 (2003): 609-30. <https://doi.org/10.1177/0191453703296001>.

⁴⁸⁹ As discussed by Arto Laitinen, Erasmus Mayrb, and Constantine Sandisc, "Kant and Hegel on Purposive Action," *Philosophical Explorations* 21, no.1(2018): 90-107. <https://doi.org/10.1080/13869795.2017.1421693>.

⁴⁹⁰ Honneth, *Pathologies*, 25-26.

Despite similarities with contemporary political critiques (such as critical post-humanism), Hegel's *Elements of the Philosophy of Right* is largely ignored in contemporary political theory. This is not without reason. While some have argued that Hegel's text does not offer a theory of the state, and instead focuses only on the question of freedom,⁴⁹¹ most agree that the work promotes the formation of a rational state in which freedom could emerge.⁴⁹² Some shy away from the *Philosophy of Right* due to Hegel's apparent promotion of an undemocratic state, which is taken as analogous to a biological organism.⁴⁹³ Others suggest this forecloses civil liberties to individuals in the state.⁴⁹⁴ Scholars who take Hegel's response to Kant as a regressive turn towards nationalism are not unfounded. Even proponents of a more participatory and communal freedom in Hegel's work admit that it contains a certain nostalgia for the loss of community.⁴⁹⁵ However, despite these concerns several scholars have posed readings which integrate Kant's concept of cosmopolitan right into the emerging historical development of spirit.⁴⁹⁶ For the purposes of this chapter it is not important to indulge in questions of whether or not Hegel provided an accurate description of Kant, whether his critique of Kant is correct, or whether Hegel should be taken as a nationalist, communitarian, or cosmopolitan. Instead, of central importance are the questions of what Hegel's critique entails and what similarities exist between Hegel's critique and that generated in critical post-humanism.

Elements of the Philosophy of Right seeks freedom through mediation with the social. It consists of three sections—on 'abstract right,' 'morality,' and 'ethical life' [*Sittlichkeit*]—that display the

⁴⁹¹ This is the position taken in Herbert Marcuse, *Reason and Revolution: Hegel and the Rise of Social Theory* (London: Routledge, 1954).

⁴⁹² On this development see Gavin Rae, *Realizing Freedom: Hegel, Sartre, and the Alienation of Human Being* (London: Palgrave Macmillan, 2020) <https://doi.org/10.1057/9780230348899>.

⁴⁹³ GWF Hegel, *Elements of the Philosophy of Right*, trans. HB Nisbet (Cambridge: Cambridge University Press, 2018), §267, 288.

⁴⁹⁴ For an overview and objection to this position, see Nicolás García Mills, "Realizing the Good: Hegel's Critique of Kantian Morality," *European Journal of Philosophy* 26, no. 1 (2022): 195-212, <https://doi.org/10.1111/ejop.12214>.

⁴⁹⁵ See for example Simon Lumsden, "Community in Hegel's Social Philosophy," *Hegel Bulletin* 41, no 2 (2020): 177-201. <https://doi.org/10.1017/hgl.2017.12>.

⁴⁹⁶ For a defense of Hegelian cosmopolitanism, see Tony Burns, "Hegel and Global Politics: Communitarianism or Cosmopolitanism?," *Journal of International Political Theory* 10, no 3 (2014): 325-344. <https://doi.org/10.1177/1755088214539409>; see also Fine, "Kant's Theory of Cosmopolitanism and Hegel's Critique."

development of this freedom through history. The former two aspects, abstract right and morality, are taken as inadequate when separated from ethical life. Moving forward from abstract right, Hegel discusses the impossibility of abstracting morality from concrete existence. In §106, for instance, he describes how abstract right is concretized through the subjective will: a turn that denounces deontologically fixed objectivity in a more subjective and situated approach to ethics. Hegel might, then, be taken as the original critic of morality.⁴⁹⁷ A critique of Kant's practical and political philosophy emerges through this development. As Sally Sedgwick outlines,⁴⁹⁸ Hegel identifies the categorical imperative as abstracted from concrete existence, or what he terms 'identity without content.'⁴⁹⁹ According to Hegel, the categorical imperative is indeterminate with respect to concrete and particular matters. Even if it were capable of guiding concrete existence, the categorical imperative lacks the ability to motivate any particular duty. Hegel writes, "For the universal aspect of the good, or good in the abstract, cannot be fulfilled in abstraction; it must first acquire the further determination of particularity."⁵⁰⁰ In other words, without a particular, concrete situation, the abstracted and formal right of 'pure reason' is incapable of any action. Concrete determinations cannot, then, be understood through fixed, universal laws that do not speak to the context of their situation.⁵⁰¹ Kantian 'duty' only exists in the intellect and is foreclosed to any concrete realization. According to Sedgwick, Hegel's critique of Kant's practical philosophy rests on a deeper theoretical critique of Kant's dualistic positions. She writes, "In all domains of Kant's Critical philosophy, the culprit as far as Hegel is concerned is dualism—a dualism that divides the human mind as a power of generating a priori concepts and laws from the separate contribution of objects wholly outside the

⁴⁹⁷ Though this position might anachronistically be applied to David Hume. See chapter 3.

⁴⁹⁸ Sedgwick informs my understanding of Hegel's critique of the three principles in Kantian humanism. See Sally Sedgwick, *Hegel's Critique of Kant* (Oxford: Oxford University Press, 2012). <https://doi.org/10.1093/acprof:oso/9780199698363.001.0001>.

⁴⁹⁹ Hegel, *Philosophy of Right*, §135, 162.

⁵⁰⁰ *Ibid.*, §134, 161.

⁵⁰¹ Hegel writes, "Because particularity is distinct from the good and falls within the subjective will, the good is initially determined only as *universal abstract essentiality*," *Ibid.*, §133, 161.

mind.”⁵⁰² Hegel’s critique refuses the dualistic separation of subject and nature (ontological separation), the reflection of that subject upon nature (epistemic reflection), and the universal abstracted moral position (deontology). These align with the same critiques provided by critical post-humanism.

Alfredo Ferrarin offers an insightful reading of Hegel’s critique of both reflection and subject-nature duality, which provides further resonance with critical post-humanism. Understanding Hegel as questioning the ‘ordinary view’ of thought—by which Ferrarin refers to the representational internalism of Kant and Descartes, where “thought is about something and it is the deliberate and conscious act of an I,”⁵⁰³—Ferrarin suggests that Hegel provides a pluralization of thought from the outset. Where internalism consists of an ‘I’ that thinks independent of the world, Hegel conceives of a broader conception of thought irreducible to self-conscious subjectivity. Hegel invokes both unconscious and non-reflective thought to “grasp the concept’s most estranged and unconscious form.”⁵⁰⁴ Hegel offers a critique of abstract, separated consciousness to think a structured (un)conscious that is both concrete and immanently mediated: “Consciousness is neither the source of meaning nor an origin. The I is a formation of mediation and defined relation to the objective sphere of which it is itself the condition.”⁵⁰⁵ Hegel’s ‘consciousness’ is not a Cartesian nor Kantian *cogito*, but a subject that emerges through a process of concrete mediation in the world. This is a rejection of Kant’s ontological separation from the world that is the condition of a reflective epistemology. Hegel offers a relational epistemology in which the ‘I’ is developed and determined through the mediated genesis of spirit in history.

⁵⁰² Sedgwick, *Hegel’s Critique of Kant*, 7.

⁵⁰³ Alfredo Ferrarin, *Thinking and the I: Hegel and the Critique of Kant* (Chicago: Northwestern University Press, 2019), 5.

⁵⁰⁴ *Ibid.*, 13.

⁵⁰⁵ *Ibid.*, 27.

For Hegel, like the critical post-humanists, ‘right’ is not determined abstractly from a deontological guise for the individual. Instead, ‘right’ (or something like it) is generated through the individual’s participation in social life, or to use a phrase from critical post-humanism the ‘web of being.’ Hegel offers a more positive rendering of freedom than is granted by Kant: a freedom to rather than a freedom from. This is the freedom found in ‘ethical life,’ defined as “the concept of freedom which has become the existing [*vorhandenen*] world and the nature of self-consciousness.”⁵⁰⁶ Robert B Pippin notes that Hegel’s ‘self’ cannot be understood apart from its social relations: one’s relation to oneself is mediated by others, as is made evident by the *Phenomenology of Spirit’s* development of self-consciousness.⁵⁰⁷ The *Phenomenology* sees self-consciousness developed through mediation with the other.⁵⁰⁸ For Hegel, the human ‘I’ is produced through a relational and connected ontology that is, in turn, the foundation for politics: “The *right of individuals* to their *subjective determination to freedom* is fulfilled in so far as they belong to ethical actuality; for their *certainty* of their own freedom has its truth in such objectivity, and it is in the ethical realm that they *actually* possess *their own* essence and their *inner* universality.”⁵⁰⁹ While Hegel continues to use the language of ‘right,’ this right is treated as secondary to an individual’s primordial connection to ethical actuality: the connection to the social world that determines the individual as individual self-consciousness. At minimum, Hegel’s position provides a ‘complementary’ rendering of the relationship between individual and society.⁵¹⁰ For some, this ‘complementary’ rendering rests on an intersubjective political ontology, which signals the emancipation from Kantian notions of freedom.⁵¹¹ Hegel

⁵⁰⁶ Hegel, *Philosophy of Right*, §142, 189.

⁵⁰⁷ See Robert B Pippin, *Hegel’s Practical Philosophy: Rational Agency as Ethical Life* (Cambridge: Cambridge University Press, 2008), 148.

⁵⁰⁸ Hegel, *Phenomenology of Spirit*, §347-393, 211-236.

⁵⁰⁹ Hegel, *Philosophy of Right*, §153, 196.

⁵¹⁰ This use of ‘complementary’ comes from Allen W Wood, who suggests that Hegel insists on “the complementary proposition that the state itself is the precondition of their welfare.” Allen W Wood, “Hegel’s Political Philosophy,” in *A Companion to Hegel*, ed. Stephen Houlgate and Michael Bauer (John Wiley & Sons, Ltd, 2011), 304.

⁵¹¹ In addition to Honneth’s *Pathologies of Individual Freedom*, see Reijo Miettinen, “Hegel’s Political and Social Theory: Ethical Life (*Sittlichkeit*) as a Historical-Institutional Context of Human Development,” *Mind, Culture, and Activity* 27, no.

promotes emancipation from an abstract rationality and ethics. Where Kant's deontological abstraction treats freedom as extrinsic to concrete existence, Hegel anchors freedom as co-extensive with concrete existence.⁵¹²

The critique of Kant offered in Hegel's *Elements of the Philosophy of Right* is similar to the critique of Kant made by critical post-humanism in several ways. Both reject a strict separation of nature and culture (ontological separation), both reject humanity's ability to uniquely represent an abstract nature (epistemic reflection), and both reject a strict separation of abstract morality from lived experience (deontological morality). Furthermore, through the promotion of ethical life, Hegel poses a political community grounded in interdependence: one pursuing harmony between its various parts, including nature and culture. Harmony in the totality is beneficial to the individual. In ethical life the 'individual' is connected with the community and social life. Freedom is only 'free' when considered in the totality. In the *Philosophy of Right*, Hegel works through the deployment of such a 'universality' from the ground up (rather than from the top down) as he moves from the ethical spirit of the family, through civil society, before finally reaching the constitution of the state.⁵¹³ While acknowledging the very apparent troubles with the assertions pertaining to a 'good state' in Hegel's oeuvre,⁵¹⁴ it remains difficult to separate critical post-humanism on structural grounds. One option would be to critique Hegel for foreclosing civil liberties, *qua* negative freedom, to individuals in the

4 (2020): 360-72. <https://doi.org/10.1080/10749039.2020.1725059>; and Jeffrey O'Conor, "Tyranny of the Majority: Hegel on the Paradox of Democracy," *Kritik: An Online Journal of Philosophy* 14, no. 2 (2020): 6-18. <https://doi.org/10.25138/14.2.a1>.

⁵¹² This position is developed further by Dean Moyar, Kate Padgett Walsh and Sebastian Rand, *Hegel's Philosophy of Right: Critical Perspectives on Freedom and History* (London: Routledge, 2022). <https://doi.org/10.4324/9781003081036>.

⁵¹³ Hegel, *Philosophy of Right*, §157, 196.

⁵¹⁴ Those without citizenship, such as slaves or people outside of Europe are not granted freedom in Hegel's account. In this sense, Hegel might be taken as continuing Kant's exclusion by scientific principles. Hegel infamously forecloses spirit from Africa in the *Philosophy of History*. There are numerous studies on Hegel's racism that provide evidence of this. For some recent discussions, see: Daniel James and Franz Knappik, "Exploring the Metaphysics of Hegel's Racism: The Teleology of the 'Concept' and the Taxonomy of Races," *Hegel Bulletin* 44, no. 1 (April 2023): 99-126. <https://doi.org/10.1017/hgl.2022.38>; Susanne Lettow, "Re-Articulating Genealogy: Hegel on Kinship, Race and Reproduction," *Hegel Bulletin* 42, no. 2 (August 2021): 256-76. <https://doi.org/10.1017/hgl.2019.1>; Rocío Zambrana, "Bad Habits: Habit, Idleness, and Race in Hegel," *Hegel Bulletin* 42, no. 1 (April 2021): 1-18. <https://doi.org/10.1017/hgl.2021.1>.

state. Within ethical life, right requires limits on individual liberties towards community ends. If one is committed to a liberal politics and negative freedom this would seem the strongest approach. Yet, this sort of approach is unlikely from a post-humanist perspective, which tends to agree with Hegel's critique of liberal considerations of negative freedom and separated subjectivity. In Kant's rendering of political subjectivity, testified in his promotion of means and ends, some parts of the population are necessarily subordinated to others. The good of some (humans, citizens) overrides the good of others (non-humans, nature, slaves). A structural exclusion mandates some 'other' as extrinsic to the state. While Hegel is by no means immune to racist and colonial positions—his foreclosure of history to Africa and defense of slavery in the *Philosophy of History* are particularly damning—there are readings of the *Philosophy of Right* that promote ethical life as overcoming the paradox of zero-sum democracy.⁵¹⁵ Despite very apparent and damning differences in content, the form of Hegel's political ontology is largely congruent with the holistic political approaches of critical post-humanism. For Hegel, freedom cannot be understood outside of one's commitment to the social realm: a commitment to those others that one's actions affect. Unlike Kant, Hegel does not argue that it is possible to abstract from concrete reality to impose deontological rules (such as a universal, cosmopolitan order). Instead, concrete reality must serve as the starting point for both ethics and politics, with the recognition that one's actions impact others and that one's freedom in the community of ethical life is bound up in obligation towards others.

Humanism's Teleology

Given similarities between Hegel and critical post-humanism, why is discussion of the former largely absent in the latter? This lack of engagement, including a notable lack of charity when engagement is made, makes it difficult to provide a succinct answer beyond appeals to 'post-structuralism.' Initially, I suspected that the lack of engagement might be due to the influence of

⁵¹⁵ See O'Casey, "The Tyranny of the Majority."

Haraway. In “A Cyborg Manifesto,” Haraway suggests that “The cyborg incarnation is outside salvation history” given that historicity, under humanism, assumes an original unity.⁵¹⁶ Haraway’s ‘cyborgs’ do not seek holism with/in nature but pose ‘connection’ with/in networks of communication. Unfortunately, Haraway’s *Simians, Cyborgs, and Women* provides only passing references to Hegel. If there is a Hegelian whom Haraway takes issue with, it is Marx, who Haraway suggests maintains a historical unity in ‘nature’ against which humanity plays the role of historical study.⁵¹⁷ Despite this critique of Marxist-Hegelianism, it seems unlikely that Haraway would be the most prominent influence, as several passages in which Haraway sounds Hegelian. Given that their later writings felt the need to explicitly distinguish their project from Hegelian dialectics, this resonance is apparent.⁵¹⁸ For example, Haraway writes the following critique of dualistic logic:

To recapitulate, certain dualisms have been persistent in Western traditions; they have been systematic to the logics and practices of domination of women, people of color, nature, workers, animals—in short, domination of all constituted others, whose task is to mirror the self. Chief among these troubling dualisms are self/other, mind/body, culture/nature, male/female [...] The self is the One who is not dominated, who know that by the service of the other, the other is the one who holds the future, who knows that by the experience of domination, which gives the lie to the autonomy of the self. To be One is to be autonomous, to be powerful, to be God; but to be One is to be an illusion, and so to be involved in the dialectic of apocalypse with the other. Yet, to be other is to be multiple, without clear boundary, frayed, insubstantial. One is too free, but two are too many.⁵¹⁹

The beginning of this passage aligns with a post-humanist refusal of dualistic thinking as an emancipatory aim. For the discussion at hand, the latter part is of central interest. Pushing back against dualistic thinking, Haraway seeks the position of the excluded middle. Like Hegel, they are critical of dualistic and binary positions, working instead towards something that mediates or

⁵¹⁶ Haraway, *Simians, Cyborgs, and Women*, 150.

⁵¹⁷ *Ibid.*, 151. The legitimacy of such a claim is beyond the scope of this project.

⁵¹⁸ Albeit in a largely uncharitably reading of dialectics as a form of dualistic thinking. See, Donna Haraway, “Cyborgs to Companion Species: Reconfiguring Kinship in Technoscience,” in *The Haraway Reader* (London: Routledge, 2004), 317.

⁵¹⁹ Haraway, *Simians, Cyborgs, and Women*, 177.

sublates by refusing duality and binary assumptions: a sublation of the One and Multiple through the pursuit of an indeterminate exclusion. There is surprisingly little engagement on this relationship in the literature. In one exception Barbara Fornssler notes a dialectic at play in Haraway's 'cyborg.' Despite the strengths of this analysis, it is not an attempt to think Haraway's resonance with Hegel, but an attempt to map Haraway's work back into the Hegelian project by thinking through the development of a new sublation occurring in the meeting of an 'Emancipatory-Feminist-Cyborg' and a 'Military-Industrial-Cyborg.'⁵²⁰

An alternative approach might be to examine how Judith Butler has been engaged in this domain. Rather than clarifying a distinction between Hegel and critical post-humanism, this route emboldens the resonance. Many of Butler's writings, such as *Subjects of Desire* and *Antigone's Claim* are works in Hegel scholarship. References to Butler by critical post-humanists, however, tend to only focus on concepts of 'performativity,' as popularized in *Gender Trouble*. Thinkers like Barad, Haraway, Herbrechter, and Ferrando all speak positively of Butler's deployment of gender as a practice or process rather than an essence.⁵²¹ For instance, Ferrando borrows Butler's analysis of gender performance to think a 'process of humanizing' through a technics of the self.⁵²² Furthermore, Barad's entire framework of intra-action builds through a notion of Butlerian performativity. Aside from Niels Bohr and Foucault, Butler is arguably the most important influence on *Meeting the Universe Halfway*. Barad's attempts to conceive a material performativity that "challenges the representationalist belief in the power of words to represent preexisting things."⁵²³ Butler introduces the concept of 'performativity' to trouble assumed boundaries of representation. First used in "Performative Acts and Gender Constitution," the concept is central to *Gender Trouble*.

⁵²⁰ Barbara Fornssler, "The Cyborg Affect: Encountering via Switch," *eTOPLA: Intersections Conference Journal*, ed. Paul Couillard and Sara Martel (Toronto: York University, 2011). <https://doi.org/10.25071/1718-4657.36562>.

⁵²¹ Barad, *Meeting the Universe Halfway*; Haraway, *Simians Cyborgs, and Women*, 135; Herbrechter, *Posthumanism*, 105; Ferrando, *Philosophical Posthumanism*, 71.

⁵²² Ferrando, *Philosophical Posthumanism*, 74.

⁵²³ Barad, *Meeting the Universe Halfway*, 133.

The latter text critiques hitherto conceptions of gender by refusing the concept of ‘woman’ as universal and totalizable. Drawing on Foucaudian ‘discursive formations,’ Butler argues that ‘woman’ is not a natural category, but a discursive form instituted as a norm through social practice. Butler argues that feminist attempts to conceive of a common identity of ‘woman’ undermine the feminist agenda by driving an economy of ‘women’ against a monolithic, masculine patriarchy.⁵²⁴ While Simone de Beauvoir previously recognized the body as a passive medium for cultural inscription, and even conceives of gender as the product of a signifying economy, Butler argues that not only gender, but sex is the product of social and discursive practice. In doing so, they aim towards an antifoundational account of the construction of identity. There is no essence of identity; there is only performance. The structure of identity—inclusive of sex and gender—is determined by the articulation of a field of power. Gender is not given (as individual or essential) but produced: “within the inherited discourse of the metaphysics of substance, gender proves to be performative—that is constituting the identity it is purported to be. In this sense, gender is always a doing.”⁵²⁵ It isn’t difficult to see how critical post-humanism would draw upon Butler’s nominalism. Barad, for instance, brings Butler’s notion of performativity together with a reading of quantum physics to conceive of all identity as emergent in performativity. Thus, where Butler conceives of the gendered body as performative and without fixed ontological status,⁵²⁶ Barad will conceive of all notions of identity as performative and without fixed ontological status.⁵²⁷ All identity is performative intra-activity. Phenomena are not determined through their resemblance with an ideal form (or as virtual individuals) but are ‘cut’ through the material semiotics of interacting phenomenal apparatuses that undo assumed categories of individualism, humanism, and representation.

⁵²⁴ Judith Butler, *Gender Trouble* (New York: Routledge, 1990), 19.

⁵²⁵ *Ibid.*, 34.

⁵²⁶ *Ibid.*, 185)

⁵²⁷ See, for example, Barad, *Meeting the Universe Halfway*, 133.

Unfortunately for those wishing to distance this project from Hegel's humanism, it is apparent that Butler's anti-essentialist and anti-foundationalist account of the performative construction of identity is inherently Hegelian. One review of the republication of *Subjects of Desire* humorously notes, "Some will certainly find it inconvenient that, as this book reveals, [Butler's] anti-identity politics was more shaped by Hegel than by Derrida."⁵²⁸ Butler's discussion of Hegel and 20th century French theory near the end of that text (focusing primarily on Derrida, Lacan, Deleuze and Guattari, and Foucault) is particularly telling. For brevity, I will limit discussion to Foucault, given his prominent position in the development of performativity in *Gender Trouble*. Butler reads Foucault through Deleuze/Guattari and Lacan, suggesting Foucault sharpens Deleuze and Guattari's critique of psychoanalysis by thinking through the productive forces of power without appealing to naturalistic tendencies.⁵²⁹ This enables Foucault to "contrive a tactic of nondialectical subversion, a position beyond subjection and rebellion which alters fundamentally the form of the cultural nexus of power and desire."⁵³⁰ Despite the aim of a 'nondialectical position,' Butler reads the *History of Sexuality* as a return to dialectics: working through Nietzsche and Deleuze to subvert the tendencies of subjectivity and teleology. Foucault's 'subject' is not Hegelian, but this distinction concerns final rather than efficient causality. As in Hegel, Foucault's subject is the product of mediated power (of subjectification).⁵³¹ Unlike Hegel, Foucault's subject is foreclosed from a final unity.⁵³² Butler poses Foucault as returning "to an essentially Hegelian preoccupation with Life and Death, with a Nietzschean concern to see the forces of affirmation triumph over those of negation."⁵³³ It is not difficult to see Butler's description of performativity as having roots in Foucault and Hegel, against

⁵²⁸ Bruce Robbins, "I Couldn't Possibly Love Such a Person': Judith Butler on Hegel," *The Minnesota Review* 52-54 (2001): 263.

⁵²⁹ Judith Butler, *Subjects of Desire: Hegelian Reflections on Twentieth Century France* (New York: Columbia University Press, 1987), 219.

⁵³⁰ *Ibid.*, 222.

⁵³¹ See discussion of Foucault and 'post-structuralism' in chapter 1.

⁵³² *Ibid.*, 224.

⁵³³ *Ibid.*, 227.

whom Foucault's break is only ever 'partial.'⁵³⁴ The penultimate claim of *Subjects of Desire* testifies to this lineage: "From Hegel through Foucault, it appears that desire makes us into strangely fictive beings."⁵³⁵ Positive renderings of performativity in the critical post-humanities do little to address this influence.

Given the lack of adequate separation from Hegel, it is necessary to question whether Hegel could be read as something of a proto-post-humanist. Hegel's relationship to humanism is not immediately clear. Given the inseparability of Hegelian dialectics—in which the inter-connection of God, the world, nature, and humanity is always evident in the unfolding of spirit—prioritizing one aspect is inherently difficult. Where one places Hegel in relationship to humanism likely depends on the interpretation of 'spirit' in Hegel's architectonic. It would not be unreasonable to align spirit with divinity, human rationality, nor even a totality of natural cognition. While many contemporary Hegel scholars align Hegel with the development of human reason, some have suggested that Hegel's deployment of non-human cognition might be taken as moving spirit beyond humanism.⁵³⁶ Yet, outside of more experimental renderings of Hegel's project, it is difficult to align Hegel with anything other than humanism given the proximity of spirit to the rational development of the human mind and Hegel's allegiances with German idealism. Rather than the central object, Hegel's divine serves as a stage in humanity's becoming in history. For example, Slavoj Žižek's writings on 'Christian atheism' posit the need to go through the 'death of god' for humanity to achieve absolute knowing.⁵³⁷ Yet, even Žižek's rendering of Hegel invokes a closeness to post-humanism (albeit one that is universally rendered), writing that for humans "the traumatic encounter is a universal condition, the intrusion which sets in motion the process of 'becoming human.' [...] the specific

⁵³⁴ Ibid., 230.

⁵³⁵ Ibid., 238.

⁵³⁶ For instance, see Leif Weatherby, "Farewell to Ontology: Hegel after Humanism," in *Posthumanism in the Age of Humanism: Mind, Matter, and the Life Sciences after Kant*, ed. Edgar Landgraf, Gabriel Trop, and Leif Weatherby (London: Bloomsbury Academic, 2018).

⁵³⁷ See Slavoj Žižek, *The Puppet and the Dwarf: The Perverse Core of Christianity* (Cambridge: MIT Press, 2003).

human vocation does not rely on the development of man's inherent potentials; it is triggered by an external traumatic encounter."⁵³⁸ The 'knot' between human and divine is apparent in Badiou's rendering as well: "God is the process of a supposedly complete man."⁵³⁹ Spirit is similarly 'entangled' with nature. As John H Smith notes, Hegel's project "embeds the human within nature and views nature dynamically."⁵⁴⁰ As such, some commentators—most notably Catherine Malabou—provide work that draws upon Hegel to consider rich, dynamic, post-human like systems that consistently rupture binary divisions.⁵⁴¹ And yet, even Malabou's study—one invested in the 'activity' of spirit as "the very *plasticity of substance* itself, [as] its capacity both to receive form and to give form to its own content"⁵⁴²—retains a humanistic remainder where humanity's 'art of the soul' links up to the 'concrete knowledge of spirit,' adopting an Aristotelean notion of the soul.⁵⁴³ Through a reading of Hegel's *Anthropology*, Malabou presents Hegel as understanding humanity as at once molded by a process of formation and that which, reflected back into itself through consciousness, is granted a formative power.⁵⁴⁴ Humanity's unique capacity for rational inquiry is not given through essence, but generated through its mutual and dynamic development with nature and the divine.

⁵³⁸ Slavoj Žižek, "No Sex, Please, We're Post-Human!," URL: <https://www.lacan.com/nosex.htm> [Accessed November 2, 2023]

⁵³⁹ Badiou cited in Christopher Watkin, *French Philosophy Today* (Edinburgh: Edinburgh University Press, 2016), 21, <https://doi.org/10.1515/9781474414746-004>.

⁵⁴⁰ John H Smith, "Steps to an Ecology of *Geist*: Hegel, Bateson, and the Spirit of Posthumanism," in *Posthumanism in the Age of Humanism: Mind, Matter, and the Life Sciences after Kant*, ed. Edgar Landgraf, Gabriel Trop, and Leif Weatherby (London: Bloomsbury Academic, 2018), 147.

⁵⁴¹ Consider Derrida's description of Malabou's work: "This synthesis has already claimed the future anterior and the 'to see (what is) coming' of anticipation, it has already called for the teleological structure and must dampen surprise itself or novelty in order to make it possible: as if it were a surprise without surprise. A continual transformation and radical interruption, a process and an explosion, plasticity and gelignite. But also, physis and techné, nature and culture, nature and the technological, nature and art, if you like." Derrida's introduction to Catherine Malabou, *The Future of Hegel: Plasticity, Temporality, and Dialectic* trans. Lisabeth During (London: Routledge, 2005), xiii.

⁵⁴² *Ibid.*, 10.

⁵⁴³ *Ibid.*, 26.

⁵⁴⁴ *Ibid.*, 67-74.

Given 1) the congruences between ethical life and critical post-humanism, and 2) the dynamically generated humanism of Hegel's position, it is 3) necessary to determine a further critique of humanism in *both* the Kantian and Hegelian sense. The remainder of this chapter identifies a rationalistic teleology as the condition of humanism in Kant and Hegel. For this reason, a critique of teleology may provide a starting point for a critique of both Kantian and Hegelian forms of humanism, allowing one to gesture towards something more veritably post-humanist. The remainder of this chapter works through the development of such a rationalistic teleology, beginning with a discussion of teleology in Aristotle.

Natural Teleology

Teleology derives from the Greek *telos* [τέλος] meaning 'end,' 'goal,' or 'finality.' Typically, teleology relates the purpose of a thing or action: its purpose or purposiveness. In Ancient Greek philosophy, *telos* relayed an inherent or natural purpose, a 'natural teleology.' Aristotle serves as a useful example. In *Physics*, Aristotle makes the epistemological claim that to know something one must first grasp its why or cause [*aitia*]. He writes, "knowledge is the object of our inquiry, and men do not think they know a thing till they have grasped the 'why' of it (which is to grasp its primary cause)."⁵⁴⁵ Examining various causes in *Physics* and *Metaphysics*, Aristotle outlines four causes that grasp the why [*aitia*] of any thing or action. These are described in *Metaphysics* V2:

'Cause' means (1) that from which, as immanent material, a thing comes into being, e.g. the bronze is the cause of the statue and the silver of the saucer, and so are the causes which include these. (2) The form of pattern, i.e. the definition of the essence, and the classes which include this (e.g. the ratio 2:1 and number in general are causes of the octave), and the parts included in the definition. (3) That from which the change or the resting from change first begins, e.g. the adviser is the cause of the action, and the father a cause of the child, and in general the maker a cause of the thing made and the change-

⁵⁴⁵ Aristotle, *Physics*, trans. RP Hardie and RK Gaye, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: The Modern Library, 2001): 194b20-25, 240.

producing of the changing. (4) The end, i.e. that for which the sake of which a thing is; e.g. health is the cause of walking.⁵⁴⁶

These four causes are commonly referred to as the (1) material, (2) formal, (3) efficient, and (4) final causes. Material and formal causes relate to what is now termed ‘hylomorphism.’ Due to the importance of this concept to chapter 4, it is worth spending a moment here. Hylomorphism combines the Greek terms for matter [*hylē*] and shape [*morphe*].⁵⁴⁷ Where Plato’s substantialism offers a theory of abstract and intelligible forms that unilaterally determined matter, Aristotle offers a ‘constituent’ approach, with an intrinsic causality and natural purpose.⁵⁴⁸ Scholarship attempting to reconstruct Aristotle’s hylomorphism is highly debated, with a focus on *Metaphysics* Z and H. One area of disagreement regards the relationship of form, matter, and their compound or unity. For Aristotle, ‘substance’ is this compound. Scholars are often focused on whether form is ‘pure’ or ‘impure,’ which respectively refer to whether a form can be considered as an essence independent of matter or not.⁵⁴⁹ Nevertheless, some general understanding of hylomorphism can be granted, primarily regarding the fact that Aristotle is concerned about the compound or composite of matter and form:

Hylomorphists are committed to the existence of certain composite material entities (‘substances’) in which the nature of the whole is partly (but not wholly) grounded in autonomous facts about its parts, and in which the

⁵⁴⁶ Aristotle, *Metaphysics*, trans. W.D. Ross, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: The Modern Library, 2001): 1013a24-35, 752.

⁵⁴⁷ See Daniel Strauss, “Hylozoism and Hylomorphism: A Lasting Legacy of Greek Philosophy,” *Phronimon* 15, no 1 (2014): 32-45. Several commentators note that the term would be more accurate if it combined matter [*hylē*] with the Greek term for ‘form’ [*eidos*]. The use of shape [*morphe*] derives from the second book of *De Anima*, where Aristotle associates shape and form. On this discussion see Aristotle, *De Anima*, trans. JA Smith, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: The Modern Library, 2001), 554-555; Allegra De Laurentiis, *Hegel’s Anthropology: Life, Psyche and Second Nature* (Evanston: Northwestern University Press, 2021), 15; and Paul Humphrey, “Metaphysics of Mind: Hylomorphism and Eternality in Aristotle and Hegel,” PhD State of New York at Stony Brook, 26, URL: <<https://www.proquest.com/docview/304748407/abstract/CC0D36BD958A4826PQ/1>>.

⁵⁴⁸ The basis of a ‘constituent’ approach is given by Christos Y Panayides, “Aristotle and Johnston on Hylomorphism and the Character of Objects,” *Problemos/Problems* 100 (2021): 62-74. <https://doi.org/10.15388/Problemos.100.5>.

⁵⁴⁹ For recent examples of this discussion see Michael Permatzis, “What is Form in Aristotle’s Hylomorphism?” *History of Philosophy Quarterly* 32, no. 3 (2015): 195-216; David Charles, *The Undivided Self: Aristotle and the ‘Mind-Body Problem’* (Oxford: Oxford University Press: 2021). <https://doi.org/10.1093/oso/9780198869566.001.0001>; and Mary-Louise Gill “VII—Aristotle’s Hylomorphism Reconceived,” *Proceedings of the Aristotelean Society* 121, no. 2 (2021): 183-202. <https://doi.org/10.1093/arisoc/aoab006>.

natures of the parts are partly grounded in autonomous facts about the whole.⁵⁵⁰

Aristotle's view is that a hylomorphic whole is the product of the ontological union of two items, matter and form. Furthermore, it is fair to assume that for an Aristotelian hylomorphic compound to exist, is for matter to have come to be ontologically tied to the relevant form, where the latter has at least two features. It is a way of being and a final cause.⁵⁵¹

Unlike Plato's unilateral theory of forms, Aristotle considers matter and material cause to be part of substance.⁵⁵² Material and formal causes relate the *what* and the *why* of individuation. Formal causes offer a pattern that is compounded with material cause to transform that material (e.g. bronze) into a form (a statue). Both David Charles and Mary-Louise Gill emphasize the substantial unity of form and matter, given that Aristotle's theorization of primary substance takes the unity of form and matter—i.e., primary substance—to be non-accidental. For both, Aristotle prioritizes form as the predicative aspect of the hylomorphic schema: the prioritization of an 'enmattered' form that drives the process of individuation.⁵⁵³

For Aristotle, the process of causality goes beyond hylomorphism. Efficient causes, for instance, describe how an action occurs. In the case of the bronze statue, the sculptor or the person who commissions the work might constitute the efficient cause. Who or whatever sets the development in motion is the efficient cause. Efficient causes will remain important to the study at hand, as they are central for thinking who or what motivates and instantiates change (e.g. it matters if and when humanity retains the place of efficient causality). Most important to a study of teleology, however, are final causes. As already noted, final causes constitute the *telos* or 'end.' This relates the purpose of a thing or an action. As with hylomorphism, there is much scholarly debate surrounding

⁵⁵⁰ Robert C Koons, "The Ontological and Epistemological Superiority of Hylomorphism," *Synthese* 198, no. 3 (2021): 885-903. <https://doi.org/10.1007/s11229-016-1295-6>.

⁵⁵¹ Panayides, "Aristotle and Johnston," 69.

⁵⁵² See Aristotle, *Metaphysics*, 1035b1-1036a15, 798-799.

⁵⁵³ See Charles, *The Undivided Self*, 88. For Gill, this 'unity' goes beyond a compound of form and matter insofar as unity is necessary for primary substance. Gill presents this as a "new conception of hylomorphism" that is introduced in *Metaphysics* Z.17. See Gill, "VII—Aristotle's Hylomorphism Reconciled," 183.

the reconstruction of final causality in Aristotle. One position takes a materialist reading of Aristotle, with final causality explaining why and not how something occurs. For instance, Monte Ransome Johnson argues that readings of Aristotelean teleology have been distorted by subsequent readings of Kant. He suggests that material and efficient causes are sufficient for explaining causal development, and final causes only emerge as extrinsic explanations of these movements.⁵⁵⁴

Opposed to this position, some argue that final causes emerge in Aristotle's science whenever material and formal explanations are insufficient for understanding causality. Here, final causes are taken as necessary to actualize the "irreducible potential of the form."⁵⁵⁵ Some in the latter camp emphasize a biological reading of final causality, given that Aristotle's biology features plants as achieving final ends.⁵⁵⁶ A common example is Aristotle's description of an acorn's *telos*: an acorn's finality or end as an oak tree. Still others argue that even Aristotle's natural teleology contains a metaphysical rendering, given its relevance in both the *Physics* and *Metaphysics*.⁵⁵⁷ Whatever the case, it is important to note that final causality is not determinate in Aristotle's formula: an end is a potency [*dunamis*] but this does not mean that it will necessarily be actualized [*entelechia*] in a deterministic fashion.⁵⁵⁸ Instead, teleology describes the purpose or end of an object or action that might become actualized as the highest possibility of the object or action. Teleology still allows for contingency in actual phenomena and should not be taken as deterministic.

⁵⁵⁴ Monte Ransome Johnson, *Aristotle on Teleology* (Oxford: Oxford University Press, 2005).

<https://doi.org/10.1093/0199285306.001.0001>.

⁵⁵⁵ Allan Gotthelf, "Aristotle's Conception of Final Causality," in *Teleology, First Principles, and Scientific Method in Aristotle's Biology*, ed. Allan Gotthelf (Oxford: Oxford University Press, 2012).

<https://doi.org/10.1093/acprof:oso/9780199287956.003.0001>.

⁵⁵⁶ For example, Rich Cameron, "Aristotle's Teleology," *Philosophy Compass* 5, no. 12 (2010): 1096-1106.

<https://doi.org/10.1111/j.1747-9991.2010.00354.x>.

⁵⁵⁷ For example, Christopher V Mirus, "The Metaphysical Roots of Aristotle's Teleology," *The Review of Metaphysics* 57 (2004): 699-724.

⁵⁵⁸ See Aristotle, *Metaphysics*, 1051a1-20, 831-832.

Kant's Regulative Teleology

Where early modern science largely absconded teleology and final causality in favor of mechanistic and mathematical models of individuation, seventeenth- and eighteenth-century discoveries in biology led to a revival in teleological explanation.⁵⁵⁹ This is why Kant's *Critique of Judgement* embraces teleology. While some have argued that Kant's teleology is mainly concerned with biological sciences,⁵⁶⁰ others pose a more inclusive overview⁵⁶¹ with teleology informing both Kant's politics⁵⁶² and historical writings.⁵⁶³ Given the antimony of mechanism and teleology, some have pursued resolving this contradiction through the use of synthesis in Kant's thought.⁵⁶⁴ Regarding the intersection of politics and teleology, Allen W. Wood notes that both Kant's anthropology and philosophy of history are aligned with natural purposiveness in the biological sphere.⁵⁶⁵ As with Aristotle, this does not mean that either operate deterministically. Instead, it suggests that Kant's use of teleology operates based on a regulative and reflective judgement to think through the possibilities of purposiveness.⁵⁶⁶

As discussed in chapter 1, Kant's first *Critique* aims at the transcendental subject as the condition of possible experience. This subject informs the need for free, rational subjectivity in the cosmopolitan order. As discussed above, Kant takes freedom as the unconditional value of moral

⁵⁵⁹ For an account of this history see Ina Goy and Eric Watkins, "Introduction," in *Kant's Theory of Biology*, ed. Ina Goy and Eric Watkins (De Gruyter, 2014). <https://doi-org.proxy1.lib.uwo.ca/10.1515/9783110225792>.

⁵⁶⁰ For instance, Peter McLaughlin, *Kant's Critique of Teleology in Biological Explanation: Antimony and Teleology* (Lewiston: Edwin Mellen Press, 1990).

⁵⁶¹ For example, Paul Guyer, *Kant's System of Nature and Freedom: Selected Essays* (Oxford: Oxford University Press, 2005); and Hannah Ginsburgh, *The Normativity of Nature* (Oxford: Oxford University Press, 2015).

⁵⁶² For example, Paul Formosa, Avery Goodman, and Tatiana Patrons (eds), *Politics and Teleology in Kant* (Wales: University of Wales Press, 2014). <https://www.jstor.org/stable/j.ctt9qhfvk>.

⁵⁶³ See Burleigh Taylor Wilkins, "Teleology in Kant's Philosophy of History," *History and Theory* 5, no. 2 (1966): 172-85. <https://doi.org/10.2307/2504513>.

⁵⁶⁴ For example, Angela Breitenbach, "Two Views on Nature: A Solution to Kant's Antimony of Mechanism and Teleology," *British Journal for the History of Philosophy* 16, no. 2 (2008): 351-69.

<https://doi.org/10.1080/09608780801969167>; and James Orr, "Teleology as a Theological Problem in Kant's Pre-Critical Thought," *Modern Theology* 32, no. 4 (2016): 522-43. <https://doi.org/10.1111/moth.12264>.

⁵⁶⁵ Allen W. Wood, *Kant's Ethical Thought* (Cambridge: Cambridge University Press, 1999).

⁵⁶⁶ For a persistent defence of Kant's teleology against determinism, see Karl-Otto Apel, "Kant's 'Toward Perpetual Peace' as Historical Prognosis from the Point of View of Moral Duty," in *Perpetual Peace: Essays on Kant's Cosmopolitan Ideal*, ed. James Bohman and Matthias Lutz-Bachmann, 79-111 (Cambridge: MIT Press, 1997).

law.⁵⁶⁷ Interestingly, Courtney D Fugate argues that while Kant's teleology emerges out of the transcendental structure as a regulative judgement, occurring only near the end of the critical project, the entirety of the critical period contains a purposive and teleological end: "Kant works consistently with a single teleology of reason throughout the critical period."⁵⁶⁸ There is a reflective structure in Kant's writing: where the legislative capacity instilled by reason comes to serve as the foundation for reason. Teleological judgement, which Kant recognizes as the regulative capacity for reason in reflective judgement, structures the study of reason.⁵⁶⁹ If Fugate is right, the culmination of Kant's critical project, in teleological judgement, is present from the start. My interest here is slightly more limited: focusing only on the way that cosmopolitan right emerges in relation to this regulative teleology.

The *Critique of Judgement* distinguishes determinate judgement, as judgement according to a priori concepts, from reflective judgement, which attempts to judge phenomena without objective concept.⁵⁷⁰ Kant argues that teleological judgements in the 'kingdom of nature' must be considered reflective judgements because it is not possible to rationally derive objective concepts from appearances of experience.⁵⁷¹ Nevertheless, he argues that reason must operate as if reflective judgements were objective so that it can participate in practical philosophy and consider nature as ordered.⁵⁷² Kant writes, "The principle [of teleology] is regulative (not constitutive), but it holds just as necessary for our human judgement as it would if it were an objective principle."⁵⁷³ According to Kant, rational beings are capable of deriving principles of natural purpose from their reflections on empirical appearances. Judgements made based on these reflections are then reflexively taken as

⁵⁶⁷ See also Guyer, *Kant on Freedom, Law and Happiness*, 236.

⁵⁶⁸ Courtney D Fugate, *The Teleology of Reason: A Study of the Structure of Kant's Critical Philosophy*, Kantstudien-Ergänzungshefte 178 (De Gruyter, 2014). <https://doi-org.proxy1.lib.uwo.ca/10.1515/9783110306484>.

⁵⁶⁹ Kant, *Critique of Judgement*, 288.

⁵⁷⁰ Ibid., 265.

⁵⁷¹ Ibid., 279.

⁵⁷² On this point, see Guyer, *Kant's System of Nature and Freedom*, 30-34.

⁵⁷³ Kant *Critique of Judgement*, 288.

regulative law (or regulative concepts) which enable rational beings to engage in practical philosophy. In other words, while derived from empirical sense/appearance, regulative concepts are reflexively used to deduce rational concepts (and systematicity) that are taken as ordering the natural world. As a result, human reflection serves as the transcendental basis upon which the world is rationally ordered through regulative principles. This is the culmination of Kant's transcendental humanism, as discussed in chapter 1.

Regulative teleology informs Kant's humanism. In §65 of the third *Critique*, he argues that natural purpose requires both internal and external organization: that parts depend on wholes and wholes depend on parts.⁵⁷⁴ The relation a whole has to its parts is termed 'intrinsic' purpose while the relation a part has to a whole is termed 'extrinsic' purpose. Extrinsic purposes explain how things come to serve other things: plants have extrinsic purposiveness as food for animals; herbivores as food for predators.⁵⁷⁵ Taking this up in §82, Kant argues that extrinsic or external purpose inherently leads to an organized whole. Using sex as an example, Kant suggests that male and female relate to each other with the extrinsic purposiveness of procreating the species: two parts that find their 'end' in the organized whole.⁵⁷⁶ He takes this to suggest that, given an organized system of nature, which can be perceived scientifically through regulative judgement, there must be some extrinsic, final purpose for which all of nature exists as means (or intrinsic purpose). Yet, he notes, such a final purpose cannot be found within nature itself because all natural things necessarily serve as extrinsic means to other natural things.⁵⁷⁷ Instead, the final purpose of nature—as in all

⁵⁷⁴ Ibid., 252.

⁵⁷⁵ Ibid., 313-314.

⁵⁷⁶ Ibid., 312-313.

⁵⁷⁷ On this Kant writes, "Once we adopt the principle that there is an objective purposiveness in the diverse species of creatures on earth and in their extrinsic relation[s] to one another as purposively structured beings, it is reasonable to think of the[se] relation[s] as having a certain organization in turn, and as [forming] a system, of all the natural kingdoms, in terms of final causes. And yet it seems that experience flatly contradicts such a maxim of reason, especially [the implication] that there is an ultimate purpose of nature. An ultimate purpose of nature is certainly required for such a system to be possible, and we cannot posit it anywhere but in man: But man too is one of the many animal species, and

regulative judgement—must be located outside of nature. As one might suspect, given the deployment of means and ends in Kant’s second *Critique*, he locates this ‘end’ in human rationality. Kant proclaims human rationality as “the ultimate purpose of nature on earth, the purpose by reference to which all other natural things constitute a system of purposes.”⁵⁷⁸ Given that humanity is the only being on earth that can act towards purposes or ends, Kant takes humanity to be the regulative *telos* of nature. As he writes in §84,

Man is the only natural being in whom we can nonetheless cognize, as part of his own constitution, a super sensible ability (*freedom*) and even cognize the law and the object of this causality, the object that this being can set before itself as its highest purpose (the highest good in the world) ... It is this legislation, therefore, which alone ambles man to be the final purpose of which all of nature is teleologically subordinated.⁵⁷⁹

Humanity is *telos* of nature: that for which all else serves as means.

Scholarship tends to note the incapacity of isolating one part of Kant’s architectonic from the system as a whole. The moral philosophy of the *Groundwork* and second *Critique* inform integral aspects of the third *Critique* and Kant’s historical, anthropological, and political writings. Some note that Kant’s anthropology is not mechanistic but biological, working through a teleological history.⁵⁸⁰ Rather than historically determined, it is helpful to read Kant’s cosmopolitanism as emerging from the teleological structure. Cosmopolitanism is not historically determined but understood, teleologically, as a political *telos* which serves as the proper means for human freedom. This should be taken as a regulative *telos* rather than a naturalistic one. Kant’s teleology, thus, opens the opportunity for human purpose to express a free and rational design in history.⁵⁸¹ Guyer expands on cosmopolitanism’s position in Kant’s regulative teleology:

nature has in not way exempted him from its destructive forces any more than from its productive forces, but has subjected everything to a natural mechanism without purpose.” *Ibid.*, 314-315.

⁵⁷⁸ *Ibid.*, 317.

⁵⁷⁹ *Ibid.*, 323.

⁵⁸⁰ See Wood, *Kant’s Ethical Thought*, 209.

⁵⁸¹ This is the position defended in Apel, “Kant’s ‘Toward Perpetual Peace.’”

Considering the whole body of Kant's writings about perpetual peace in the 1790s, then, we find confirmation of two of the most fundamental conclusions of his most mature moral philosophy and moral anthropology: the view that virtue is never an inevitability but always a possibility for human beings with inscrutable freedom of the will, and the view that the possibility of freedom must be not only accessible to human reason through the consciousness of moral law but also palpable to human sensibility.⁵⁸²

This emphasis on human freedom as the practical and moral concern of Kant's architectonic bridges the third *Critique's* teleology with the political cosmopolitanism of his political ontology. If nature's *telos* is humanity, then Kant's political writings, including "Perpetual Peace," can be understood as providing grounds for achieving the flourishing of that end. The purpose of humanity—in freedom—is made possible in the political ontology of cosmopolitanism that enables humanity to achieve it. Kant's liberalism allows for this sort of political regulation only insofar as it enables the preservation of freedom as the ultimate good and end.

Hegel's Intrinsic Teleology in Ethical Life

Teleology similarly grounds Hegel's pursuit of freedom in the political ontology of ethical life. In the *Science of Logic*, Hegel uses teleology to consider the problem of individuation.⁵⁸³ The discussion on "Teleology" comes at the end of the chapter on "Objectivity." In Hegel's architectonic structure of the greater *Logic*, teleology is used to discuss how the 'concept' [*Begriff*] individuates as an objective idea that is not only in itself but also for itself. In Hegel's writing, the 'concept' (translated by AV Miller as 'Notion') is one of the more confusing yet consistent terms. Unlike Kant, Hegel's 'concept' is not representational (given his critique of reflective epistemology). Instead, the 'concept' refers to the development of concepts through the dialectical history of philosophy. Throughout Hegel's corpus, the 'concept' unfolds towards absolute knowing. Now, just as ethics cannot develop

⁵⁸² Guyer, *Kant on Freedom, Law, and Happiness*, 434.

⁵⁸³ For a more thorough discussion of teleology and individuation, see Chen Yang and Christopher Yeomans, "Taking the Teleology of History Seriously: Lessons from Hegel's *Logic*," *Hegel Bulletin* 44, no. 1 (2023): 219-40. <https://doi.org/10.1017/hgl.2023.7>.

through abstraction, so too can the ‘concept’ not reach objectivity when considered as an abstract form. Instead, Hegel suggests that “objectivity is the immediacy as which the concept has determined itself by the sublation of abstraction and mediation.”⁵⁸⁴ The ‘concept’ cannot reach objectivity through pure abstraction but must instead be individuated through its mediation in and with empirical reality. For Hegel, this individuation moves through the process of mechanism, chemism, and teleology. Mechanism relates to something like Cartesian, Newtonian, or Kantian physics. Mechanical relationships are always external connections between two objects. The relationship is alien to those objects, outside or extrinsic to the object.⁵⁸⁵ Mechanical relationships can be understood as similar to representational epistemologies: where the object-in-itself is distinct from its cause (the cause is external to the object) just as the subject’s representation is extrinsic to the object under observation.⁵⁸⁶ Chemism is the next stage in the ‘concept’s’ movement. Chemical objects are not external to their relations but hold their relations as part of their nature.⁵⁸⁷ Where mechanical relationships pose external laws, chemical relationships follow internal laws. Thus, while chemical relationships are not yet self-subsistent (a chemical relationship is considered *in itself* but not yet *for itself*), they move towards the process of self-determination. The determination of the object as *in* and *for itself* only occurs through the objective ‘concept’ in its purposiveness as found in teleology.⁵⁸⁸

⁵⁸⁴ GWF. Hegel, *The Science of Logic*, trans. George Di Giovanni (Cambridge: Cambridge University Press, 2010), 12.130, 628.

⁵⁸⁵ *Ibid.*, 12.135, 633.

⁵⁸⁶ Hegel describes this relationship in a somewhat roundabout way: “Mechanism, since it belongs to the sphere of the concept, has that posited within it which proved to be the truth of the relation of causality, namely, that the cause which is supposed to be something existing in and for itself is in fact effect just as well, positedness. In mechanism, therefore, the original causality of the object is immediately a non-originaryness; the object is indifferent to this determination attributed to it; that it is a cause is therefore something accidental to it; that it is a cause is therefore something accidental to it. — To this extent, it can be said that the causality of substances is *only the product of representation*. But precisely this causality as product of representation is what *mechanism* is; for mechanism is this, that causality, as *identical* to determinateness of a diversity of substances and hence as the foundering into this identity of their self-subsistence, is a *mere positedness...*” *Ibid.*, 12.137, 635.

⁵⁸⁷ *Ibid.*, 12.149, 646.

⁵⁸⁸ *Ibid.*, 12.153, 650.

Hegel's discussion of teleology and purposiveness is, even by his own standards, dense. There are several interpretations worth mentioning. Some contend that Hegel retains an extrinsic teleology due to his ties with religious history.⁵⁸⁹ Others offer a more naturalistic, immanent teleology that thinks individuation as an immanently determined purpose, which nevertheless retains a primary cause.⁵⁹⁰ A third position, which strikes me as the most accurate, argues that Hegel offers an 'internal' teleology. This position interprets Hegel as providing an open concept of purpose: where purpose emerges through the development of the 'concept' in its formation. Terry Pinkard's 'internal view,' which is both immanent and intrinsic, considers teleology as emerging internally through the historical process but without necessary reference to a primary cause (as in the 'immanent teleological' position).⁵⁹¹

Aristotle and Kant are the chief influences of Hegel's teleology.⁵⁹² All three thinkers appeal to some sort of human *telos*. Nevertheless, as with the *Philosophy of Right*, the relationship between humanity, the state, and nature is not so clearly demarcated in Hegel as it is in Kant. While Hegel does appear to maintain some distinction between nature and humanity, that distinction is always dialectically mediated. For this reason, some argue that Hegel should be taken as an ontological pluralist.⁵⁹³ Yet, despite the complexity Hegel grants to nature, there does remain some ontological priority granted to thought over nature in the greater *Logic*. As one commentator states, "Only in mind, if ever, can nature be thought to be 'beyond itself' in a way that requires fundamentally new

⁵⁸⁹ For example, Laurence Winant Dickey, *Hegel: Religion, Economics, and the Politics of Spirit 1770-1807* (New York: Cambridge University Press, 1987).

⁵⁹⁰ For example, Eric Michael Dale, *Hegel and the End of History, and the Future*, (Cambridge: Cambridge University Press, 2014); and James Kreines, "Hegel: The Reality and Priority of Immanent Teleology," in *Teleology: A History*, ed. Jeffrey K McDonough (Oxford: Oxford University Press, 2020). <https://doi.org/10.1093/oso/9780190845711.003.0012>.

⁵⁹¹ Terry Pinkard, *Does History Make Sense?: Hegel on the Historical Shapes of Justice* (Cambridge: Harvard University Press, 2017).

⁵⁹² This is a point made by both Kreines, "Hegel" and Yang and Yeomans, "Taking the Teleology of History Seriously."

⁵⁹³ For example, Raoni Padui, "Hegel's Ontological Pluralism: Rethinking the Distinction Between Nature and Geist," *The Review of Metaphysics* 67, no. 1 (2013): 125-48.

and different philosophical categories.⁵⁹⁴ One might recall Hegel's frustration over nature's inability to express clear categories in the *Philosophy of Nature*, as 'nature' must be overcome to give way to spirit's development.⁵⁹⁵ Yet, even in that text, the close finds nature unified with spirit in the 'concept's' development. There, sublated with the 'concept,' "Nature has passed over into its truth, into subjectivity of the [concept] whose *objectivity* is itself the sublated immediacy of singularity, its *concrete universality*."⁵⁹⁶ The relationship between nature and spirit is further problematized at the end of the *Science of Logic*, which sees the liberation of the 'concept' from itself at the culmination of spirit's journey:

[W]hat is posited by this first resolve of the pure idea to determine itself as external idea is only the mediation out of which the concept, as free concrete existence from externality has come to itself, raises itself up, completes this self-liberation *in the science of spirit*, and in the science of logic finds its highest concept of itself, the pure concept conceptually comprehending itself.⁵⁹⁷

Putting the question of sublation to the side (as it is impossible to deal with at length here), I follow Pinkard's rendering of Hegel's teleology given that his position offers the strongest and most robust shift away from a residual primary causality (i.e., a search for origin). Pinkard's reading suggests that Hegel's position allows teleology to emerge through the mediation of spirit and nature, rather than unilaterally determined by spirit onto nature (as in reflective judgement). As Yang and Yeomans note, in Hegel "Teleology is (a) a form of reciprocal interaction, (b) in which the end serves as an immanent governing principle, and (c) thus is exposed to change, and (d) the fullest

⁵⁹⁴ Christian Spahn, "External or Intrinsic Purpose – What Comes First? On Hegel's Treatment of Teleology," *Hegel Bulletin* 44, no. 1(2023): 207, <https://doi.org/10.1017/hgl.2023.1>.

⁵⁹⁵ Take, for instance, this passage from §250 of that text: "in the impotence of Nature to adhere strictly to the [concept] in its realization, lies the difficulty and, in many cases, the impossibility of finding fixed distinctions for classes and orders from an empirical consideration of Nature. Nature everywhere blurs the essential limits of species and genera by intermediate and defective forms, which continually furnish counter examples to every fixed distinction." GWF Hegel, *The Philosophy of Nature*, trans. by AV Miller (Oxford: Oxford University Press, 2004), §250, 24.

⁵⁹⁶ *Ibid.*, §376, 443. Emphasis in original.

⁵⁹⁷ Hegel, *The Science of Logic*, 12.253, 753. On the self-overcoming of spirit in relation to nature, see Cinzia Ferrini, "Being and Truth in Hegel's Philosophy of Nature," *Hegel-Studien* 37(2002): 69-90. <https://www.jstor.org/stable/26589523>.

actualization of the end can be found in the durable means rather than in anything like a state of affairs corresponding to a projected goal.”⁵⁹⁸ Rather than a mystical or divine force, spirit’s teleology is developed through an internal process of the ‘concept’s’ unfolding.

Hegel opens his discussion of teleology by contrasting teleology and mechanism. Where mechanism only consists in external determination, teleology follows and goes further than mechanism in offering an internalized self-determined causality. Mechanism describes only efficient cause, while teleology describes a final cause. Additionally, the distinction with mechanism provides a capacity for freedom, allowing one to bridge the teleology of the greater *Logic* with the political ontology of the *Philosophy of Right*. Hegel notes, “the antimony of *fatalism*, along with *determinism* and *freedom* is equally concerned with the opposition between mechanism and teleology; for free is the concept in its concrete existence.”⁵⁹⁹ Teleology is central to both final causality and freedom. In Hegelian fashion, the process towards ‘concrete objectivity’ for the ‘concept’ involves the sublation of the antimonies of mechanism and mechanism, with both invoked in the unity of teleological purpose.⁶⁰⁰ The relationship to mechanism, specifically, is seen in the movement of teleology as external or extrinsic purpose. As in Kant, extrinsic purpose refers to the object’s determination from outside itself as a means to another’s end. According to Hegel, extrinsic purposiveness provides the ‘form of purposiveness’ but remains mechanical because it is extrinsically determined.⁶⁰¹ The form of extrinsic determination is true of any concept that is determined by something external to it, as well as by any determination with external causality.⁶⁰² This is why Hegel praises Kant for distinguishing intrinsic and extrinsic purposiveness:⁶⁰³ individuation can only be free when “objectivity is posited in its determinateness as something external and the simple unity of the concept now has this objectivity

⁵⁹⁸ Yang and Yeomans, “Taking the Teleology of History Seriously,” 225.

⁵⁹⁹ Hegel, *The Science of Logic*, 12.154, 651.

⁶⁰⁰ *Ibid.*, 12.155, 652.

⁶⁰¹ *Ibid.*, 12.157, 654.

⁶⁰² *Ibid.*, 12.174, 659-660.

⁶⁰³ *Ibid.*, 12.157, 654.

as such without it.”⁶⁰⁴ Hegel defines the teleological process as “the *translation* of the concept that concretely exists distinctly as concept into objectivity, as we see this translation into a presupposed other is the rejoining of the concept *through itself with itself*.”⁶⁰⁵ Here, the ‘concept’s’ determination is a self-determination: both internal and free rather than mechanically caused by some external design or designer. For this reason, it is difficult to side with theological readings of Hegel that suppose an extrinsic teleology, given that extrinsic purpose does not attain the freedom found in internal, intrinsic teleology.⁶⁰⁶ The development of the ‘concept’ as ‘objective’ and ‘free’ can only occur through an immanent and internal causality that develops through the movements of the concept itself. This maintains a chemical balance through an internalized relationship with its environment. For example, Hegel writes:

Thus the original *inner* externality of the concept, by virtue of which the concept is self-repelling unity, purpose and the striving of purpose towards objectivity, is the immediate positing or the presuppositions of an external object; the *self-determination* is also the determination of an *external* object not determined by the concept; and conversely this determination is self-determination, that is, the sublated externality *posited as inner*, or the *certainty of the inessentiality* of the external object.⁶⁰⁷

This difficult passage relays that the ‘concept’ individuates as the ‘idea’ not only in itself and for itself but in an objective becoming through itself. Purposiveness, in Hegel’s use of teleology, is derived as a goal emerging through the immanent generation of ends. Briefly, it is possible to bridge this back to Hegel’s political and ethical philosophy insofar as he maintains an emphasis on freedom. Teleology occurs in world history through the pursuit of freedom as the telos of human history. Freedom is taken to be the formal telos of the state. The development of freedom in human history serves to govern the system of history as its immanently derived and individuated purpose. As in

⁶⁰⁴ Ibid., 12.165, 662. Emphasis in original.

⁶⁰⁵ Ibid., 12.167, 664.

⁶⁰⁶ For example, Dickey, *Hegel*. On Hegel’s critique of external purposiveness, see Hegel, *The Science of Logic*, 12.169, 666.

⁶⁰⁷ Hegel, *The Science of Logic*, 12.171, 668–669.

Kant, Hegel's political ontology is driven through a pursuit of freedom as the overarching teleological purpose.

Between Kant and Hegel is a repetition of the classic division of the parts and the whole. In Kant's political ontology, 'freedom' is prioritized as a negative freedom for individuals to engage in rational activity. Kant valorizes the individual in pursuit of freedom. Hegel, in contrast, prioritizes the realization of 'ethical life' within the rational unfolding of spirit: the community serves as the necessary grounds for all practical philosophy because freedom is grounded in communal life. Kant prioritizes the individual, with the cosmopolitan order only required as an extrinsic condition for human freedom. Hegel prioritizes the communal as political end, with the individual's development as a rational being serving as the intrinsic condition necessary for the realization of ethical life. One could make the case that there is a mediating gesture in both Kant and Hegel: one which attempts to unify the individual and the community through the unity of parts and wholes. This is less explicit in Kant, where the unity of intrinsic and extrinsic purpose occurs within the architectonic of nature: here all of nature regulatively contains both intrinsic and extrinsic purpose that can be determined through reflective judgement. In Hegel, this unity is more apparent: found in the development of 'ethical life,' which requires both individuals and the community to be co-mediated in the dialectical unfolding. In centring this unifying tendency, both thinkers offer a mediative both/and position: taking the unity of parts and wholes as the necessary condition of political philosophy. Adopting this reading of (to a lesser extent) Kant and (to a greater extent) Hegel reveals the capacity for a mediated 'humanism' that no longer takes ontological separation and epistemic reflection as the fundamental condition of its political ontology. Instead, one finds that 'humanism' is capable of withstanding humanity's 'mixture' in both the communal and the natural.

Given that humanism is capable of withstanding humanity's mixture with/in both the social and the natural, a critique of ontological separation and its subsequent developments in epistemic

reflection and deontology is insufficient for rendering post-humanity. In tracing the development of teleology through both Kant and Hegel, I am suggesting that the development of a *telos* can be taken as the central object of a humanistic political ontology. Both Kant and Hegel operate with a rationally derived *telos*. Whether that *telos* is attributed to human individuals or to a more holistic community in ‘ethical life,’ both maintain some rational capacity for humanity to determine the ends for humanity, sociality, and nature. It is this capacity for rational intervention in teleological purpose that might be critiqued. Given Hegel’s extension of *telos* in the greater community of ‘ethical life,’ it is not enough to critique positions that determine humanity as ends. Rather, critical post-humanism must critique the humanistic impulse for rational activity to govern the determination of ends. The promotion of a post-humanism that would sufficiently break from humanism requires both a critique of rationalism and a critique of the teleological structure: to be done with end seeking activity altogether. These critiques form the basis of the two subsequent chapters: to explore the critique of rationalism in ethics (chapter 3) and the critique of teleology more broadly (chapter 4).

Chapter 3, Post-Humanist Ethics? Embodied and Physiological Ethics Contra Rational Moralism⁶⁰⁸

In the previous chapter, I traced the development of G.W.F. Hegel's critique of Immanuel Kant's ontological, epistemological, and moral positions to show how Hegel's critique of Kant, as developed in the work on 'ethical life' [*Sittlichkeit*], resonates with the political ontology of critical post-humanism. In addition to the critique of separation, reflection, and deontology stressed in chapter 1, a post-humanist critique of humanism requires a critique of humanism's rationalism and teleology. This chapter stresses the critique of rationalism, focusing on how a post-humanist 'ethics' attempts to provide non-rational normative models in contrast to Kant and Hegel. While Hegel is an early critic of Kant's deontological morality, his deployment of 'ethical life' remains rationally mediated by spirit [*Geist*], as reason is immanentized through a rational unfolding of spirit's end [*telos*]. While Hegel does not necessarily follow Kant in understanding morality as the development of a 'transparent I' in the synthetic process of 'pure reason,' his theorization of spirit's unfolding arguably goes further in transforming reason into the transcendental force of history. This 'transcendental poiesis,' as it is termed by Denise Ferreira da Silva, takes reason to be the self-actualizing force of history: no longer the transparent representation of appearances, but a system that takes reason as the driving force of social and natural creation in history. Scholarship in the post-humanities presents a third position against Kant and Hegel by posing a 'post-human ethics' as an alternative to their rationalistic forms of 'morality.' Rather than a universal form of reason (Kant), these studies work towards a localized or 'situated ethics,' albeit an ethics that, unlike Hegel, claims no rationalistic oversight. Empiricism, with its emphasis on nature, affects, impressions, and the body, can be taken as an alternative starting point. Rather than Kant and Hegel, figures such as

⁶⁰⁸ Parts of this chapter have been adopted from Jacob Vangeest, "Philosophical Health in Entangled Cosmopolitan Posthumanism."

Benedictus de Spinoza, Friedrich Nietzsche, Gilles Deleuze and Félix Guattari are taken as inspiration. Where Kant and Hegel emphasize transparency and free rational activity, the critiques of rationality emphasized by these figures provides a distinct ethico-political project: one found in the body rather than in the powers of the rationality. Thinking through ‘embodiment’ and ‘physiology,’ towards what some might term an ‘immanent ethics,’ scholars in this domain of the critical post-humanities promote an ‘ethics’ without the valorization of human rationality.

This chapter centres the following research questions: First, how might one derive a normative theory from nature, affects, impressions, and the body? Second, in their pursuit of such an ‘ethics,’ are critical post-humanists successful at deriving normative positions without an appeal to rationality? Finally, what might such an ‘embodied’ or ‘physiological’ ethics entail? Towards these questions I proceed in three sections. For the first, I centre Deleuze’s reading of Hume in *Empiricism and Subjectivity*. This move is unique in critical post-humanism, which has largely ignored Hume in favour of Deleuze’s reading of Spinoza. I argue this is a disservice because Hume provides a compelling basis for an empirically grounded post-humanist subjectivity and normative philosophy. A central consideration is how Deleuze uses Hume to circumnavigate not only Kantian rationalism but also the phenomenological rationalism of Edmund Husserl.⁶⁰⁹ Separating Deleuze and Hume from Kant and Husserl provides a clear division between empiricism and rationalism. This distinction contains strong ramifications for both a philosophy of the subject and a meta-ethical approach to moral philosophy. Second, I focus on the distinction between ‘ethics’ and ‘morality’ as introduced by Deleuze and adopted by critical post-humanists. Centring two cases—in the work of Rosi Braidotti and Patricia MacCormack—this sections tests whether this distinction separates

⁶⁰⁹ Kyle Novak has argued that by going around Kant and Husserl, Deleuze avoids the ‘correlationism’ of Kant that is outlined by Quentin Meillassoux. See Kyle Novak, “Deleuze’s Transcendental Empiricism Against Speculative Realism: How Deleuze’s Hume Avoids the Challenge of Correlationism,” *The Journal of Speculative Philosophy* 34, no 3 (2020): 297-308. muse.jhu.edu/article/763149.

critical post-humanism from rationalism. Deleuze's distinction, which is absent from *Empiricism and Subjectivity*, appears in Deleuze's work on Nietzsche and Spinoza. Tracing the developments of this distinction through 20th century French readings of Spinoza, which are emphasized by Braidotti and MacCormack, this section argues that the use of 'adequate ideas' and 'common notions' from Spinoza's *Ethics* leads critical post-humanism to return to both universalism and rationalism. Here, two pathways emerge: the first, to abandon Deleuze (and 'post-structuralism') in favor of a decolonial and phenomenological universalism that might find resonance with Husserlean phenomenology through the work of Enrique Dussel; the second, to continue on a non-universal and non-rational pathway through an embodied and empirical approach to 'ethics' that would more steadfastly focus the body, embodiment, and physiology. Taking the second path, the chapter closes with a discussion of the potential for a physiological ethics that emerges in Nietzsche's critique of morality.

Deleuze's Hume and the Pursuit of and Embodied Normative Philosophy

Hume's empiricism, especially when interpreted by Deleuze, provides a pathway for thinking an embodied subjectivity and normativity without an appeal to rationalism. Deleuze's use of Hume is best understood through the greater milieu of 20th century French philosophy. Russel Ford notes that Deleuze's study of Hume likely resulted from the inclusion of Hume's *A Treatise of Human Nature* on the philosophy *agrégation* in France from 1946 until 1959 (Deleuze wrote the *agrégation* in 1948), which coincided with Jean Hyppolite's course on Hume in 1946-47 (which Deleuze attended).⁶¹⁰ While Deleuze's book, *Empiricism and Subjectivity*, was not his first work on Hume, it is the first book that is written largely in Deleuze's voice.⁶¹¹ *Empiricism and Subjectivity* is unique amongst

⁶¹⁰ Russel Ford, *Experience and Empiricism: Hegel, Hume, and the Early Deleuze* (Chicago: Northwestern University Press, 2023), 110.

⁶¹¹ Deleuze had previously co-written the text *David Hume, sa vie, son oeuvre* with André Cresson in 1952, a year prior to the publication of *Empiricism and Subjectivity*. Parts of this work are available in English, most notably Gilles Deleuze, "Supplement on the work of David Hume," trans. David Scott, *Angelaki* 16, no. 2 (2011): 181-188. <https://doi.org/10.1080/0969725X.2011.591596>.

work on Hume in France at the time (and Humean scholarship more generally), given that it focuses neither on the problem of induction nor on the is-ought problem, which tend to be centred in post-Kantian works on Hume, but instead on questions relating to French phenomenology, existential rationalism, and theories of immanence and transcendence by centring the question of the production of human nature.⁶¹²

According to Ford, Deleuze's text is largely an attempt to circumnavigate the rationalism of Kant, Husserl, and French phenomenology by using Hume's empiricism. Deleuze's text challenges both Kantian and phenomenological accounts of empiricism, which dominated mid-twentieth century French philosophy given the influence of Hyppolite and Jean Wahl. It does this by attempting to conceive an alternative rendering of subjectivity and the phenomenological 'given.' As discussed in chapters 1 and 2, Kant's rationalism imposes a transcendental subject as the basis of empiricism in reflective judgement. For Kant, empiricism consists in the experience that a subject has. Following Hegel and Husserl, respectively, Hyppolite and Wahl were largely concerned with empiricism and subjectivity in post-Kantian, rationalistic terms. Hyppolite, for instance, followed Hegel in thinking subjectivity through the transcendental reconciliation of the individual and the whole.⁶¹³ Wahl, on the other hand, considered subjectivity by way of the phenomenological given. While I return to a critique of Hegel in chapter 4's discussion of teleology, in this chapter it is more pertinent to focus the phenomenological angle.

Husserlean phenomenology follows Kant in proposing "a rationalist solution to the problem of the determination of lawfulness of the given world."⁶¹⁴ Husserl is critical of Hume's epistemological skepticism: against Hume, he argues that judgements are not psychological formations but result from a phenomenological, pre-theoretical 'given.' These terms can be

⁶¹² This is a claim made by Ford, *Experience and Empiricism*.

⁶¹³ See Ford, *Experience and Empiricism*, 116.

⁶¹⁴ *Ibid.*, 121.

understood through what Husserl terms the ‘phenomenological reduction,’ which conceives of the ‘given’ as primordial to and bracketed off from theoretical inquiry. For Husserl, judgement is not, as in Kant, based on the capacity for reflection, but instead conceived as prior to reflection in this ‘given.’⁶¹⁵ This ‘phenomenological reduction’ attempts to centre consciousness prior to any subsequent theoretical intervention: it is consciousness as it appears to us. For Husserl, knowledge is grounded in the past as it is phenomenologically given for the subject in what he terms ‘intentionality.’ It is worth noting that phenomenological ‘intention’ is slightly distinct from intentionality as found in Kantian purposiveness. Husserl defines intentionality as “what characterizes *consciousness* in the pregnant sense and which, at the same time, justifies designating the whole stream of mental processes as the stream of consciousness and as the unity of *one* consciousness.”⁶¹⁶ Intentionality can be understood as the movement of the ‘given’ consciousness towards something, or what might be termed consciousness *of* something.⁶¹⁷ Despite apparent distinctions, Husserl’s phenomenological theory of judgement can be linked to Kant’s reflective judgement because both infer a rationalistic separation: Husserlean intentionality invokes an aboutness grounded in phenomenal consciousness separate from the ‘of something’ under observation. Like Kant’s promotion of rationality in reflective judgement, the phenomenological promotion of intentionality begin with a foundation in a given subject.

⁶¹⁵ Husserl provides an understanding of the phenomenological reduction in *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, trans F Kirsten (Springer, 1983), 113. Emphasis in original. “It now becomes clear that, in contrast to the natural theoretical attitude, the correlate of which is the world, a new attitude must in fact be possible which, in spite of the ‘exclusion’ of this psychophysical universe of Nature, leaves us something: the whole field of absolute consciousness. Instead, then, of living naively in experience and theoretically exploring what is experienced, transcendent Nature, we effect the ‘phenomenological reduction.’ In other words, instead of naively *effecting* the acts pertaining to our Nature—constituting consciousness with their positing of something transcendent, and letting ourselves be induced, by motives implicit in them, to effect ever new positing of something transcendent—instead of that, we put all those positings ‘out of action,’ we do not ‘participate in them;’ we direct our seizing and theoretically inquiring regard to *pure consciousness in its own absolute being*.”

⁶¹⁶ Husserl, *Ideas*, 199 Emphasis in original.

⁶¹⁷ Deleuze uses this phrasing to distinguish Husserl from Henri Bergson. Where Husserl thinks consciousness as consciousness *of* something, for Bergson consciousness *is*. See Gilles Deleuze, *Cinema 1: The Movement Image*, trans. Hugh Tomlinson and Barbara Habberjam (Minneapolis: University of Minnesota Press, 1986), 56-57.

Any epistemology that grounds itself in subjectivity inherently takes subjectivity as given. This is because it cannot attempt to explain the genesis or production of that subjectivity. By turning to Hume instead of Kant or Husserl, Deleuze poses a genetic understanding of subjectivity in an attempt to conceive of the production of the subject. Empiricism, in this sense, cannot be understood as the intentional production of a given consciousness, nor the experience that consciousness has, nor any separation between consciousness and some other. Rather, empiricism consists in the experience that consciousness *is* and the experience that is constitutive of subjectivity. As Ford writes, “For Husserl, the retention of the past is rationally given, but, Deleuze writes, Hume notes that this very givenness must be explained and therefore concludes that, since it can’t be, the operations of reason should be understood not as transcendental causes but as effects.”⁶¹⁸

Where contemporary readings of Hume tend to centre the problem of induction,⁶¹⁹ *Empiricism and Subjectivity* focuses on Hume’s understanding of the mind’s constitution through impressions and affections.⁶²⁰ By centring the question of human nature in Hume, Deleuze focuses on the genetic construction of subjectivity through empiricism and embodiment. Hume’s *Treatise*, which is the central focus of Deleuze’s book, questions the ontological promotion of a given subject *who has perceptions* to instead think about how experience, perceptions, impressions, and affects are constitutive of the subject (which Deleuze might term a ‘passive synthesis’). Without an appeal to transcendental subjectivity or a given human essence, Deleuze’s reading of Hume attempts to determine how human nature is constructed through impressions: in his words, “how does the mind become human nature?”⁶²¹ In doing so, Deleuze inverts rationalistic epistemology. Where rationalism takes perception as a tool of intellectual faculties, Deleuze’s use of Hume takes

⁶¹⁸ Ford, *Experience and Empiricism*, 122.

⁶¹⁹ The problem of induction is key to Hume’s skepticism. Roughly, the problem of induction questions why one should believe that future actions will resemble past actions.

⁶²⁰ Gilles Deleuze, *Empiricism and Subjectivity*, trans. Constantin V Boundas (New York: Columbia University Press, 1991), 21.

⁶²¹ *Ibid.*, 22.

perception as the production of intellectual faculties.⁶²² This enables a shift: from thinking perception as grounded in a given subject or identity to instead understand identity and subjectivity as emerging through perception. This point is stressed in Jeffrey A Bell's reading of Deleuze's Hume: thinking is never separated from life processes but developed with/in the processes of life.⁶²³ For Bell, this is not an attempt by the mind to organize or systematize perceptions (as we see in Kant) but the production of perception to organize and systematize the mind.⁶²⁴ Subjectivity is constituted through the processes of perceptions, which oscillate to generate the subject as a passive and synthetic singularity: "The question is no longer about transcendence, but rather about integration. Unlike reason, which always proceeds from one part to another, feeling reacts to wholes."⁶²⁵ Subjectivity is neither given, transcendental, nor separate from life but instead constituted by and 'integrated' in the circuits of life.

It is possible to find a clear rejoinder to critical post-humanism through this reading of Hume. While Deleuze uses the term 'integration,' I find it useful to adopt Karen Barad's term 'intra-action' to instead think of this process as an 'intra-gration.' Intra-gration, as I use it here, poses connection as primordial to the individuated subject: emergent through the processes of life rather than separated and 'inter-connected' to them.⁶²⁶ Subjectivity's intra-gration through life processes affirms a rendering of its embodied constitution. This resonates with post-humanistic theories of subjective embodiment as the mind is constituted by the processes of its embodiment.

⁶²² Though, one might suggest that rationalistic epistemology had first inverted Hume's epistemology. This would mean Deleuze sets it right side up.

⁶²³ See Jeffrey A Bell, *Deleuze's Hume: Philosophy, Culture and the Scottish Enlightenment* (Edinburgh: Edinburgh University Press, 2009), 3.

⁶²⁴ *Ibid.*, 9.

⁶²⁵ Deleuze, *Empiricism and Subjectivity*, 36.

⁶²⁶ The term 'intra-action' is discussed in chapters 1, 2 and 5. In short, intra-action poses that any identity should be taken as emergent within its relations, rather than primordial to its relations. Here, intra-gration would pose that a subject emerges through the processes of perception (and is not some 'given' that has perceptions).

Subjectivity's intra-gration in life processes affirms its production in and through affections and impressions. It bears repeating that rather than having affection and impressions, the intra-grated subject is constituted through affections and impressions. As Jon Roffe suggests in his study of *Empiricism and Subjectivity*, the 'subject' is the constitution of "habitually associated ideas and their concomitant impressions."⁶²⁷ The concepts of 'impression' and 'association' require unpacking. 'Impressions' are important for Deleuze's study as he takes the entirety of Hume's empiricism to be concerned with the impressions of feeling and embodiment.⁶²⁸ In the *Treatise*, Hume distinguishes 1) impressions of sensation; 2) impressions of reflection; and 3) ideas. Impressions of sensation, which can be conceived as felt stimuli, are constitutive of impressions of reflection. Felt stimuli thus produce the categories of "passions, desires, and emotions" that emerge in and as the mind.⁶²⁹ Through the habitual repetition of impressions, the mind comes to 'associate' various processes into what Hume terms 'ideas.' This process, which moves from sensation to reflection to association, informs Hume's 'associationism.' Associations emerge out of impressions of reflection to group similar, connected, and habitual impressions.⁶³⁰ Hume describes association through "resemblance, contiguity in time or place, and cause and effect."⁶³¹ The process can be described as follows: 1) felt impressions give rise to impressions of sensation; 2) sensation invokes impressions of reflection; 3) through the habitual repetition of sensation and reflection, the mind is organized through the production of 'ideas' as associations. In this development, impressions are taken as primordial to both ideas *and* the mind itself, stressing the centrality of the body to empiricism. Mental activity works through the association of impressions, suggesting that the mind is intra-grated as subject

⁶²⁷ Jon Roffe, *Deleuze's Empiricism and Subjectivity: A Critical Introduction and Guide* (Edinburgh: Edinburgh University Press, 2016), 104.

⁶²⁸ Stressing the aspect of physicality, he writes that "Hume's entire philosophy (in fact, empiricism in general) is a kind of 'physicalism.'" Deleuze, *Empiricism and Subjectivity*, 119.

⁶²⁹ Hume, *Treatise*, 7-8.

⁶³⁰ Deleuze, *Empiricism and Subjectivity*, 114.

⁶³¹ Hume, *Treatise*, 11.

with/in the processes of life, experience, and sensation. Deleuze writes: “empirical subjectivity is constituted in the mind under the influence of the principles affecting it: the mind does not have the characteristics of a preexisting subject.”⁶³² The mind is organized through sensation and association; the mind is not actively organizing these ideas. One ramification of this continual organization is that ‘subjectivity’ cannot be a fixed imprint of impressions but is actively ‘in-formation’ through the continued intra-gration of feelings, impressions, and associated ideas.⁶³³ Every idea is paradoxically in-formation as and with/in the unfolding processes of subjectivity. For instance, the very attempt to express an idea as a given abstraction is simultaneously the unfolding of both that idea and the continuing constitution of subjectivity through association. This is key: Ideas are grounded in association and habit, which in-form subjectivity. Ideas are not the rational abstraction of a given subject. Subjectivity is found in the mind as an activity, association, or habit. For Deleuze, this informs the task of philosophy as a “theory of what we are doing, not as a theory of what there is.”⁶³⁴ This activity is the subject’s constitution.

The centrality of activity, practicality, and practice in the intra-grated constitution of subjectivity is important for critical post-humanism, given its commitment to a study of ‘ethics’ through embodied potentiality. As Roffe notes, *Empiricism and Subjectivity* is not invested in distinguishing ‘morality’ from ‘ethics,’ as Deleuze’s later writings are. Instead, Deleuze largely follows Hume in presenting a moral philosophy, albeit one that generates its obligations through “a social and political genesis that arises on non-normative grounds.”⁶³⁵ For Deleuze, Hume’s goal is not a rational moral system but rather an attempt to determine how moral values arise from impressions: the action and practice that develops an embodied morality. In this sense, Hume’s project might be

⁶³² Deleuze, *Empiricism and Subjectivity*, 29.

⁶³³ My use of in-formation is a not-so-subtle reference to Gilbert Simondon’s notions of ‘information’ and ‘metastability,’ which inform my use of intra-gration. For more on ‘information,’ see chapter 4.

⁶³⁴ Deleuze, *Empiricism and Subjectivity*, 133. See Also Ford, *Experience and Empiricism*, 184-191.

⁶³⁵ Roffe, *Deleuze’s Empiricism and Subjectivity*, 33.

more accurately understood as ‘meta-ethical:’ an attempt to disclose the ground of moral values, rather than a discourse on those values themselves. According to Deleuze’s reading, the basis for moral distinction must be understood through the constitution of the mind in embodiment. Thus, moral distinctions arise from impressions, associations, and habits rather than rational activity.⁶³⁶ Sensation and impression are the basis of moral value; there is never an a priori generation of morality in reason.⁶³⁷ In Hume, the concepts of ‘good’ and ‘evil’ are derived as responses to felt stimuli, suggesting that the origin of ‘morality’ is in feeling and sensation. He writes, for instance,

Now, since the distinguishing impressions, by which moral good or evil is known, are nothing but particular pains or pleasures; it follows that in all enquiries concerning these moral distinctions, it will be sufficient to shew the principles which makes us feel a satisfaction or uneasiness from the survey of any character, in order to satisfy us why the character is laudable or blameable [...] To have the sense of virtue, is nothing but to feel a satisfaction of a particular kind from the contemplation of a character. The very feeling constitutes our praise or admiration. We go no farther, nor do we enquire into the cause of the satisfaction. We do not infer a character to be virtuous because it pleases: But in feeling that it pleases after such a particular manner, we in effect feel that it is virtuous.⁶³⁸

For Hume, moral value and moral problems are not posed through rational developments but are instead understood as reflective impressions and passions that are constituted by pleasure and pain. Morality emerges from an affective order, ‘moral taste,’ and “certain sentiments of pleasure or disgust,” and not from reason, rational activity, nor ideas.⁶³⁹ *Avant la lettre*, Kant’s deontology falters in attempts to impose a rationality, *a posteriori*, onto these physiological and felt impressions.

Identifying morality through situated and localized conditions provides a clear opening for critical post-humanism to think through a normative point of view that is not grounded in rationality or universality. Nevertheless, critical post-humanists might be wary of Hume for his use of

⁶³⁶ Deleuze, *Empiricism and Subjectivity*, 33.

⁶³⁷ See Hume, *Treatise*, 462-470.

⁶³⁸ *Ibid.*, 471.

⁶³⁹ *Ibid.*, 581.

‘sympathy’ as imposing a new structure of deontological obligation. For instance, Deleuze’s discussion of sympathy as the basis for moral ‘ought’ in Hume could be understood as operating similarly to a project of universal or general inclusion. Roffe writes that sympathy becomes the basis of any action towards others in Hume’s normative philosophy. Here, sympathy involves both impressions of reflection and associated ideas. One begins with the idea of another’s pain or pleasure because one associates those principles with their own experience. Working from an associated idea, one can infer a resemblance between oneself and the other. Based on this resemblance and similarity, one empathizes with the other and becomes obliged to act in a manner that might ease their pain or bring them pleasure.⁶⁴⁰ Hume’s appeal to resemblance and similarity would appear to open his normative philosophy to the same objections that post-humanists such as MacCormack level against Jacques Derrida and Emmanuel Levinas: that responsibility is grounded in reciprocity. While I will discuss this objection in more depth in the second part of this chapter, for now it is enough to note that MacCormack argues that any ethics grounded in reciprocity is insufficient for post-humanism because reciprocity is incapable of ethical action towards the truly alien. This limitation, as Roffe notes, is a limitation that holds true of all moral philosophy, given that experience begins from partiality.⁶⁴¹ Yet, while the limitation is important to recognize, MacCormack’s critique does not neatly apply to Hume in this reading, given the account of intra-grated identity that is generated by Deleuze. For Deleuze, sympathy must be taken as inherently paradoxical. He writes that sympathy “opens for us a moral space and generality, but the space has no extension, nor does the generality have quantity.”⁶⁴² Deleuze’s phrasing is a bit hermetic, but it can be understood as follows: given the particularities (or partialities) of moral sensation, no two identities have the same sympathies. Thus, these particularities mandate a more localized (or

⁶⁴⁰ See Jon Roffe, *Deleuze’s Empiricism and Subjectivity*, 43-44.

⁶⁴¹ *Ibid*, 45.

⁶⁴² Deleuze, *Empiricism and Subjectivity*, 37.

‘situated’) rendering of ‘generality,’ which would be inherently at odds with the universality of deontological moralism or liberal sympathy. As Roffe notes, morality may arise from particular or localized moral sensation, but this sensation should not be taken as the essence of morality. Instead, as he puts it, “the problem of morality concerns the way in which our natural affective and moral particularities can be integrated into a social whole with everyone else’s.”⁶⁴³ As in critical post-humanism, this form of ‘morality’ can only ever be understood on the basis of an intersubjectivity or, to use more precise language for critical post-humanism, ‘intra-subjectivity.’⁶⁴⁴ Intra-subjectivity, by way of the principle of intra-gration, emerges with/in/as the conditions and activities of life. Hume offers a rendering of morality as generated through the activities of life that cannot be imposed on the totality as a universal design. Rather, given the fact that the ‘individual’ and the ‘social’ can never be strictly separated, the individual is intra-grated into the social and the social is intra-grated in the individual: “the understanding is only the process of the passions on their way to socialization.”⁶⁴⁵ Both ‘morality’ and ‘ethics’ mandate the resonance between these actively intra-grated singularities, neither prioritizing one nor the other, insofar as any prioritization would maintain the powers of rationality to determine one as means to the other’s end, thus breaking from their resonant intra-gration and (transductive) co-constitutive (see chapter 4). Thus, despite the rhetoric of ‘sympathy’ in Hume, such sympathy is always emergent through intra-gration, and never completely separated nor alien from some ‘other.’

This Deleuze-Humean type of morality would seek something like an oblique rendering of morality through a constantly fluctuating and dynamic resonance that begins with embodied impressions. Due to these characteristics, Hume’s morality is constituent with a non-universal, non-rational, and non-deontological system that is the claimed aim of critical post-humanism. My use of

⁶⁴³ Roffe, *Deleuze’s Empiricism and Subjectivity*, 47.

⁶⁴⁴ *Ibid.*, 53

⁶⁴⁵ Deleuze, *Empiricism and Subjectivity*, 22.

‘intra-gration’ promotes a localized or ‘situated’ basis for moral values as emerging from embodiment, while extending towards a certain resonant generality without mandating any universal creed or asceticism. This promotion could provide the grounds for critical post-humanism to develop an ‘ethical’ or even ‘moral’ thought that would not return to a universal obligation rendered from the condition of some human, non-human, or even post-human subjectivity, but instead through an intra-grated resonance at each stage upon multiple registers: human, non-human, and post-human intra-gration.

Before continuing onward, it is worth noting the distinction between an intra-grated moralism and a deontological one. Where Kant’s morality is rational and deontological, which is to say developed through the abstract reflection of a transcendental subject who imposes their will on nature, Hume provides an account of morality that is grounded in sensation, impression, and particularity. Hegel, through his critique of Kant, certainly revises aspects of the deontological perspective (as seen in chapter 2), but ultimately remains bound to a rationalized teleology, where spirit sublates nature in a ‘transcendental poiesis.’⁶⁴⁶ Both Kant and Hegel’s rendering of subjectivity, which would also include the ‘given’ of phenomenological subjectivity, allows for a universal position. The empirical subject, as seen in Deleuze’s reading of Hume, does not. This is why empiricism should be of central importance to critical post-humanism. In Kant and Hegel, human reason consists in the active power of rationality to deduce the proper benefit for the natural world. In Kant, through the transcendental and transparent I, which actively organizes matter into form; in Hegel, through the immanentization of this rational production through a transcendental poiesis to invoke the rational unfolding of history. Hume offers a concrete alternative, which produces a much different basis for normativity that is not grounded in a transcendental operation. As per Deleuze,

⁶⁴⁶ That said, a critique of Hegel on these grounds is much more difficult. Hegel’s dialectic offers something quite close to my notion of intra-gration. For this reason, I have focused an alternative critique of Hegel in chapter 4.

there is a ‘special ground’ for Hume’s empiricism, where “nothing is ever transcendental.”⁶⁴⁷ This is of utmost importance to critical post-humanism’s attempt to invoke an alternative ethico-onto-epistemology based in the subject’s immanence and embodiment. For these theorists, ‘post-humanism’ invokes a ‘new agenda,’ “which is no longer that of European or Eurocentric universal, rational subjectivity.”⁶⁴⁸ Hume’s depiction of impressions as the basis of moral sensation allows for an other-than rational basis for morality: one grounded in embodiment and physiology. An alternative ontology of the subject invokes an alternative epistemic and moral framework: a grounding of ethics as derived from the body and the subject’s intra-gration in life, rather than inscribed on life from a strictly separate, transcendental subject. The ‘old’ ontology, epistemology, and morality are too humanistic because they are centred on reason. Despite his own appeal to a ‘science of humanity,’ Hume anachronistically provides an alternative.

Deleuze’s Distinction: Post-Humanism’s Spinozist ‘Ethics’

Critical post-humanism has largely spurned Hume for alternative philosophical lineages. For scholars such as Rosi Braidotti and Patricia MacCormack, who draw heavily upon Deleuze, it is Benedictus de Spinoza who is taken as a key influence. There are a few reasons for turning to Spinoza rather than Hume. First, Hume’s identification of morality with sympathy and promotion of a moral philosophy more generally, may be an issue for scholars critical of morality and moralism. Second, the use of Spinoza reflects a shift in Deleuze’s philosophical trajectory. Starting with 1962’s *Nietzsche and Philosophy*, Deleuze offers a distinction between ‘ethics’ and ‘morality’ that is not present in earlier works, such as *Empiricism and Subjectivity*.⁶⁴⁹ Third, the use of Spinoza by critical post-humanists follows a particular reading of Spinoza that emerges in post-Deleuzian scholarship. For

⁶⁴⁷ Ibid., 24.

⁶⁴⁸ Braidotti, *The Posthuman*, 52.

⁶⁴⁹ It is worth noting that David Scott argues that Deleuze work on Hume, even in the work with Cresson, already sets the stage for the later distinction between ethics and morality. Scott argues that the rational powers of organization should be aligned with ‘morality,’ while the activity-oriented discussions found in Hume align more closely with ‘ethics.’ See Scott, “Gilles Deleuze’s Contributions to *David Hume, sa vie, son oeuvre*, translator’s introduction.”

instance, the promotion of a Spinozist philosophy of democracy by thinkers such as Antonio Negri and Michael Hardt, allows for expanded political formations.⁶⁵⁰ As such, I stress Deleuze and post-Deleuzian French readings of Spinoza in the following analysis. There are several additional reasons for this. First, Braidotti and MacCormack tend to follow Deleuze in offering an empirical and embodied reading of Spinoza. This goes against historical readings of Spinoza as a key figure in the rationalist tradition. Second, despite Deleuze's use of Spinoza to distinguish between 'ethics' and 'morals,' Spinoza tends to affirm moral philosophy throughout the *Ethics*.⁶⁵¹ Given the emergence of this distinction in his writings on Nietzsche, it is worth questioning its origin in Spinoza.⁶⁵² Deleuze builds upon the distinction in 1970's *Spinoza: Practical Philosophy*, but the concept is further developed in work outside his writings on Spinoza.⁶⁵³ Finally, it is worth questioning whether the political positions attributed to Spinoza by Deleuze and subsequent thinkers provides an accurate depiction of Spinoza's political philosophy (though this question is largely beyond the scope of this thesis).⁶⁵⁴ For these reasons, I focus on Deleuze and post-Deleuzian readings of Spinoza, turning to Spinoza's

⁶⁵⁰ See, in particular, Antonio Negri and Michael Hardt, *Empire* (Cambridge: Harvard University Press, 2001). For the sake of brevity, I largely sidestep these political readings in favor of questions of ethics, ontology, and individuation.

⁶⁵¹ For an example of Spinoza's moralism, see P41 of the fifth part of the *Ethics*, where Spinoza writes, "Even if we did not know that our Mind is eternal, we would still regard as of the first importance Morality, Religion, and absolutely all the things we have shown." Benedictus de Spinoza, *Ethics*, trans. Edwin Curley, in *The Collected Works of Spinoza* (Princeton: Princeton University Press, 1985), V.P41, 615.

⁶⁵² Deleuze writes, "ethical determination, that of good and bad, gives way to moral judgment. The good of ethics has become the evil of morality, the bad has become the good of morality." Gilles Deleuze, *Nietzsche and Philosophy*, trans. Hugh Tomlinson (New York: Columbia, 2006), 122.

⁶⁵³ While the distinction is not expressly discussed in Deleuze's longer book on Spinoza, *Expressionism in Philosophy: Spinoza*, there is an implicit distinction that is raised in the fifteenth and sixteenth chapters of that text. Here, there are clear resonances between Deleuze's reading of Hume and Spinoza. For instance, Deleuze writes that "*evil is always a bad encounter*, evil is always the decomposition of a relation [...] The evil suffered by a man is always, according to Spinoza, *of the same kind as indigestion, intoxication or poisoning*" Gilles Deleuze, *Expressionism in Philosophy: Spinoza*, trans. Martin Joughin (New York: Zone Books, 1992), 247. Deleuze, furthermore, aligns Spinoza with a "rationalist 'amoralism'" and suggests that good and evil are 'inadequate ideas.' See *Ibid.*, 253-254. In this sense, 'evil' is only an abstraction of the 'bad' which might relate to a felt sensation. Deleuze does discuss the distinction in Gilles Deleuze, *Spinoza: Practical Philosophy*, trans. Robert Hurley (San Francisco: City Light Books, 1988), 17; and in Gilles Deleuze, *Negotiations: 1972-1990*, trans. Martin Joughin (New York: Columbia University Press, 1995), 100.

⁶⁵⁴ See Sandra Field, "Democracy and the Multitude: Spinoza against Negri," *Theoria: A Journal of Social and Political Philosophy* 59, no. 131 (June 2012): 21-40. <https://www.jstor.org/stable/42705240>.

Ethics only when it is beneficial for understanding the subsequent use of his conceptual geometry (most notably to better understand the relationship of affects, freedom, and knowledge).

In this section I take Braidotti's *The Posthuman* and MacCormack's *Posthuman Ethics* as case studies for examining how critical posthumanism follows Deleuze in producing 'ethical' normative frameworks. Both thinkers affirm a 'Spinozist ethics,' which they respectively align with an 'ethics of affirmation'⁶⁵⁵ and a 'system of relation,'⁶⁵⁶ that push back against overarching 'moral' positions. Following Spinoza, these 'ethics' seek a higher degree of freedom by increasing embodied powers of acting. This occurs by developing 'adequate ideas' or 'common notions' of embodied affective development. Adequate ideas of one's affective determination, through what I've termed intra-gration, would, via Spinoza, provide a greater capacity for freedom.⁶⁵⁷ Given 'post-humanism' as a more ecological and extended ontology, Braidotti and MacCormack's work often seeks to extend these capacities for freedom with reference to Spinoza's monism.⁶⁵⁸ Monism is the position that all of being is composed of a single substance. In Deleuze's work, monism is used in conjunction with Duns Scotus' conceptualization of the 'univocity of being.'⁶⁵⁹ This term promotes an ontological equivalence: that all of being is said in the same voice. Together, these concepts suggest not only that being exists on the same ontological plane (i.e., there is no ontological hierarchization) but also that there is an inherent connection constitutive of and through being itself (i.e., being is intra-active, to use Barad's term). This means two things for individuals: first, there exists no hierarchy between individuals; second, individuals are secondary to a primary intra-gration or connection through

⁶⁵⁵ Rosi Braidotti, "Affirmation, Pain and Empowerment," *Asian Journal of Women's Studies* 14, no 3 (2008): 10. <https://doi.org/10.1080/12259276.2008.11666049>.

⁶⁵⁶ MacCormack, *Posthuman Ethics*, 2.

⁶⁵⁷ This is consistent with Deleuze's longer work on Spinoza, where he writes, "The highest essences already strive in their existence to make *their own* encounters correspond to relations that are compatible with *theirs*. This endeavor, which cannot wholly succeed, contributes the striving of reason. A reasonable being may in this sense be said, in its way, to reproduce and express the effort of Nature as a whole," Deleuze, *Expressionism in Philosophy*, 265.

⁶⁵⁸ See for instance, Braidotti, *The Posthuman*, 57; MacCormack, *Posthuman Ethics*, 12.

⁶⁵⁹ Deleuze, *Difference and Repetition*, 35-40.

which they are constituted. As a result, it is possible to suggest that ethics and freedom are applicable not only to individuals but should also be applied to that primary intra-gration or connection. For Braidotti, this results in ethics being aligned with an affirmative vitalism. Here, the subject of ethics is identical with the totality of life itself through the concept of *zōē*.⁶⁶⁰ For MacCormack, this extended capacity beyond the human enables a withdrawal from the human category of subjectivity through what is termed the ‘ethical non-subject.’ Here, ethics takes on an apophatic condition that works through the concepts of ‘love’ and ‘grace’ (which I attempt to define in more depth near the close of this section).⁶⁶¹ For both, the move away from a transcendental, rational freedom towards a more affective understanding of freedom is entangled with the shift away from anthropocentrism towards more eco-centric or ecological oriented notions of freedom.

I argue that while these projects are incredibly important for extending certain capacities beyond humanity, they unwittingly remain bound to a certain form of rationalism and teleology. My argument develops as follows: I begin by outlining Deleuze’s distinction to best understand how these thinkers separate ‘ethics,’ as an embodied or situated practice, from ‘moralism,’ as a transcendental abstraction and universal obligation. Working from this distinction, I outline how Deleuze’s use of ‘Spinozist ethics’ centres the body as the locus of ethicality. This outline stresses the development of adequate ideas or common notions of one’s affective generation through intra-gration. By developing adequate ideas, one is capable of acting freely on the basis of rationality rather than acting unfreely because of one’s passions. Ethics, as understood by Deleuze, is aligned with increasing the potentiality for free action by achieving adequate ideas of one’s constitution. I then turn to the use of adequate ideas and common notions by Braidotti and MacCormack, respectively. Here, the development of adequate ideas and common notions are extended beyond

⁶⁶⁰ Braidotti, *The Posthuman*, 134.

⁶⁶¹ MacCormack, *Posthuman Ethics*, 43.

the individual human subject in order to develop more intra-grated conceptualizations for either *zoe* or the ethical non-subject. Using this development as the starting point for my critique, I argue that the extension of Spinoza's use of adequate ideas and common notions to either *zoe* or the ethical non-subject—so as to increase their respective powers of acting—retains the promotion of an 'ought,' informing a new asceticism. Two positions are taken as examples: Braidotti's appeal to an 'ethical accountability' and an 'ethics of sustainability,' and MacCormack's promotion of the cessation of human reproduction. As imperatives, both positions remain bound to a universal, rational structure that Deleuze's distinction would align with morality. This may be due to Spinoza's rationalism. While Spinoza's epistemology centres the body as the locus of knowledge, his appeal to intuitive forms of knowledge throughout the *Ethics* maintains a rational basis for understanding affects and passions.⁶⁶² None of this is to say that Braidotti and MacCormack are wrong in their accounts. The promotion of a rational understanding of affects and passions, especially when extended on a more intra-grated scale, is incredibly useful. My aim, here, is minimal: only to suggest that these positions reintegrate a hierarchical subordination of the body. As I suggest near the close of this section, such a post-humanist moralism can likely remain consistent with a critical cosmopolitanism (as discussed in chapter 2). The issue: is such a project veritably post-humanist?

Deleuze's Distinction

Deleuze generates a distinction between ethics and morals through his larger philosophical critique of identity and representational subjectivity.⁶⁶³ Here, there are connections with the work on Hume. Where rationalism and representation can be aligned with morality, Deleuze takes ethics as something embedded or embodied. I find it useful to again use the term 'intra-gration' to understand

⁶⁶² Here, Spinoza's rationalism might be contrasted with Hume's empiricism. Namely, the distinction between rational ideas and empirical associations.

⁶⁶³ This point is expanded upon by James Williams, "Never too Late? On the Implications of Deleuze's Work on Death for a Deleuzian Moral Philosophy," in *Deleuze and Ethics*, ed. Nathan Jun and Daniel W Smith (Edinburgh: Edinburgh University Press, 2011). <https://doi.org/10.1515/9780748646296>.

the body as the locus of ethicality. In his reading of Spinoza, Deleuze understands the production of normativity as arising from achieving a better understanding of the body and embodiment.⁶⁶⁴ This is shown in the often cited statement, “we do not even know what a body can do.”⁶⁶⁵ As in his reading of Hume, Deleuze focuses on the body as the site of the immanent and empirical genesis of normativity without a transcendental position.⁶⁶⁶ Rather than begin from the transcendental subject, Deleuze once again promotes normativity as intra-grated with the constitution of the subject. This is the basis for distinguishing morals and ethics. Used here, morality is defined as a reflective judgement of subjectivity that is taken to be universally applicable. Morality consists in obligation or ‘ought.’ Ethics, in contrast, can be defined as the pursuit of knowledge as intra-grated with and through the embodied constitution of subjectivity (i.e. the subject’s intra-gration). Ethics must be grounded in something other than moral obligation or ought. For theorists of a Spinozist ethics, this shift enables the promotion of an immanently rendered, embodied notion of normativity.

Both Braidotti and MacCormack draw upon Deleuze’s distinction to offer an ethical project distinct from moralism. Braidotti argues that Spinoza’s ethics entail a ‘radical estrangement’ from deontological rationalism.⁶⁶⁷ Here, post-human ethics constitutes a ‘non-Kantian’ normative philosophy that is based in relation, connection, and embodiment rather than transcendental abstraction.⁶⁶⁸ She writes, for instance, “the notion of codependence replaces that of recognition much as the ethics of sustainability replaces the philosophy of rights. This reiterates the importance of grounded, situated, and very specific and hence accountable perspectives in a move that I call *zoe-*

⁶⁶⁴ See, for instance, Deleuze, *Expressionism in Philosophy*, 237-239.

⁶⁶⁵ Deleuze, *Spinoza: Practical Philosophy*, 19.

⁶⁶⁶ Two secondary accounts of this position include Susan Ruddick, “The Politics of Affect: Spinoza in the Work of Negri and Deleuze,” *Theory, Culture & Society* 27, no. 4 (2010): 21-45. <https://doi.org/10.1177/02632764103372235>, and Nathan Jun, “Deleuze, Values, and Normativity,” in *Deleuze and Ethics*, ed. Nathan Jun and Daniel W Smith (Edinburgh: Edinburgh University Press, 2011). <https://doi.org/10.1515/9780748646296>.

⁶⁶⁷ Braidotti, *The Posthuman*, 72.

⁶⁶⁸ Braidotti speaks stridently against Kant near the end of *The Posthuman*, see *Ibid.*, 190.

centred egalitarianism.”⁶⁶⁹ *Zoe* is initially defined as “the generative force of non-human life, rules through a trans-species and transgenic interconnection, or rather a chain of connections, which can best be described as an ecological philosophy of nonunitary, embodied subjects and of multiple belongings.”⁶⁷⁰ *Zoe*, thus, consists in a monistic and univocal ontology of differential being. Being cannot be understood in terms of individuals. The totality of being can only be understood in terms of a persistent, processual intra-gration. Given this ecological intra-gration, ethics must abscond individualism in favor of a complex ecological connectionism.⁶⁷¹ As a result, ‘subjectivity’ is understood in terms of more complex and ecologically bound contexts. Due to this subjective entanglement in what we might term intra-action, Braidotti conceives of both the subject and ethicality as process oriented.⁶⁷² This means that both subjectivity and ethics are open to shifts in their constitution. Both ethics and subjectivity are consistently in flux. Similarly, MacCormack grounds their understanding of a post-humanist, ‘Spinozist Ethics’ in monistic notions of immanence and embodiment that run contrary to rationalist considerations of a transcendental moralism. For instance, she writes, “Ethics is a practice of activist, adaptive, and creative interaction which avoids claims of overarching moral structures. Inherent in thinking posthuman ethics is the status of bodies as the site of lives inextricable from philosophy, thought experiments in being and fantasies of the future.”⁶⁷³ Like Braidotti, this understanding of ethics is understood in contradistinction to Kant. Where Kant offers moralism through human ascendance and benevolence, MacCormack takes ‘ethical counters’ as working through a monistic consideration of bodies that interact, connect, and relate to each other. Rather than ascendancy, it is intimacy that grounds MacCormack’s approach to post-human ethics.⁶⁷⁴ Ethics emerges through the intimacy of,

⁶⁶⁹ Ibid., 94.

⁶⁷⁰ Rosi Braidotti, “Posthuman, All Too Human.”.

⁶⁷¹ For example, Braidotti, *The Posthuman*, 139.

⁶⁷² Ibid., 140.

⁶⁷³ MacCormack, *Posthuman Ethics*, 1.

⁶⁷⁴ Ibid., 3.

and connections between, heterogeneous bodies. Like Braidotti, the primacy of connection speaks to something like intra-gration as primordial to individuality or objectivity. Like Braidotti's *zoe*, MacCormack's ethicality rests on the processual liminality of connection. In their work, this is expressed as an 'act of love.'⁶⁷⁵ 'Ethics' is taken as distinct from moral, rule-bound formulations of right. It promotes ground-up knowledge based in local situations: a focus on embodiment and empiricism.

Before continuing, it is worth investigating the validity of Deleuze's distinction. It is difficult to find an etymological distinction. 'Ethics' derives from the Greek *ethōs*. Morality, in turn, derives from Cicero's term *moralis*, which was coined to translate *ethōs* into Latin. Philosophy tends to treat these as related terms. Several technical distinctions between the terms have been offered, but these are far from consistent. Most notable for the study at hand is Zygmunt Bauman's use of Emmanuel Levinas. While I do not have the space to treat Levinas in depth here, it is worth offering a brief overview. In *Totality and Infinity*, Levinas takes 'ethics' to be primordial to ontology.⁶⁷⁶ This means that ethics comes before any ontological distinction or similarity. To make this claim, Levinas follows Husserl in promoting a phenomenological encounter prior to the theoretical attitude. Unlike previous phenomenologists Levinas does not centre the 'I' but the phenomenological encounter with the 'Other.'⁶⁷⁷ For Levinas, the foundation of all experience occurs in this face-to-face encounter with the Other. The face is that in primordial experience that refuses to be contained. Prior to ontology, the Other is neither a *fact* nor an *obstacle*.⁶⁷⁸ It is described by Levinas as naked. The face resists my attempt to control it, leading to a struggle or what Levinas terms 'the ethical resistance.'⁶⁷⁹ However, unlike a dialectic resistance, such as we find in Hegel's Lord-Bondsman

⁶⁷⁵ Ibid., 4.

⁶⁷⁶ Emmanuel Levinas, *Totality and Infinity: An Essay on Exteriority*, trans. Alphonso Lingis (Pittsburgh: Dusquense, 1969), 201.

⁶⁷⁷ Ibid., 13.

⁶⁷⁸ Ibid., 84.

⁶⁷⁹ Ibid., 199.

dialectic, this is a passive resistance. It is a passive resistance counter to any desire to dominate. This is an obligation grounded in a primordial expression of responsibility towards a naked and defenseless Other that asks not to be killed. For Levinas, this ethical obligation towards the Other serves as the grounds for any ontology. Ontological distinction only emerges out of the encounter with the face of the Other. Similarly, Levinas understands morality as emerging after this primordial encounter, through the determination of a moral code that is bound up with the law. Bauman makes this apparent: ethics is tied to a phenomenal, non-rational, aporetic, non-universalizable, irrational emergence in the face of the Other.⁶⁸⁰ Morality, in contrast, is bound to rule following and a moral code that emerges with the Law.⁶⁸¹

While some post-humanists, such as Barad, find use in Levinas' distinction (as I discuss more in chapter 5), MacCormack takes issue with both Levinas' promotion of ethics, and its subsequent use by Derrida. In conjunction with an intra-grated notion of 'connection,' MacCormack's concept of 'love' helps explain this division.⁶⁸² They note that Levinas' ethics is alluring due to its embrace of alterity and refusal of equivalence. Nevertheless, MacCormack refuses Levinas' position due to what 'counts' in the ethical plane. This act of 'counting,' they suggest, invokes an inherent structure of 'self' and 'other' as an "exclusionary ethics of external other."⁶⁸³ This is most clearly stated in the middle of their book: "Where Levinas claims we need an other, not necessarily perceived but encountered, toward which we turn in order to form an ethical relation [...] I argue that leaving the other alone is ethical invocation."⁶⁸⁴ MacCormack critiques the centrality of Levinas' phenomenological distinction. This becomes clearer in their critique of Derrida. Noting that

⁶⁸⁰ Zygmunt Bauman, *Postmodern Ethics* (Hoboken: Wiley-Blackwell, 1993), 10-15, 48-9.

⁶⁸¹ *Ibid.*, 21, 70.

⁶⁸² In what follows, I largely adopt MacCormack's position as accurate. For the purposes of my argument, it is not worth debating whether or not MacCormack's critique of Levinas and Derrida is accurate. One might argue, for instance, that Levinas does not begin with a standard of reciprocity as the basis for ethics. Whether or not that is the case is outside the scope of this analysis.

⁶⁸³ MacCormack, *Posthuman Ethics*, 15.

⁶⁸⁴ *Ibid.*, 71.

Derrida's *The Animal That Therefore I Am* critiques Levinas for giving no attention to the animal gaze, MacCormack critiques Derridean-Levinasian ethics for centring the gaze in the first place. They write, "the gaze is a human conceit and affording the animal a gaze continues to hold equality (albeit sensitive to alterity) as the mark of ethical attention toward animals."⁶⁸⁵ This suggests that extending the (human) gaze to animality does not counter anthropocentrism, but only re-instills it. They claim that this model centres human responsibility towards the animal as the ethical gesture. It thus retains an element of obligation and reciprocity. Where MacCormack reads Levinas' ethical plane as invoking a subsequent 'reciprocity,' their promotion of 'love' and 'grace' attempts to think an alternative ethical dimension.⁶⁸⁶ 'Love,' as already noted, aligns with the intimacy of bodies in something akin to intra-gration and liminality. Unfortunately, MacCormack provides no clear definition of love. This may be because love is 'an ecstatic state,' one that 'collides with mysticism.'⁶⁸⁷ The closest to a concise definition comes at the close of the book: "Want is monodirectional, love is gracious acknowledgement of the relations we have made and those we must inevitably continue to make."⁶⁸⁸ Here, love is aligned with ethics and a particular openness to the intimacy of relationality and connection—what I have termed intra-gration—that are constitutive of our ontological relation. The condition of love, as it is used by MacCormack, might be best understood in conjunction with 'grace.' Following Michel Serres, 'grace' is identified with 'stepping aside.'⁶⁸⁹ Rather than a sense of reciprocity towards, grace is a letting be or 'leaving alone.'⁶⁹⁰ According to MacCormack, grace "delivers us from the inevitable destruction we [humans] wreak on the world."⁶⁹¹ In conjunction

⁶⁸⁵ Ibid., 67.

⁶⁸⁶ Both the concept of 'love' and 'grace' come from the work of Michel Serres.

⁶⁸⁷ Ibid., 114.

⁶⁸⁸ Ibid., 148.

⁶⁸⁹ Ibid., 58.

⁶⁹⁰ Ibid., 68.

⁶⁹¹ Ibid., 69.

with love, grace provides the distinction from Levinas and Derrida. For MacCormack, grace is not inclusion through counting (nor the reciprocity of the animal's gaze) but instead a refusal to count.⁶⁹²

Freedom as derived from adequate ideas and common notions of the affects

As in Kant and Hegel's moral philosophy, the development of a post-humanist normative philosophy—or ethics—under the Spinozist-Deleuzian structure works according to an understanding of 'freedom.' Against rationalist accounts of freedom, however, these accounts resemble the Humean position: where Hume centres impressions, habits, and associations, Deleuze's reading of Spinoza centres the affective production of 'adequate ideas' and 'common notions' in the development of freedom. As in Hume, it is worth drawing out the relationship between these concepts (affect, adequate ideas, common notions, and freedom) to best understand how a theory of 'ethics' operates in critical post-humanism.

The centrality of freedom to ethics can be seen in Deleuze's writing on the distinction. In *Spinoza: Practical Philosophy*, he identifies ethics with increasing life's powers of acting.⁶⁹³ This is notable given Spinoza's writing on the relationship of epistemology and freedom. In the *Ethics*, Spinoza outlines three types of knowledge. First, beginning with random experience, one can determine 'opinions' and 'imaginations.' Second, through the repetition of opinions and imaginations, it is possible to determine "common notions and adequate ideas of the properties of a thing."⁶⁹⁴ Common notions arise through inductive reason. Third, Spinoza offers a distinct type of knowledge, which he terms 'intuitive ideas.' Like the second type of knowledge, intuitive ideas can be identified as 'adequate ideas.' In contrast to common notions, 'intuitive ideas' emerge through deductive reason beginning with the knowledge of God. According to Deleuze, all adequate ideas—whether they arise as common notions or through the intuition—must be taken as distinct from

⁶⁹² I provide a more thorough account of both love and grace in the close of this section.

⁶⁹³ Ibid., 26. See also, Deleuze, *Expressionism in Philosophy*, 255-272.

⁶⁹⁴ Spinoza, *Ethics*, II.D4, 447.

Cartesian ‘clear and distinct’ ideas, because they are logical (intuition) and expressive (common notions) rather than psychological and representative.⁶⁹⁵ Deleuze argues, then, that the existence of adequate ideas of ‘common notions’ in empiricism (by way of the second type of knowledge) suggest that we can derive adequate ideas empirically.⁶⁹⁶ While Spinoza explicitly distinguishes between the second and third types of knowledge, Deleuze contends that there is a ‘non-symmetrical relation’ between the two: common notions lead to adequate ideas of God while adequate ideas of God are the necessary condition for determining common notions.⁶⁹⁷ This is important for critical post-humanism because it enables a reading of Spinoza that continues to centre bodies and embodiment in the construction of ethical philosophy. For Deleuze, the totality of knowledge in Spinoza begins with natural, empirical conditions, which inform an adequate idea of God. The body serves as the necessary condition of knowledge. (It is worth noting that this revolves around a difficult bit of philosophical work, wherein a common notion emerges through the deployment of a felt affect as an adequate idea. Insofar as an adequate idea emerges as a common notion, it is necessarily an adequate idea, insofar as it is generalizable and common. For Deleuze, this appears to rely on the parallelism of extension and ideation. Here, what is common between bodies in extension is necessarily parallel to something in common between minds in intellection. Thus, Deleuze suggests that for Spinoza it is the case that the very capacity to develop common notions necessarily speaks to the capacity for adequate ideas).⁶⁹⁸

Deleuze provides a reading of Spinoza that rejects the division of rationalism and empiricism. Here, there is a parallelism or harmony between extension and intellection. This position is echoed in subsequent French readings of Spinoza. For example, Étienne Balibar writes, “Every idea is

⁶⁹⁵ Deleuze, *Spinoza: Practical Philosophy*, 75.

⁶⁹⁶ *Ibid.*, 54-55. Deleuze provides more depth to this explanation in chapter 17 of *Expressionism in Philosophy*, 273-288.

⁶⁹⁷ Deleuze, *Spinoza Practical Philosophy*, 57-58.

⁶⁹⁸ See Deleuze, *Expressionism in Philosophy*, 280-281.

always accompanied by an affect [...] The strongest ideas, and in particular ‘adequate’ ideas, which are intrinsically true, are also the strongest affects.”⁶⁹⁹ Ideas in the mind are parallel to affects in and of the body. Again, it is worth noting that an idea is not constituted in the representation of an affect but the expression of an action of the individual at once being affected and affecting.⁷⁰⁰ The intersection of epistemology and freedom becomes apparent through the role of affect. For Spinoza, a body is constituted through “motion and rest, speed and slowness, and not by reason or substance.”⁷⁰¹ The body is the product of affections in extension. Through the interaction of various affects, a body’s “powers of action [are] increased or diminished.”⁷⁰² Deleuze highlights three levels of affection and affect. First, each ‘mode’ or thing is itself an affection [*affectio*] of God’s substance.⁷⁰³ Second, this generation produces affects [*affectus*] as feelings in the body. Affects can be understood as the various impacts (sensations, feelings, etc.) that happen to a body or affection. Initially, these affects form inadequate ideas. Third, following *Ethics* III.D3, the formation of an adequate understanding of the cause of one’s affect allows for free action, while any movements that are generated by external forces (as inadequate ideas) are ‘passions.’⁷⁰⁴ In other words, when one lacks a proper understanding of the embodied cause of one’s passions, one acts blindly. In contrast, if one understands the embodied processes contributing to that passion, it ceases to be a passion as one can act freely based on adequate ideas.⁷⁰⁵ For Spinoza, adequate knowledge allows one to act freely.⁷⁰⁶ Suppose I have a newborn baby, who gets up every two hours during the night. My dog wants to go on a walk and barks at me. I am tired, so I get angry at my dog. Under this scenario, I

⁶⁹⁹ Étienne Balibar, *Spinoza and Politics*, trans. Peter Snowdon (New York: Verso, 1988), 108.

⁷⁰⁰ See, for instance, Pierre Machery, “Negri’s Untimely Spinoza,” trans. Timothy S. Murphy, *Genre* 46, no. 2 (2013): 145-153. <https://doi.org/10.1215/00166928-2087980>

⁷⁰¹ Spinoza, *Ethics*, II.L1, 458.

⁷⁰² *Ibid.*, III.Post1, 493.

⁷⁰³ *Ibid.*, I.D5, 409.

⁷⁰⁴ *Ibid.*, III.D3, 492.

⁷⁰⁵ *Ibid.*, V.P3, P4, 598.

⁷⁰⁶ *Ibid.*, V.P6, 599.

am a slave to the passions and act according to my inadequate idea of annoyance with my dog. Upon consideration, however, I realize that I am not actually angry with my dog. Instead, I am exhausted due to getting up with the baby several times during the night. Upon realizing that the true source of my anger is not my dog, but in fact my exhaustion, I now can act with a more adequate idea of my affect. Anger towards my dog is generated in accordance with an inadequate idea and is identified with a certain unfreedom or passion. In contrast, once I have an adequate understanding of the construction of my passions, I can then act freely based on those adequate ideas. To act freely is, for Spinoza, to act in accordance with reason rather than passion. Here the relationship of epistemology and freedom is clear: knowledge consists in generating adequate ideas regarding the causes of affects to achieve a higher power of acting that is unconditioned by affects, thus getting closer to an intuitive understanding of God.

It is finally possible to link the relationship of epistemology, freedom, and ethics. For Deleuze, Spinoza's epistemology informs an 'ethics' that enables freedom. Insofar as one's temperaments are affectively generated and guided by passion, one's passions are 'evil' or 'harmful,' "insofar as [they prevent] the mind from being able to think [...and] prevent the mind from understanding."⁷⁰⁷ In other words, passions are 'evil' for preventing rational activity and the powers of acting. In contrast, action is 'virtuous' when it is directed through adequate ideas.⁷⁰⁸ Ethics increases the powers of acting by way of adequate ideas; virtue consists in action according to adequate ideas. This framework is largely distinct from ancient, medieval, and modern considerations of 'morality.'⁷⁰⁹ Spinoza's moral philosophy does not fit into traditionally established categories, as it argues against both naturalistic and transcendental foundations for justice.⁷¹⁰ For this reason, post-humanist

⁷⁰⁷ Ibid., V.P10Dem, 601.

⁷⁰⁸ Ibid., V.P4S, 599.

⁷⁰⁹ See John Carrier, "The Ethics in Spinoza's *Ethics*," in *Essays on Spinoza's Ethical Theory*, ed. Matthew J Kisner and Andrew Youpa (Oxford: Oxford University Press, 2014).

⁷¹⁰ See Michael A Rosenthal, "Politics and Ethics in Spinoza: The Problem of Normativity," in *Essays on Spinoza's Ethical Theory*, ed. Matthew J Kisner and Andrew Youpa (Oxford: Oxford University Press, 2014).

scholarship may be justified in suggesting that Spinoza's *Ethics* refuses an imposed, overarching model of morality in favor of a more localized or situated pathway for free action in contextualized 'ethics.'⁷¹¹ *Avant la lettre*, Spinoza is used by Deleuze against deontological morality. He writes, for instance, "For although human bodies agree on many things, they differ in very many. And for that reason what seems good to one, seems bad to another; what seems ordered to one, seems confused to another; what seems pleasing to one, seems displeasing to another, and so on."⁷¹² For Deleuze, Spinoza's rejection of a divinely inspired and transcendental imposition of morality as a system of rules and representations allows him to instead think 'virtue' as the formation of adequate ideas and intuitive knowledge through the powers of deduction. Works on Spinoza's moral philosophy affirm he does not fit into standard moral categories but begins from a distinct position affirming affection and affect. Here, 'ethics' is not concerned with overarching normative structures but with actualizing the power of acting in accordance with adequate ideas against the passions. Despite the use of the term 'reason' and Spinoza's 'rationalism,' this ethics appears consistent with a strategy that centres the body and empiricism against deontological, rationalistic, and universal frameworks of obligation. Furthermore, the pursuit of adequate ideas, in this framing, is consistent with critical post-humanism's pursuit of situatedness and locality. As Alexandre Matheron suggests, "The more [adequate ideas] we have, the less the desire they inspire in us will appear to us as norms that the superior part of ourselves would impose on the inferior part. With knowledge and existence of the third kind, the illusion of normativity would disappear completely: we would be beyond good and evil."⁷¹³

⁷¹¹ Here, they might be emboldened by Beth Lord's "The Free Man and the Free Market: Ethics, Politics, and Economics in Spinoza's *Ethics* IV," in *Spinoza's Ethics: A Critical Guide*, ed. Yitzhak Y. Malamed (Cambridge: Cambridge University Press, 2017). <https://doi.org/10.1017/9781316339213.015>.

⁷¹² Spinoza, *Ethics*, I.App, 445.

⁷¹³ Alexandre Matheron, *Politics, Ontology, and Knowledge in Spinoza*, trans. David Maruzzella and Gil Morejón (Edinburgh: Edinburgh University Press, 2020), 113.

Zoe-Centrism in Braidotti

Following Deleuze, a post-humanist ethics would consist in the development of adequate ideas to increase the powers of acting beyond human individuals. Like Deleuze's reading of Spinoza, post-humanist ethics centre the body and embodiment. Braidotti understands *zoe*'s subjectivity as rooted in embodied affect.⁷¹⁴ She understands both humanity and subjectivity as products of affective, embodied processes. Resulting from these processes, individual human subjects are considered secondary developments of the more interactive (or, to use my term, intra-grated) developments of *zoe*. All of life, both human and non-human, is connected in what they term "a comprehensive eco-philosophy of becoming."⁷¹⁵ All are affected by these primordial, intra-grated processes.⁷¹⁶ This position affirms a more open and distributed notion of embodiment. The individual is not fixed, but unfolding within a shifting, processual landscape.⁷¹⁷ Individuals can be understood as the outgrowth (or secondary affectations) of a more primordial process of individuation: *zoe* or life (as primary affectation).

This re-conceptualization of 'embodiment' informs a re-consideration of ethics. Braidotti's project can be understood as providing a more adequate idea of how subjectivity is constituted both as and through *zoe*. Building from Deleuze's reading of Spinoza, Braidotti's ethics can be rendered as the attempt to increase *zoe*'s powers of acting. This is consistent with her language of a '*zoe*-centred egalitarianism.'⁷¹⁸ For example, Braidotti identifies ethics with "the primacy of relation, of interdependence, [which] values *zoe* in itself."⁷¹⁹ Furthermore, she uses Spinozist language to suggest that this ethics "seeks a more *adequate understanding* of the complexity of factors that structure the

⁷¹⁴ Braidotti, *The Posthuman*, 26.

⁷¹⁵ Ibid., 104.

⁷¹⁶ Ibid., 196.

⁷¹⁷ Ibid., 188.

⁷¹⁸ Ibid., 141.

⁷¹⁹ Ibid., 95.

posthuman subject.”⁷²⁰ As presented in this work, the aim of a ‘critical posthumanities’ can be understood as the attempt to develop a more adequate understanding of the affective constitution of *zoe*, so as to increase the capacities of life in general. This might involve any number of new narratives, genealogies, kinship systems, etc.⁷²¹ Taking *zoe* as the intra-grated form of subjectivity, one which is no longer confined to but rather is the production of humanity, means understanding *zoe* as the necessary condition for producing more adequate ideas of being. As a result, an adequate idea of *zoe* is necessary for acting in accordance with freedom rather than remaining a slave to passions. Braidotti expresses something along this line of thought by writing, “in elaboration of a new normative framework for the posthuman subject is the focus of collectively enacted, non-profit-oriented experiments with intensity, that is to say with what we are actually capable of becoming.”⁷²² Posthuman ethics is the awakening of these capability through the development of adequate ideas of *zoe*. By achieving this understanding, it is possible to seek out adequate ideas of *zoe*’s affects and passions. Because *zoe* is mutable, processual, interactive, and open-ended, ethics is necessarily the production of ‘adequate representations’ of values that are localized, iterative, and situated.⁷²³ Ethics consists in a normative approach to local situations.

Curiously, despite the consistent promotion of a localized, iterative, and situated ethics, Braidotti’s work also focuses on a planetary dimension. She writes, for instance, that *zoe* consists as a subjectivity that “acquire[s] a planetary dimension.”⁷²⁴ While ethical criteria are localized (given the need to iteratively develop adequate ideas within immediate contexts), these localized situations are simultaneously generalized as the universal mandate to achieve adequate ideas of *zoe*’s unfolding. Inherently, extending subjectivity beyond humanity towards a more intra-grated or connected

⁷²⁰ Ibid., 80. Emphasis mine.

⁷²¹ Ibid.

⁷²² Ibid., 92.

⁷²³ Ibid., 4, 36, 60.

⁷²⁴ Ibid., 89.

process of *zoe* works as part of this extension towards the ‘planetary’ as a ‘geo-centred’ dimension.⁷²⁵ According to this line of thought the ‘posthuman condition’ aligns with a shift in both the subject and object of investigation.⁷²⁶ For Braidotti, *zoe* constitutes both a ‘new knowing subject’ *and* the new object of investigation. This means that *zoe* would constitute both the efficient and final cause of analysis. As Simon Susen suggests, this appeal towards ‘*zoe*-centred justice’ is central to Braidotti’s plea for ‘species egalitarianism’ and an ‘ethics of sustainability.’⁷²⁷ Reaching an adequate idea of *zoe* would be consistent with an ethics that leads to the flourishing of life on a planetary scale.

There are three ramifications of this position that are worth unpacking. First, it is worth focusing the relationship of the local (or ‘situatedness’) and the planetary. Centring *zoe* as the ethical subject, Braidotti invokes an imperative regarding the need for sustainability as necessarily geo-centric and planetary. This is not, inherently, contradictory, but it does introduce some difficulty. For instance, Braidotti quickly moves from one sentence focusing on a “historically situated vision of the subject” to then think about a “*zoe*-centred egalitarianism.”⁷²⁸ This shift works if we consider *zoe*’s subjectivity—a transversal or intra-grated subjectivity—as a first order affectation that invokes action from second order affectations (or individual subjects), such as humans. This would mean that if humans achieve a more adequate understanding of *zoe*, their actions should work in accordance with *zoe*’s flourishing. Nevertheless, it is difficult to square this planetary-oriented form of ethics with the analyses from methodologies like standpoint feminism, which tend to focus on the hyper-localized situations of *zoe*’s second order affectations: individual human subjects. Centring *zoe* as the ethical subject, Braidotti imparts an obligation on these affectations: given an adequate idea of

⁷²⁵ Braidotti refers to this ‘planetary scale’ throughout *The Posthuman*. For example, see *Ibid.*, 6-7, 67, 71, 81, 86-89, 94, 104, 111, 153, 172.

⁷²⁶ See, specifically, *Ibid.*, 159.

⁷²⁷ Susen, “Reflections on the (Post-)Human Condition,” 75.

⁷²⁸ Braidotti, *The Posthuman*, 141.

zoe, each must necessarily act in ways that increase *zoe*'s powers of acting. Individual humans, as affectations of *zoe*'s intra-grated process, are obligated towards (and a means to) *zoe*'s end.

Second, drawing from Deleuze's distinction it is difficult to read this account of 'accountability' as ethical rather than moral. Braidotti uses the language of imperative when discussing the shift towards post-humanism. For instance, she writes "it is urgent to set a new posthuman agenda" and mandates that "[t]he limits and limitations of posthuman bodies must become the object of collective discussions and decisions across the multiple constituencies of our policy and civil society."⁷²⁹ While she is quick to separate this work from the Kantian, rational project, which she identifies as a "moral and cognitive universalism," Braidotti promotes *zoe* as a mutable or process-oriented subject that nevertheless has "universal reach."⁷³⁰ To be clear, Braidotti's system of ethics *is* distinct from a Kantian, deontological moralism, given that her promotion of process, mutability, and affectivity are distinct from fixed notions of moral obligation determined through abstraction. There is an openness to Braidotti's normative philosophy that is completely at odds with deontological moral philosophy. Nevertheless, the claim that *zoe* has a universal reach, even if that universal reach is collaborative and mutable, operates as if it were a judgement or obligation (to use the language of moralism). Given her language of 'accountability,' where the human is taken as accountable on a geological scale, Braidotti's notion of '*zoe*-centrism' would be better understood as shifting the properties of rationalism and moralism. It is not a break from rationalism and moralism entirely. This becomes clear in her vision of the post-humanities.

Take, for instance, the following claim:

The argument is straightforward: if the proper study of mankind used to be Man and the proper study of humanity was the human, it seems to follow that the proper study of the posthuman condition is the posthuman itself. The new knowing subject is a complex assemblage of human and non-

⁷²⁹ Ibid., 196.

⁷³⁰ Ibid., 190.

human, planetary and cosmic, given and manufactured, which requires major re-adjustments in our ways of thinking.⁷³¹

Braidotti is less interested in breaking the structure of rationalism than in shifting the categories of rationalism so that the human's position as both subject and object of study are replaced by *zoe*. There are clear benefits to this shift. Rather than a top-down universal deontology, the imposition of *zoe*'s planetary dimension, alongside the promotion of difference, enable an immanently generated or bottom-up universality. Yet, given that this universality does impose an accountability towards *zoe*, Braidotti retains a concept of obligation. Each affection *must* work towards '*zoe*-centric' ends *qua* '*zoe* in itself.'⁷³²

Third, as evidenced by the preceding block quote, Braidotti's project introduces both an onto-epistemological claim, that *zoe* is the new subjectivity, and a normative claim, that *zoe* ought to be taken as the new object of study. While I touch on this strategy in more depth in chapter 5, it is worth dwelling on it here for a moment. Sometimes it feels that Braidotti too quickly equates their onto-epistemological claim of *zoe*'s connection (or intra-gration) with the normative imperative of *zoe*-centrism. In chapter 5, I argue that an ontological reality (such as *zoe*) does not inherently lead to an ethical outgrowth (such as *zoe*-centredness). For a moment, I'd like to focus less on Braidotti's promotion of *zoe* as final cause (i.e. *zoe*-centrism) to instead focus on *zoe* as efficient cause (i.e. as knowing subject). *Zoe* as final cause or *telos* functionally operates as a normative imperative towards geo-centric or planetary ends. Epistemologically, to take *zoe* as object of study allows humans to reach more adequate ideas about our intra-gration through planetary processes. What is not so clear, however, is Braidotti's shift to *zoe* as efficient cause or knowing subject. If it is the case that *zoe* is the primary subjective formation (that through which human subjectivity is intra-grated), then why is it the case that the promotion of *zoe* must be instituted as imperative? If it is the case that "the proper

⁷³¹ Ibid., 159.

⁷³² Ibid., 95.

study of mankind used to be Man and the proper study of humanity was the human,” would not *zoe*, as the subject of the post-humanities, inherently take itself as the object of study? Perhaps not. The development of humanism, for instance, required imperative and intervention. Thus, the study of *zoe* may require a similar shift. What remains frustrating, however, are the operative conditions necessary to instantiate Braidotti’s position. For instance, each of Braidotti’s examples of the ‘critical post-humanities’—work in the environmental humanities, Dipesh Chakrabarty’s notion of ‘Deep History,’ the ‘One Health Initiative,’ and the Digital Humanities—centres developments of human research. Operationally, humanity remains the efficient cause, or that which attains a more adequate understanding, of *zoe*’s intra-action. Braidotti may respond that this is the case since humans are affectively generated through *zoe*’s connective entanglements. But regardless of whether this is the case, the aim seems to be shifts in research undertaken by humans to obligate humans towards *zoe*. Certainly, it is difficult (if not impossible) to think about the production of research design without human involvement, but this would seem to be the critical task in breaking from humanity as efficient causality.

Through the promotion of reaching ‘adequate ideas’ of *zoe* towards a ‘*zoe*-centrism,’ Braidotti extends, rather than upends, rationalism and moralism. While the body may generate ethicality, the mind remains the efficient cause of instantiating obligation through adequate understanding. While the human no longer serves as *telos* of a rational unfolding, human reason, and its pursuit of adequate ideas regarding the nature of being, *qua zoe*, remain the efficient cause of this normative project. Braidotti’s language of ‘*zoe*-centrism’ and ‘*zoe* in itself,’ suggest a normative project where being—specifically human being—serves as means to *zoe*’s ends. This is not inconsistent with understanding humanity as integrally bound, or intra-grated, through *zoe*’s processual unfolding. Instead, it takes all *zoe*’s affectations to be obligated towards *zoe*. Humanity’s purpose is for *zoe*. Insofar as moralism operates through the structure of obligation (specifically an obligation that generates a structure of

subordination through means and ends), Braidotti's project should be read as a moral (and therefore rational) one.

MacCormack on human extinction

MacCormack's a-humanism may provide a way out of this rationalistic design, which takes human reason as efficient causality. Like Braidotti, MacCormack's promotion of ethicality centres affective generation in bodies and embodiment. Following Deleuze's reading of Spinoza, they centre the harmony of the intellect (mind) and extension (body) to understand ideas as parallel with affects. This enables an understanding of ethics as produced through felt stimuli.⁷³³ One of the more apparent examples of this comes from a discussion of wounds and wounding. MacCormack writes, "Physical risks and pains are part of becoming more enfleshed through risk. The wound creates a consistency of traversal and re-orientation of becoming, not a point of a wounded 'I' [...] Wounding is an opening to the twists and deterritorializations we go through in activist territories."⁷³⁴ Wounds become a locus of ethics and ethicality in the liminal embodied space through which power emerges. For MacCormack, wounds shift our consideration of subjectivity: It is not that 'I' am wounded, but that wounds are constitutive of the intra-grated formation of subjectivity. Furthermore, they speak to the production of adequate ideas and 'enfleshment' in the development of ethics: wounds highlight flesh and the body in the generation of 'love' and 'grace.'

While Braidotti's language alludes to Spinoza's concept of 'adequate ideas' throughout *The Posthuman*, MacCormack's *Posthuman Ethics* never uses that language. Instead, they draw upon Deleuze to focus Spinoza's concept of 'common notions.' This is an important move, given that it allows MacCormack to centre the body (and not the mind) as the genesis of ethics. Here, Spinoza's refusal of mind/body hierarchization allows for the mind and body to work in distinct, but not

⁷³³ MacCormack, *Posthuman Ethics*, 21.

⁷³⁴ *Ibid.*, 135.

subordinated, ways. Drawing from Spinoza, thought is understood as consisting in the power to “increase, that is, to alter, develop, and expand, so that differentiation of the thing directly correlates with its liberty.”⁷³⁵ Like Braidotti, MacCormack’s understanding of ethics works towards increasing the powers of acting for a more diverse community or interdependence. Yet, the focus on ‘common notions’ rather than ‘adequate ideas’ allows them to stress ethical relations through affective interaction. In *Spinoza: Practical Philosophy*, Deleuze describes common notions as “the representation of a composition between two bodies, and a unity of this composition.”⁷³⁶ As mentioned above, Deleuze takes common notions in extension as paralleled to adequate ideas in intellection. For MacCormack, common notions speak to something material that escapes the power of human representation. Common notions consist as a dynamic relation present in the ‘liminal’ encounter of bodies. They write,

Each element or entity does not come to the relation already fixed in the qualities which will therefore either be or not be clearly commensurable with each other. Deleuze emphasizes that a defining element of the experience of affects of joy comes from an encounter even when we do not (or cannot) know the commonality from which the affect arises. This requires we think carefully what is meant by ‘commonality.’ Refining this ethic, commonality can be interpreted not as resemblance but by the openness of each element to experience the other as self and thus self as other.⁷³⁷

The ethical encounter involves a common notion as the affective capacity of bodies to be affected by other bodies. Rather than stressing the similarity between two individuals and basing a system of ethics on what is similar between those two individuals (as in vulgar readings of Hume’s sympathy), MacCormack takes ethics to be an openness towards this encounter without pre-determined outcome. Such openness, they claim, increases the capacity of each to be affected by

⁷³⁵ Ibid., 2.

⁷³⁶ Deleuze, *Spinoza: Practical Philosophy*, 55.

⁷³⁷ MacCormack, *Posthuman Ethics*, 16.

other participants. They suggest that ethics invokes both “alterity and openness, relinquishing reliance on pre-existing signifiers to become lost in the flows of affectivity.”⁷³⁸

Like Braidotti, MacCormack takes this encounter as working towards an increase in the capacities of life and connection: increasing a more general power of acting. While they do not provide a strict name for this ‘connection’ (such as *zoe*), MacCormack does conceive of this encounter as not only inevitable, but in many ways primordial to any specific individual. They write, “the space between the I/Other is one of inevitable connection and we are always and already othered/otherable.”⁷³⁹ The potentialities of action are linked to a capacity for openness in this encounter. It is here that MacCormack’s use of the concepts of ‘love’ and ‘grace’ come to play a major role in the development of any affectation’s capacity to affect and be affected.⁷⁴⁰ It is worth unpacking these concepts in more depth. ‘Love’ seeks to increase capacities for acting in and through this affective encounter, despite the condition of unknowability.⁷⁴¹ Thus far, I’ve largely skirted a clear definition of love. Perhaps it too is unknowable. Nevertheless, it may be possible to render a glimpse of love through MacCormack’s writing. Love seems to consist in the liminal relation or affective encounter that occurs between, yet is simultaneously determinate of, thingness. Love can be taken as a way of going towards, but it is not a going towards the Other (as in Levinas). Rather, it is a going towards on the basis of a primordial relation that resists the sort of given separation that is assumed in the ethics of going towards the Other. MacCormack helpfully draws upon Braidotti to understand this love not as the love between one and the Other, but as a love which opens to new potentialities. Love is less a relation of separate individuals and much more an intra-action or intra-gration that is the affective encounter.⁷⁴² Here, commonality (or common

⁷³⁸ Ibid., 17.

⁷³⁹ Ibid., 6.

⁷⁴⁰ Ibid., 104.

⁷⁴¹ Ibid., 76.

⁷⁴² See Ibid., 87-89.

notions) is the condition of emergence. Such a becoming transforms not only the possibilities *for* each, but also than potentialities *of* each. Neither can be strictly identified as individual. Instead, all are intra-grated in a transversal process through which they continuously unfold. Read through Spinoza, MacCormack's rendering of love can be understood as the capacity to affect and be affected. This is distinct from the (mental) capacity to think about or represent.⁷⁴³ Given this primordial ontological relation, MacCormack identifies any condition of separation or existence without relation as a form of 'lack.' Solitude, for instance, lacks relation and thus lacks potentiality.⁷⁴⁴ Being without relation, which is to say being without love, is to exist but without the capacity for free action. If ethics is the practice of increasing powers of acting, then the ethical act is consistent with the emergence of common notions through love. Love, for MacCormack, increasing potentiality. Ethics emerges from an openness to commonality in relation.

Through this development, MacCormack understands grace as an ethical maxim. Their argument unfolds as follows: given the histories of human intervention (colonialism, factory farming, the Anthropocene, etc.), we know that humanity wreaks havoc on both human and non-human worlds. Rather than increase the powers of non-human acting, human intervention closes potentiality. Thus love, as the desire to increase potentiality, mandates grace, which can be defined as the refusal to intervene in any manner. For MacCormack, love and grace resist any attempt at reciprocity with non-humanity.⁷⁴⁵ Grace makes no demand on the non-human. They describe it as being "without condition, prediction, or affirmation."⁷⁴⁶ Establishing commonality as humanity's shared imbrication or intra-gration with and through all being, MacCormack recognizes human intervention as inimical to love. Here, the refusal to make a demand on non-human life establishes

⁷⁴³ See Patricia MacCormack, "Art, Nature, Ethics: Nonhuman Queerings," *Somatechnics* 5, no 2(2015):129. <https://doi.org/10.3366/soma.2015.0157>.

⁷⁴⁴ MacCormack, *Posthuman Ethics*, 148.

⁷⁴⁵ MacCormack, "Art, Nature, Ethics," 129.

⁷⁴⁶ MacCormack, *Posthuman Ethics*, 72.

grace as ethical rather than moral. This claim can be made based on Deleuze's distinction. Where morality is identified with an imposed obligation, ethics emerges through lived practice (here, common notions). MacCormack affirms that 'morality' works through obligation and the use of 'ought.' They suggest that the condition of obligation legitimizes the human as the dominating party. Obligation, in areas such as animal rights, focuses the intentional capacity of humanity to intervene and assumes that humanity knows what is best for non-humanity.⁷⁴⁷ In contrast, MacCormack centring of unknowability in Spinozist affectivity stresses that humanity cannot know what is best for non-humanity. Grace imposes nothing on non-humanity because it assumes no knowledge of non-human potentiality. According to MacCormack, grace is inconsistent with obligation insofar as obligation and any notion of 'ought' imply a doing.⁷⁴⁸ In contrast, the withdrawal into the indeterminate love of the ethical encounter opens to grace as refusal: "I will not."⁷⁴⁹

While I'm sympathetic to this refusal as a break from humanist rationalism and moralism, it becomes trickier to maintain that division as MacCormack uses grace to inform normative imperatives: most notably the push towards human extinction. The epilogue to *Posthuman Ethics*, titled "After Life," in some ways addresses my earlier critique of Braidotti: that human projects of recognizing connection, via adequate ideation, retain humanity as an efficient cause. MacCormack's way of overcoming the centrality of humanity in this production is through "the cessation of the reproduction of human life."⁷⁵⁰ This cessation—resulting in human extinction—is posed as a choice that would alter the course of the earth's history. Human extinction, it is theorized, would lead to increased diversification of life, enabling new potentialities, and increasing more diverse powers of acting. Following the commonality of love, this extinction would not occur through the cessation of

⁷⁴⁷ Ibid.

⁷⁴⁸ Ibid., 76.

⁷⁴⁹ Ibid., 77.

⁷⁵⁰ Ibid., 140.

all reproduction but only reproduction of the human: human silence would open to a multiplicity of novel, transversal becomings through commonality. MacCormack writes, “Silencing human speech opens a harmonious cacophony of polyvocalities imperceptible to human understanding, just as human speech has the detrimental effect of silencing unheard, unthought expression.”⁷⁵¹ By identifying this imperative with grace, MacCormack attempts to align with an embodied ethics rather than a rationalized morality. The most revealing aspect occurs through their insistence that this cessation is not a sacrifice. They write,

Human extinction differs from sacrifice, we are not being sacrificed by nature in order to save it in the same way we as humans unethically sacrifice other lives to save ourselves from imminent death as annihilation. Nature does not want to sacrifice us... Conceiving human absence as sacrifice is an insipid response that claims we give a gift of the most valuable element in nature—humans—in order to save the nature we have manipulated. Human sacrifice is another manipulation.⁷⁵²

This depiction of ‘sacrifice’ is unorthodox at best. For MacCormack, the imperative of human extinction cannot be a sacrifice because non-humanity imposes nothing on humanity. Because non-humanity makes no demand on humanity, MacCormack claims human extinction cannot be sacrificial. This is a strange understanding of sacrifice. As I understand it, sacrifice is not (and cannot be) the imposition of the Other, but precisely is the sort of grace that MacCormack has established. For instance, a parent who sacrifices their life for their child does not do so because of some imposition placed on them by their child. Rather, that parent sacrifices their life to increase the potentials for their child’s life. Perhaps the classic example is the Christian figure of Jesus Christ. According to the book of John, Christ was not sacrificed *by* humanity, but he certainly was sacrificed *for* humanity.⁷⁵³ Furthermore, MacCormack’s Christological language, especially their use of love and

⁷⁵¹ Ibid., 153.

⁷⁵² Ibid., 145.

⁷⁵³ “For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.” John 3: 16.

grace, undoes the claim that this cessation is not sacrificial. It may be this tie to Christianity that leads to MacCormack's insistence against sacrifice. Sacrifice, in the biblical context, takes Christ as sovereign ruler and savior of humanity.⁷⁵⁴ To understand humanity's extinction as a sacrifice in this manner would instill a return to human sovereignty.

MacCormack's position is quite inventive. The attempt to withdraw from human subjectivity (as an individual) into a primordial relationality of love (what I've termed intra-gration or what Braidotti might term connection), shifts from a human to an 'a-human' condition in grace. This move is incredibly promising for post-humanism because it effectively shifts away from the condition of human subjectivity by withdrawing into that primordial relationality. This might enable MacCormack to work around the centrality of human intentionality, as prioritized in humanist forms of moral rationalism. Nevertheless, it is frustrating that MacCormack uses this shift to instill a new imperative on humanity. Following Deleuze's distinction, a position is 'moral' when it imposes a universal condition of obligation. MacCormack insists, throughout their work, that grace imposes no obligation on non-human life. This claim is accurate. However, the notion of human extinction that is raised in the epilogue *does* impose an obligation: an obligation on humanity. One way to circumnavigate this critique might be to suggest that this obligation only occurs on what I have termed a second-order affection. Here, the process of individuation—the commonality of love in intra-gration or connection—is, like *zōē*, a first-order affectation. Under this purview, it would initially appear that humanity, as second-order affection, is hierarchically subordinated to connection as a first-order affectation. Unfortunately, this would instill a hierarchical design, which post-humanism aims to overcome. Against this, MacCormack could offer a reduction to monism. As second-order affection, humanity is merely a fiction of intra-gration. Thus, any hierarchization or subordination of humanity would also function as fiction. I would suggest, however, that the very

⁷⁵⁴ MacCormack makes this point. See *Posthuman Ethics*, 144.

fact that MacCormack can issue the imperative for human extinction goes against this reduction. MacCormack issues the imperative on the basis that “life itself cannot exist in the perpetuation of subjectivity—for formerly human life nor for any other.”⁷⁵⁵ This means that humanity *is* subordinated to the general category of ‘life itself’ and that humanity *ought* to sacrifice itself for that greater category.

Like Braidotti, MacCormack’s shift towards imperative returns to the structure of means and ends: humanity serves as means to a post-human end. Both thinkers should be praised for offering a shift away from a human *telos*. Furthermore, both should be praised for attempting to break from an abstracted, fixed moralism based in rational separation. Nevertheless, more work is needed to try and fully overcome the structure of means-ends in finalism or teleology. Both thinkers seek a new ethics, but in doing so reproduce a structure of obligation. In MacCormack’s work, we might rephrase John in stating the following: for humanity so loved the world that it gave up the possibility of future offspring so that life would not perish but remain everlasting. While humanity is not the final cause of this undertaking, it is the efficient one. The powers of humanity are centred in the pursuit of natural or post-human ends. Here, humanity remains obliged to a moral ‘ought’ in terms of cessation: a moral obligation of responsibility towards nature through a moral, all too moral, imposition.

Critical Post-Humanism and Decolonial Phenomenology

Despite returning to a universal position through the adoption of planetary maxims, my aim is not to suggest that Braidotti nor MacCormack should be abandoned. In fact, it strikes me that the imposition of a universal moral formulation works nicely with a commitment to certain dialogic and post-colonial cosmopolitan frameworks, as were identified in chapter 2. Post-colonial thought is not necessarily antagonistic to universalizing tendencies. For example, Enrique Dussel’s *Ethics of*

⁷⁵⁵ Ibid., 148.

Liberation develops an ethics with universal reach while seeking liberation from Eurocentric paradigms.⁷⁵⁶ According to Linda Martín Alcoff, Dussel acknowledges the incapacity of universality from any specific standpoint while, simultaneously, promoting a critical philosophy with a global reach.⁷⁵⁷ He does this, they suggest, by sharing Hegel's attentiveness to geography while eliding Hegel's assumptions regarding developmentalism. This promotes a shift to understanding locality within a global context.⁷⁵⁸ For Dussel, no local position (e.g. Germany, Europe) can define the planetary. Yet, the planetary *can* be grasped by considering the almost universal position of global domination and victimhood: that most of humanity remains victim to various systems of oppression. By focusing the fundamental violence of global domination, Dussel promotes a philosophy of liberation as capable of producing a universal ethics.⁷⁵⁹ This ethics is both universal *and* situated. As Alcoff writes, “[Dussel’s] idea is that ethics needs to be significantly reframed if it is going to be forced to address life itself and its concomitant real-world, historically situated needs.”⁷⁶⁰ Like critical post-humanism, Dussel’s project pursues ethics without the abstract formalism of Kantian deontology. Yet, it does so in a manner that generalizes the need for specific, situated ethics that can be applied in concrete situations of victimhood.

Attempt to adopt this sort of post-colonial framework do, however, pose issues for anti-foundationalist positions that critical post-humanism has adopted from figures like Foucault, Derrida, and Deleuze. Dussel is critical of (to use his term) ‘postmodernism’ for offering only a “surface criticism of rationality that leaves the victim absolutely opaque, shrouded, from within the

⁷⁵⁶ Linda Martín Alcoff, for instance, argues that Dussel is similar to Hegel in offering an “ethics with a universal reach,” while simultaneously emphasizing the error of Hegel’s geographical and historical writings. See Linda Martín Alcoff, “The Hegel of Coyoacán,” in *Decolonizing Ethics*, ed. Amy Allen (Penn State University Press, 2021), 42.

⁷⁵⁷ *Ibid.*, 44.

⁷⁵⁸ *Ibid.*, 45.

⁷⁵⁹ *Ibid.*, 47.

⁷⁶⁰ *Ibid.*, 58.

horizon of systematic rationality that ultimately goes unquestioned.”⁷⁶¹ What Dussel seems to be suggesting is that the anti-foundationalist position actively questions capacities for rational inquiry, but does so in a way that provides the victim no clear avenue for response.⁷⁶² While Dussel shares the ‘post-structuralist’ critique of European universalism and modernity, given the propensity of that universalism towards domination, he nevertheless argues that post-structuralism retains a latent Eurocentrism. Where post-structuralism focuses a counter-narrative and contestation to European hegemony, Dussel centres the victim as a form of universal resistance. This works to step outside of and refuse both a counter-modernity (the mimetic inversion or contestation of European hegemony) and the post-structuralist ‘post-modernity’ (which would allow the structural tendencies of modernity to continue). The result is something like a dialogic or critical cosmopolitanism. He writes, “not a universal culture [...] but instead [one] of being respectful of the alterity of other positions.”⁷⁶³ For Dussel, this project results in a ‘pluriversity,’ which is neither homogenous nor imposed but instead recognizes “a globality [*mundialidad*] with an analogical similarity.”⁷⁶⁴ While European ‘universality’ would impose similarity in a top-down manner, Dussel’s ‘pluriversal’ approach seeks ‘analogical similarity’ through a bottom-up approach with something like a common notion of victimhood. For Dussel, the ‘pluriversal’ embraces neither modernity nor postmodernity but instead a “new age of humanity’s *transmodernity*,”⁷⁶⁵ that emerges not as a homogenization but through a dialogic diversification. As Amy Allen and Eduardo Mendieta suggest, where a modern

⁷⁶¹ Enrique Dussel, *The Ethics of Liberation: In the Age of Capitalism and Exclusion*, trans. Eduardo Mendieta, Camilo Pérez Bustillo, Yolanda Angulo, Nelson Maldonado-Torres (Durham: Duke University Press, 2013), 278. While Dussel and the literature tends to use the term ‘postmodernism’ for the sake of consistency with earlier parts of this thesis (and my own theoretical sympathies) I have chosen to use the term ‘post-structuralism’ or ‘anti-foundational.’

⁷⁶² For a helpful description, see Lynda Lange, “Burnt Offerings to Rationality: A Feminist Reading of the Construction of Indigenous Peoples in Enrique Dussel’s Theory of Modernity,” *Hyppatia* 13, no. 3 (1998): 132-145. <https://jstor.org/stable/3810703>.

⁷⁶³ Enrique Dussel, “Are Many Modernities Possible? A South-South Dialogue” in *Decolonizing Ethics*, ed. Amy Allen (Penn State University Press, 2021), 25.

⁷⁶⁴ *Ibid.*, 33

⁷⁶⁵ *Ibid.*

universality would impose a univocal position, Dussel's attempt at a 'cultural pluriversality' poses a universal openness to "specificity and alterity of different traditions."⁷⁶⁶

While 'pluriversality' appeals to critical post-humanism's plea for ethics that respects alterity and diversity, it is difficult to mediate the lineage of post-structuralism with Dussel. While it is critical of post-structuralism, Dussel's work retains much from the phenomenological tradition. For example, Levinas' work on the 'Other' and alterity is a major focus of Dussel's *Toward a Latin American Philosophy of Liberation*.⁷⁶⁷ Levinas offers a critique of traditional rationalism, given its incapacity to deal with alterity. Given the promotion of ethics as first philosophy, rationality is understood as emerging out of the face-to-face encounter. Dussel writes,

Levinas proposes, on the one hand, and in the first place, (a) a 'creative drive' associated with alterity, which launches totality all over again, as well as the reproduction drives of self-preservation (that of the same, of egoistic psychologism) and even the Dionysian narcissistic drives themselves (egotistical éros or basic constituted cultural need); and on the other hand, and secondarily (b) corresponding "critical reason."⁷⁶⁸

Reason, then, emerges through the phenomenological encounter in the face-to-face. As Dussel emphasizes, Levinas does not adopt the 'irrationalism' of the later 20th century post-structuralists.

On this point, Dussel writes,

To the contrary, Levinas clearly demonstrates the importance of rationality, but does not tire of seeking to show its *origin* and *meaning*. Reason, rationality, intentionality, and the order of being and the world, language, 'that which has been said [*le dit*],' all emerge from a framework that has already been described and all are ultimately turned on their heads within it.⁷⁶⁹

Following Levinas, Dussel maintains a vision of critical rationality that allows for an 'ethical reason' constituted through the "re-sponsibility for the Other."⁷⁷⁰ The projects of 'pluriversality' and

⁷⁶⁶ Amy Allen and Eduardo Mendieta, "Introduction," in *Decolonizing Ethics*, ed. Amy Allen (Penn State University Press, 2021), 16-17.

⁷⁶⁷ See Dussel, *The Ethics of Liberation*, 268

⁷⁶⁸ *Ibid.*, 270.

⁷⁶⁹ *Ibid.*, 277.

⁷⁷⁰ *Ibid.*

‘transmodernity’ are necessarily rational, allowing for their global extension. Such an undertaking necessarily maintains the powers of thought and rationality in the ethical register.

Given this division, critical post-humanism is faced with a decision: either to continue towards a universal or ‘pluriversal’ framework that would adopt a rationalistic, though anti-Kantian, position, through the work of Levinas and Dussel, or remain tied to its anti-foundationalist roots through the ‘post-structuralism’ of figures like Foucault, Derrida, and Deleuze. As the analysis of Braidotti and MacCormack suggests, these thinkers attempt to bridge this divide by working to extend certain capacities of ethicality beyond the confines of humanity in a post-human or ‘pan-human’ sort of pluriversality. This bridge must either a) extend rationality to the non-human, or b) reject rationality as its foundation. Both options run into issues. Extending rationality to non-humans risks promoting a colonial sort of framework. This can be explicated as follows: Inclusion is granted into the universal structure based on the capacity for rationality. The property of rationality remains the central capacity for inclusion. Rationality is a human capacity. Thus, a human capacity remains the basis for inclusion. To be included is to be more like humanity. Of course, thinkers like Braidotti might contend that they are not interested in a human form of rationality but instead a *zoe*-centred form of rationality. Yet, while *zoe* might provide the capacity for explaining the genesis of the rational given—and this is something that should be praised—it nevertheless falls back into a structure of integration rather than intra-gration. This is because it poses a primordial separation (*qua* alterity) in the reciprocal encounter that is the face-to-face. This leads back to MacCormack’s critique of Levinas, making the extension untenable with intra-action or intra-gration. In contrast, the second option would attempt to reject rationality as the basis for a critical post-humanist pluriversality. Unfortunately, the rejection of rationality in the construction of pluriversality is necessarily self-defeating. Rationality constitutes the foundation of the pluriversal order. As Dussel suggests, ethical *reason* is the basis for responsibility towards alterity. Without reason there can be no

pluriversal ethics nor any universal condition of responsibility. Rationality, as it is found in Braidotti and MacCormack's use of adequate ideas and common notions, respectively, is necessary for adopting their extended ethical imperatives. Thus, critical post-humanism finds itself with a difficult decision. To follow Dussel forecloses the possibility of a truly post-human ethics, insofar as ethicality in the phenomenological register is necessarily tied to rationality, which is to say, human thought. This pathway necessarily takes human thought as the efficient cause of its ethical project, even when that efficient cause leads to a more extended or ecological final cause. In contrast, the alternative pathway forecloses the possibility of any universal or pluriversal design inclusive of the non-human. This is because the 'anti-rational' position refuses the general extension of associations or ideas beyond the local condition from which they emerge. Given the discussion thus far, neither position seems desirable for critical post-humanism. Braidotti and MacCormack wish to maintain the premise of responsibility, but a responsibility that is stripped of the rational foundation that makes responsibility possible. Thus, critical post-humanism is left with the choice of either responsibility *with* rationalism, which remains squarely in the human domain, or anti-rationalism without any universal appeal or foundation for responsibility. While each position has its strengths and weaknesses, only the latter choice provides the conditions necessary for a veritable post-humanism.

Physiological Ethics

Critical post-humanism desires an ethics without rationalistic foundation and without a universal reach. Working through Deleuze's reading of Hume and Spinoza such an ethics, which is understood as distinct from rational forms of 'moralism,' finds its genesis in embodied feeling, sensation, and impressions (rather than in the mind). While those who have drawn upon Spinoza, like Braidotti and MacCormack, provide a notable step towards such an undertaking, their attempt to reinstall notions of responsibility through adequate ideation and common notions tend to return

to a universal or teleological design, albeit one more ‘pluriversal’ and ecological. To avoid this return to rationalised responsibility, critical post-humanism might do well to turn to another prominent influence of Deleuze, Friedrich Nietzsche. Nietzsche’s *On the Genealogy of Morality* provides a thorough critique of universal moral positions. Despite Nietzsche’s criticisms of Hume in that text—as one of the ‘English psychologists’⁷⁷¹—the two thinkers can be brought together as understanding morality as having its genesis in embodied feeling. The first essay of Nietzsche’s text focuses on the development of morality through *ressentiment*. First introduced in §10, *ressentiment* describes the reaction of the weak against ‘noble morality.’ He writes, “Whereas all noble morality grows out of a triumphant Yes-saying to oneself, slave morality from the start says No to an ‘outside,’ to a ‘different,’ to a ‘non-self’: and *this* No is its creative deed.”⁷⁷² Rather than affirm itself, *ressentiment* denies others. For Nietzsche, those working “through the poisonous eye of *ressentiment*” introduce the moral categories of ‘good’ and ‘evil’ (as distinct from ‘good’ and ‘bad’).⁷⁷³ Once again, this gives rise to Deleuze’s distinction: “the good of *ethics* has become the evil of morality, the bad has become the good of *morality*.”⁷⁷⁴ Ethics works through affirmation of oneself, morality emerges as *ressentiment* towards the other. Notable for the study at hand the root of this term, *ressentiment*, derives from the Latin term *sentire*, meaning to feel. The use of the prefix ‘re’ in conjunction with *sentire* invokes the capacity to feel again or feel backwards.⁷⁷⁵ Understanding morality as emerging through feeling [*sentire*], Nietzsche stresses morality as generated in the body rather than the mind. As with the other thinkers investigated in this chapter, Nietzsche offers a genetic account of subjectivity, the ‘soul,’ or the ‘ego,’ which is placed in contradistinction to the phenomenological ‘given’: one does not begin with a subject who *has* a will, but from the act of willing that *determines*

⁷⁷¹ See Prinz, “Genealogies of Morals.”

⁷⁷² Nietzsche, *Genealogy*, 228-229.

⁷⁷³ *Ibid.*, 232.

⁷⁷⁴ Deleuze, *Nietzsche and Philosophy*, 122. Emphasis mine.

⁷⁷⁵ This point is developed by Scott Jenkins, “*Ressentiment*, Imaginary Revenge, and the Slave Revolt,” *Philosophy and Phenomenological Research* XCVI, no. 1 (January 2018), 195. <https://doi.org/10.1111/phpr.12309>.

the subject.⁷⁷⁶ For Deleuze, this determination sees both the body and mind as formed by a multiplicity of dynamisms. The body is produced through the intra-action of various ‘forces’: “the ‘arbitrary product of the forces of which it is composed.” Both body and subjectivity are the result of operational intra-gration. In Deleuze’s reading, Nietzsche’s ‘will’ is this affective constitution of both bodies and subjects.

By centring a physiological production of morality, Deleuze provides an uncommon and highly contested reading of Nietzsche. Despite Nietzsche’s own suggestion that thinking differently is consistent with feeling differently,⁷⁷⁷ scholarship tends to understand the development of morality as happening psychologically.⁷⁷⁸ For readers in this tradition, Nietzsche’s critique of moral philosophy is taken to be a critique of the dogmatic imposition of moral laws, such as those provided in Kantian deontology. For instance, commentators such as Maudemarie Clark and Brian Leiter argue that Nietzsche is at once rationalistic and moralizing. Clark contends that the ‘deconstructionist’ reading of Nietzsche—which is associated with Derrida, Paul de Man, and Sarah Kofman, who present Nietzsche’s work as an affront to truth and metaphysics—fails to offer criteria for selecting one interpretation against another. This, they suggest, is due to the eliding of ‘truth’ with the ascetic ideal (asceticism, life-denial).⁷⁷⁹ In contrast, both Clark and Leiter hold that Nietzsche’s rejection of the ascetic ideal provides an opening to not only a greater form of ethics, but a superior moral philosophy. For example, Leiter writes that Nietzsche, “is more accurately read [...] as a kind of *esoteric moralist*, i.e., someone who has views about human flourishing, views he

⁷⁷⁶ Deleuze, *Nietzsche and Philosophy*, 7-8.

⁷⁷⁷ See Friedrich Nietzsche, *Dawn*, trans. Brittain Smith (Stanford: Stanford University Press, 2011), 71.

⁷⁷⁸ For instance, both Bernard Reginster and Guy Elgat take *ressentiment* and ‘bad conscience’ to be psychological conditions. See Bernard Reginster, *The Will to Nothingness: An Essay on Nietzsche’s Genealogy of Morality* (Oxford: Oxford University Press, 2021); Guy Elgat, *Nietzsche’s Psychology of Ressentiment: Revenge and Justice in On the Genealogy of Morals* (New York: Routledge, 2017).

⁷⁷⁹ Maudemarie Clark, *Nietzsche on Truth and Philosophy* (Cambridge: Cambridge University Press, 1990), 19. For Nietzsche, the ascetic ideal is identified with poverty, humility, and chastity. It takes self-denial and asceticism as the highest good.

wants to communicate at least to a select few.”⁷⁸⁰ These readings tend to take Nietzsche as a thinker of a greater rationality and a greater morality: the rationality and moralism of the overman. Such a reading largely affirms what might be understood as a Kantian interpretation of Nietzsche: where the rational human, which is to say the highest and greatest of rational humanity, is the one capable of designating new and higher forms of valuation.⁷⁸¹

While I do not have the space, here, to offer a thorough critique of this position from Nietzsche’s texts, it should suffice to note that such a reading remains thoroughly focused on the human dimension. This is untenable for critical post-humanism. Take, for instance, Clark’s critique of the ‘deconstructionist’ interpretation, *qua* Kofman and Deleuze:

Some radical interpreters insist that the reason to accept Nietzsche’s perspective is not cognitive superiority—its greater truth—but its superiority in serving a noncognitive end, for example, that it is more life-affirming (Kofman) or that it reflects the active rather than the reactive position (Deleuze). But this only pushes the self-reference problem back one step.⁷⁸²

This passage betrays a Kantian or phenomenological rationalism at the heart of Clark’s portrayal of Nietzsche: it imposes a ‘given’ subject who might accept or reject from several readings of Nietzsche. Clark is concerned with the truth or falsity of various accounts of Nietzsche: to think through why one might suppose one interpretation superior to another. Deleuze (as well as those who both inspired and were inspired by Deleuze such as Gilbert Simondon and François Laruelle, respectively) is not interested in this sort of philosophical decision—where one might choose between distinct interpretations—but rather invested in the operational or genetic production of interpretation. From this position, Clark’s analysis reads Nietzsche backwards. For Deleuze, the issue is not to determine why some consciousness or subjectivity might accept the superiority of the

⁷⁸⁰ Brian Leiter, *Nietzsche on Morality* (London: Routledge, 2015), 237.

⁷⁸¹ While this reading of Nietzsche has tended to remain in analytic philosophy departments, several recent works, such as Daniel Tutt, *How to Read Like a Parasite: Why the Left Got High on Nietzsche* (London: Repeater, 2024), offer a similar rendering of Nietzsche as an aristocratic thinker.

⁷⁸² Clark, *Nietzsche on Truth and Philosophy*, 151

active position. Instead, Deleuze attempts to present the active and affective dynamism of the will to power as the construction of that consciousness or subjectivity. The subject has no power over the determination of the will. Rather, the subject is determined by and through the will to power's intra-gration.⁷⁸³ This reading of Nietzsche is invested in a genetic account of the body, subjectivity, and morality. Each emerges through affective dimensions (sensations, feelings, impressions).

Given a triad of Hume, Nietzsche, and Deleuze, the production of morality is understood as emerging through bodily and physiological dynamisms (what in chapter 4 will be aligned with a 'physio-psychological' production). This reading does not displace morality as a psychological state. Instead, it renders the development of that psychological state as physiologically produced. Iain Morrison notes that the third essay of Nietzsche's *On the Genealogy of Morality* offers a physiological basis for the ascetic ideal. Nietzsche writes, for instance,

*the ascetic ideal arises from the protective and healing instinct of a degenerating life, which tries to preserve itself using all means and fights for its existence; it points to a partial physiological obstruction and exhaustion, against which the deepest instinct of life, remaining intact, incessantly fight with new means and inventions [...] the physiological struggle of humans with death.*⁷⁸⁴

Morality, as found in life-denial or asceticism, can be understood as physiologically generated weakness, exhaustion, and sickness. Given this emphasis on physiology, Nietzsche's frequent discussions of 'sickliness' should not be taken as metaphorical but as expressing a nervous condition. Morrison writes, "the sickliness at the root of the ascetic ideal is a nervous condition."⁷⁸⁵ To centre physiology as the genesis of psychology, Morrison turns to §16 of Nietzsche's third essay. Here, Nietzsche writes, "When someone cannot have done with a 'psychological pain,' then it is *not*,

⁷⁸³ Perhaps the most powerful reading of Nietzsche along these lines is present in the early work of François Laruelle. Less interested in pitting one interpretation against another, Laruelle conceives of Nietzsche as a political machine through which interpretations are generated. For more, see Jacob Vangeest, "Nietzschean Problematics," *Electronic Thesis and Dissertation Repository*. 7295. (2020). <https://ir.lib.uwo.ca/etd/7295>.

⁷⁸⁴ Nietzsche, *Genealogy*, 309.

⁷⁸⁵ Iain Morrison, "Nietzsche's Nervous Ascetics: The Physiological Roots of the Ascetic Ideal," *The Journal of Nietzsche Studies* 53, no. 2 (2022): 164. muse.jhu.edu/article/868382.

putting it crudely, due to his ‘psyche;’ more probably due to his belly.”⁷⁸⁶ For Morrison, this suggests that one cannot deal with the ‘suffering of [their] soul’ without first attending to their bodily production. Psychology is conditioned by physiology.⁷⁸⁷ Various attempts to deal with suffering (such as Nietzsche’s concepts of *ressentiment* and the ascetic ideal) are attempts to solve physiological inhibition, which is seen through exhaustion and sickness. Morrison writes, “If the physiologically inhibited are stuck on an exhausting awareness of their own pains or stresses, the ascetic priests’ lifestyle options are all basically about distracting from that awareness with alternative points of focus.”⁷⁸⁸ Moral asceticism and life-denial function to distract the sick, exhausted, and hurt from dealing with their very real sickness, exhaustion, and pain. Nietzsche notably identifies morality with a ‘physiological failure’⁷⁸⁹ and describes it as a decrease in the “physiological capacity for life.”⁷⁹⁰ Rather than the subject, consciousness, ego, or soul, Nietzsche writes that “the real physiological cause of *ressentiment*, revenge, and the like are to be found; that is, in the craving for *anesthetization of pain through affect*.”⁷⁹¹ For Nietzsche, morality emerges as a way for trying to deal with the pain, exhaustion, and sickness of the body.

Some have suggested that the centrality of physiology and embodiment in the constitution of subjectivity and morality can be understood through Nietzsche’s own physiological sickness. For example, Friedrich Kittler suggests Nietzsche’s relationship with his typewriter was central to how he understood subjective environmental formation (what I have termed *intra-gration*) as a form of human technics. Kittler focuses on Nietzsche’s statement that “our writing tools also work on our thoughts.”⁷⁹² Like Nietzsche’s work on ‘sickness,’ Kittler suggests that this statement is not a

⁷⁸⁶ Nietzsche, *Genealogy*, 318.

⁷⁸⁷ Morrison, “Nietzsche’s Nervous Ascetics,” 167.

⁷⁸⁸ *Ibid.*, 175.

⁷⁸⁹ Nietzsche, *Genealogy*, 286.

⁷⁹⁰ *Ibid.*, 307.

⁷⁹¹ *Ibid.*, 316, emphasis in original.

⁷⁹² Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford University Press, 1999), 201.

metaphor. He notes that Nietzsche's sickness caused him to be an early adopter of the typewriter. Nietzsche's illness resulted in partial blindness—or perhaps 'mental derangement'—that made both reading letters and writing by hand difficult.⁷⁹³ In order to write, Nietzsche reached out to Johann Malling Hansen (who invented the first commercially available typewriter). Kittler claims that, due to writing his seminal works on the typewriter, Nietzsche's is both the first and last mechanized philosophy. He writes, "not only a turn from philosophy to physiology in theory; [Nietzsche's] central nervous system always preceded him."⁷⁹⁴ The centrality of physiology was not hypothetical, but a very material reality of Nietzsche's work. Kittler suggests that Nietzsche's description of the production of humanity through media, which Nietzsche describes as a calculus of humanity through which the human being is 'made,'⁷⁹⁵ may have been directly lifted from his own physiological condition and relationship with the typewriter.⁷⁹⁶ Beyond the illness which caused its use, the physiological practice of typing transformed the production of Nietzsche's writing. Typing produces a uniformity alien to the individual production of handwriting. Kittler understands this as a genetic account where, rather than some production of consciousness, the unconscious is instantiated through the physiological practice of typing: "instead of deriving the evolution of the human being from Hegel's spirit (in between the lines of books) or Marx's labor (in between the differential potential of muscular energy), [Nietzsche's philosophy] began with an information machine."⁷⁹⁷

Drawing upon Kittler's physiological reading of Nietzsche, Nandita Biswas Mellamphy suggests that Nietzsche's account of writing understands the production of 'humanity' as always

⁷⁹³ Ibid.

⁷⁹⁴ Ibid.

⁷⁹⁵ Nietzsche, *Genealogy*, 247.

⁷⁹⁶ Ibid., 210. Kittler writes, "In the second essay of *On the Genealogy of Morals*, knowledge, speech, and virtuous action are no longer inborn attributes of Man. Like the animal that will soon go by a different name, Man derived from forgetfulness and random noise, the background of all media."

⁷⁹⁷ Ibid.

already preceded and extended by a predicative and physiological writing process.⁷⁹⁸ The ‘human’ is a dynamic process of ‘political physiology.’ This is generated through a ‘pharmatechnics’ where the body is ‘inscribed’ through wounds. These wounds or ‘inscriptions’ (as exhaustions, sickness, pain) inform moral development. Biswas Mellamphy defines this ‘political physiology’ as the “eternal recurrence [that] focuses on reading the language of bodies (their drives and impulses).”⁷⁹⁹ Physiology and the body remain central in both the ‘will to power’ and the desire for a ‘healthy human body.’⁸⁰⁰ Health, the body, and physiology are integral to Nietzsche’s understanding of the production of subjectivity and morality. This (onto)genetic account extends to the development of culture and politics as well:⁸⁰¹

The significance of this idea cannot be underestimated: not only does Nietzsche claim that all morality originates in the material conditions of the body, but more importantly, the language of the body replaces the language of the polis such that the experience of the drives and impulses of the body will become the originary site for all of Nietzsche’s thoughts on society, culture and politics.⁸⁰²

The cultural condition of morality emerges through not only the material condition of the body, but the physiological production of embodiment. If one follows the reading generated by Kittler and Biswas Mellamphy, to discuss Nietzsche’s account of morality requires one to centre the body as the site of its genesis. Morality is a material wound or inscription on the body.⁸⁰³

This understanding of inscription as physiological is in some ways contrary to how the term is used by mid-twentieth century French ‘post-structuralists.’ N Scott Bakker suggests Nietzsche’s

⁷⁹⁸ Nandita Biswas Mellamphy, “The Overhuman,” in *Critical Posthumanism and Planetary Futures*, ed. D Banerji and MR Paranjabe (New Delhi: Springer, 2016).

⁷⁹⁹ Nandita Biswas Mellamphy, *The Three Stigmata of Friedrich Nietzsche: Political Physiology in the Age of Nihilism* (Houndsmills, Basingstoke, Hampshire: Palgrave Macmillan, 2011), 10.

⁸⁰⁰ *Ibid.*, 126.

⁸⁰¹ Gilbert Simondon’s term ‘ontogenesis’ is described in more depth in the next chapter. Roughly, ontogenesis is invested in studying the process of individuation rather than any fixed individual.

⁸⁰² *Ibid.*, 23.

⁸⁰³ Biswas Mellamphy uses the term ‘mnemotechnics’ to think through this inscription. Mnemotechnics, from ancient Greek, refers to the art of memory. Thus, through its production as wound or inscription, the body is the site of memory.

physiological approach “was actually thinking *past* post-structuralism *a century before it*.”⁸⁰⁴ One must acknowledge that, to a much greater extent than thinkers like Clark and Leiter, the ‘post-structuralist’ reading of Nietzsche does centre the body. Beyond even Deleuze, examples can be seen in the work of thinkers like Michel Foucault and Jean-François Lyotard. For example, Foucault writes, “The body is the inscribed surface of events.” He reads genealogy as “history’s destruction of the body.”⁸⁰⁵ Furthermore, for Lyotard, who’s reading possibly follows Deleuze, reaction emerges from embodied affective tendencies.⁸⁰⁶ Yet, the use of ‘inscription’ and the ‘body’ in these examples applies to history and a general metaphysics, respectively. These examples lack the condition of a more concrete materiality (one might even say locality), which can be seen in Nietzsche’s relationship with inscription and (type-)writing. Nietzsche was one among a select few who was privy to the typewriter. Here, writing is no longer the extension of the human body (as with the pen) but became something mechanical. For Kittler, this shift inverts the relationship:

Nietzsche’s notion of inscription, which has degenerated into a poststructuralist catch-all metaphor, has validity only within the framework of the history of the typewriter. It designates the turning point at which communications technologies can no longer be related back to humans. Instead, the former have formed the latter.⁸⁰⁷

Where the pen works through the mechanisms of the body, the typewriter produces a shift in physiological movement. The typewriter physiologically transformed Nietzsche’s body. Following Kittler and Biswas Mellamphy, this signals that the term ‘inscription,’ as a shift in the relationship of humanity to writing, should be understood in terms of a ‘political physiology’ that is less invested in post-Saussurean linguistic philosophy and anti-foundationalism than it is invested in the material

⁸⁰⁴ N Scott Bakker, “Outing the ‘It’ that Thinks: On the Collapse of an Intellectual System,” in *The Digital Dionysus: Nietzsche and the Network-Centric Condition*, ed. Dan Mellamphy and Nandita Biswas Mellamphy (Earth: Milky Way: Punctum Books, 2016), 158.

⁸⁰⁵ Michel Foucault, *Language, counter-memory, practice: Selected essays and interviews by Michel Foucault*, ed. Donald F. Bouchard (Ithaca: Cornell, 1977), 148.

⁸⁰⁶ Jean-François Lyotard, “Nietzsche and the inhuman,” with Richard Beardsworth, *Journal of Nietzsche Studies* 7: Futures of Nietzschean Affirmation and Aporia (1994): 117, <https://www.jstor.org/stable/20717601>.

⁸⁰⁷ Kittler, *Gramophone*, 211.

production of an embodied psychology produced by one's writing instruments. Inscription is, quite literally, the mechanized inscription of the writing apparatus upon the page. With the typewriter, the physical act of typing becomes integral to the formation of humanity as typing being. 'Humanity' is determined through the physiological act of typing, which alters its formation. The typewriter produces bone structures, mannerisms, thoughts.⁸⁰⁸ Following from how it has been developed thus far, ethics serves as the site of a physiological determination. Any shift in the condition of ethicality cannot be centred in the mind. Instead, to change ethics requires changing the body.

While Kittler provides an affront to Deleuze and others working in his milieu, Deleuze's work on Nietzsche nevertheless provides a strong account of the relationship between humanism and morality. For Deleuze, the technical development of humanity intersects with the asceticism of modern science. The emergence of positivism is taken as a key example, given that it centres the "exaltation of the human fact."⁸⁰⁹ By this, Deleuze appears to be suggesting that modern science, under the purview of positivism and humanism, aims at a study of the truth of humanity. The human is a fixed and stable thing that can be studied. Deleuze can be taken as expanding upon Foucault's claims regarding a 'human science,' by suggesting that such a science neglects the operational or allagmatic production of humanity. Thus, from the outset modern science assumes the principle of ontological separation. Yet, this language might be taken as moving too quickly to focus the intention of modern science. Consider Deleuze's statement on positivism's role in the production of morality and humanity: "*Ressentiment*, bad conscience, and nihilism are not psychological traits but the foundation of humanity in man. They are the principles of the human being as such."⁸¹⁰ Moralism, in its various guises, is not a psychological trait of humanity that is

⁸⁰⁸ Thomas Moynihan has provided a genealogical account of the emergence of human development through the formation of the spine. See Thomas Moynihan, *Spinal Catastrophism: A Secret History* (The Old Lemonade Factory, Windsor Quarry: Urbanomic, 2019).

⁸⁰⁹ Deleuze, *Nietzsche and Philosophy*, 60.

⁸¹⁰ *Ibid.*, 64.

founded under positivism or humanism. Rather, Deleuze is suggesting that these are operational principles in the determination of humanity. The human does not adopt principles of humanism, moralism, or positivism; the human is the product of these operational tendencies. This means that the developments of humanism, as a psychological state concerned with morality, are co-determinate or intra-grated with the production of the 'human' as a figure with moral concern.

The above results in a profound realization: it cannot be the case, as the post-humanists like to claim, that the 'human' can be re-imagined, re-thought, or re-conceived through a post-humanist break with humanism. Humanism and moralism cannot be understood as ideological positions that can be learned and unlearned through rational activity.⁸¹¹ Instead, humanism and moralism are outgrowths of the physiological production of humanity. Rational activity is insufficient for refusing the (re)production of morality and humanism because morality and humanism, as psychological states, are the result of physiological processes, not rational activity. It is not enough to think differently. Human physiology, including the technics and processes of its production, must be transformed. Consider it like this: if intention is the product of affective tendencies working towards the composition of the body, then any change in mental state is not informed by intention but only through shifts in the physiological condition. The development of an alternative set of values, such as an 'ethics,' that would align with 'post-humanism' requires a shift in human physiology. This would require a fundamental change in the operational production of humanity, or human technics. As a result, 'post-humanism' cannot be implemented by thinking differently nor by 're-writing' the human in a metaphorical sense. Taking up a physiological ethics, the implementation of post-humanism requires a shift in the construction of humanity: only 're-written' in a very material, physiological sense. As the product of human technics, human thought will consistently return to the tenants of humanism (emancipation, teleology, rationalism). Post-humanism cannot retain the

⁸¹¹ Thus, against Clark, the issue is not one of consciously accepting a greater or lesser morality.

human as efficient cause. Against the various claims of critical post-humanism, a veritable post-humanism requires a shift in the physiological production (and the resulting efficient causality) that is post-human.

It is worth pondering whether Deleuze falters in his use of Spinoza. As noted, Deleuze's work on Nietzsche identifies moralism and humanism as physiological productions.⁸¹² Through his writing, including the work with Félix Guattari, Deleuze argues against a 'given' subject in favor of a more intra-grated or allagmatic development.⁸¹³ Nevertheless, the way Deleuze has been operationalized by thinkers like Braidotti and MacCormack to develop a quasi-universal ethical responsibility might be cause for concern. It does seem possible to offer a reading of Deleuze that would use Spinoza to outline the overcoming of physiological forces (which could be identified with passions) by generating adequate ideas of their affective powers. Despite his intra-grated, allagmatic, and embodied understanding of subjectivity, this sort of ethics would again centre the mind's production of adequate ideas to best understand the physiological production of moralism and humanism. This sort of position could develop as follows: if moralism and humanism are material tendencies produced by human technics, the way to overcome those tendencies would be to achieve adequate ideas of their instantiation, thereby achieving the capacity for free action in accordance with reason to transform the production of humanity. Such a position would prioritize mental capacities as superior to physiological production, as the mind would serve as the efficient cause of this post-humanity. While there are certain passages in Deleuze's work that could be understood as leaning in the direction of achieving a greater understanding by way of adequate ideas,⁸¹⁴ I am not aware of any writing that affirms this task as an ethical responsibility. Where Deleuze does appear to speak with the rhetoric of imperative, his work tends towards a strategic,

⁸¹² Again, see Deleuze, *Nietzsche and Philosophy*, 60-64.

⁸¹³ This is true even of the work on Spinoza. See Deleuze, *Spinoza: Practical Philosophy*, 123.

⁸¹⁴ See Deleuze, *Expressionism in Philosophy*, 284-5.

rather than ethical or moralizing, register. For example, Deleuze's statement, "There is no need to fear or hope, but only to look for new weapons," is a strategic imperative rather than an imperative that evokes responsibility.⁸¹⁵ It is a strategy of resistance, not a universal design. Similarly, Deleuze's discussion of common notions might be taken as strategic rather than ethical or moral. Common notions work towards universality, but this is not a universality that is transcendently determined by a subject. Instead, common notions are part of the generative production of freedom.⁸¹⁶ Here, it is useful to affirm MacCormack's insight that common notions focus a material encounter of embodiment.⁸¹⁷ Centring the relationship of bodies in the production of common notions suggests a material, physiological dimension to their production. Unlike MacCormack, however, Deleuze's position remains strategic. Attaining common notions is not sought as a responsibility, but a strategic means for achieving freedom.

The problem of a physiological, post-human ethics remains. Given the current instantiation of human thought—as generated by and through human physiology under humanism—any attempt to conceive of a post-human ethics in the spirit of post-humanism is necessarily alien to human thought. Humanism, as the physiological production of humanity, serves as an obstacle for thinking beyond itself. From the perspective of humanity, the theorization of a post-humanity is necessarily speculative. Nevertheless, there are avenues ripe for inquiry. Biswas Mellamphy's recent work has suggested a turn to Katherine Behar's Object-Oriented Feminism (OOF) as a way to speculate on the alien or 'xeno' dimension.⁸¹⁸ From the ancient Greek *xenos*, xeno refers to the stranger or the

⁸¹⁵ Gilles Deleuze, "Postscript on the Societies of Control," *October* 59 (1992): 3. <http://www.jstor.org/stable/778828>.

⁸¹⁶ Deleuze, *Expressionism in Philosophy*, 288.

⁸¹⁷ Furthermore, it could be interesting to focus the univocity of common notions in Deleuze's writing. Where adequate ideas exist in the regime of signs (which are equivocal), common notions are within the regime of expressions (which are univocal). See *Ibid.*, 300, 330.

⁸¹⁸ See Nandita Biswas Mellamphy, "Edge {s} of the 'Anthropocene': Standard and Non-standard Post-humanisms," *Technophany* 2 (2023). <https://doi.org/10.54195/technophany.13800>

foreigner. In this context it is taken as being without “any anthropocentric baseline,”⁸¹⁹ and takes on something of a ‘semantic vacancy’ for humanity’s current instantiation.⁸²⁰

Behar’s discussion of ‘Botox Ethics’ serves as a possible pathway for speculating on the sort of physiological, but alien ethics that might emerge alongside a veritable post-humanism. Like MacCormack, Behar distances their project from a Levinasian ethics of encounter. They are critical of the face-to-face relation, because it centres communication and inclusion. The face-to-face requires alliance, welcoming, and reciprocity. According to Behar, the principle of inclusion is inherently neoliberal, taking communication across divergent positions as its aim. Working from a position of total withdrawal, Behar writes that “Botox ethics warrants some newfound inhospitality.”⁸²¹ This provides a direct confrontation with works on cosmopolitanism, which is grounded in hospitality.⁸²² Instead of a principle of inclusion, Behar focuses on alienation and alterity through an inhospitable exclusion. Inclusion, as MacCormack notes, strips alterity from alterity by bringing it into a system of communication and reciprocity. Even systems that work towards the inclusion of difference reduce that difference to the sameness of difference.⁸²³ Levinasian ethics remains, for these thinkers, grounded in the reciprocity of the face-to-face. Focusing on exclusion, Behar’s ‘Botox Ethics’ is an attempt to refuse the universalizing tendencies of inclusion that works towards any sort of neoliberal reduction. I read their work as centring Botox as dead ‘plastic’ against the more dynamic becoming of ‘plasticity.’ Here, the focus is on death rather than life. For example, they write, “In place of the vivophilic ethics [i.e. Levinas] of ‘Don’t kill me!’ Botox ethics says, ‘I’ll kill myself!’ Shooting up to shut up, Botox ethics recommends battening down the hatches on our

⁸¹⁹ Biswas Mellamphy, “Humans ‘in-the-Loop?’ Human-Centrism, Posthumanism, and AI,” 22.

⁸²⁰ Peter Heft, “Xenofeminism: A Framework to Hack the Human,” *New Proposals: Journal of Marxism and Interdisciplinary Inquiry* 12, no. 1 (Winter 2021): 135.

⁸²¹ Katherine Behar, “Facing Necrophilia, or ‘Botox Ethics,’” in *Object-Oriented Feminism*, ed. Katherine Behar (Minneapolis: University of Minnesota Press, 2016), 136.

⁸²² On the role of hospitality in cosmopolitanism, see chapter 2.

⁸²³ See François Laruelle, *Philosophies of Difference: A Critical Introduction*, trans. Rocco Gangle (London: Bloomsbury, 2011).

own black boxes and becoming killer objects who will shoot ourselves first.”⁸²⁴ Where Levinas’ face-to-face encounter results in responsibility toward the other who cries out ‘Don’t kill me!’ Behar’s alternative focuses on self-imposed inhospitality. This position is fundamentally opposed to the life affirming plasticity found in Braidotti’s dynamism.

The distinction between Behar and MacCormack is slightly more complicated. It is tempting to align Behar’s ‘I’ll kill myself!’ with MacCormack’s ‘cessation of reproduction.’ On the surface, both theories shift away from ethics as a condition of outward life-affirmation towards an ethics of refusal. Nevertheless, there is a clear distinction. Despite their continued hesitancy to extend any principle of obligation to animals, MacCormack’s imperative strives at a maxim: the imposition that humanity ought to cease reproduction. This imposition works universally to all humanity, who must cease reproducing to provide an opening for life to flourish. MacCormack’s maxim re-imposes rationality as the efficient condition of ethicality: to sustain life, humanity must cease reproducing. Humanity is taken as means to life’s ends. Behar’s Botox ethics claims no such maxim. Botox ethic never extends beyond a plastic materiality. The difficulty of Botox ethics is precisely the refusal of any general imposition, project, or program. Botox doesn’t have an aim, project, or *telos*. Rather, it is a technology that, much like the typewriter, reveals a human technics (and a physiological production). Where MacCormack’s ‘love’ works in the form of an imposition, i.e. “You/we *ought* to cease reproducing,” Botox ethics “I’ll kill myself” withdraws from any human propensity for rationalized generality. Where MacCormack maintains the “You/we ought,” Behar’s Botox ethics only ever claims “I will.” By only ever positioning itself as “I will,” Botox ethics refuses the tendency to extend an imposition outward as a universal or pluri-versal obligation. In doing so, Botox ethics refuses to engage in a dialectical play of ‘plastic’ and ‘plasticity,’ which can be envisioned as the dialectical play of emancipation and domination that is central to humanism.

⁸²⁴ Behar, “Facing Necrophilia,” 139

Botox refuses rationalism because it never attempts to impose some norm as a generalized theory of emancipation. There is no imposition on any other to withdraw into a plastic materiality. Botox might, instead, be taken as a hyper localized and strategic response to the exhaustion of contemporary humanity. One might suggest that exhaustion is a contemporary sickness. The neoliberal condition works by exhausting the possible: opening every possibility towards further accumulation and thereby foreclosing any future possibility.⁸²⁵ By way of Nietzsche, I understand that exhaustion is not merely an outgrowth of humanity, but central to humanity's formation. Exhaustion is an operative condition of humanity's intra-gration. The humanistic impulse would likely seek emancipation from the condition of exhaustion. Through *ressentiment*, it would lash out at some other as the cause of its exhaustion. Through asceticism, it would engage in self-denial as the way outward. Botox ethics responds in an altogether different manner. "Screw it. I'm exhausted. I'll kill myself." Rather than succumb to exhaustion, this 'screw it' refuses to engage in the moralism of *ressentiment* and asceticism. Here, one would begin from the premise that the emancipation of humanity from exhaustion would result in reproducing the technologies of exhaustion. This is because the project of emancipation is central to the exhaustion of possibility found in the humanist project: emancipation is central to the production of the human and humanism.

The issue with previous 'critical post-humanisms' is that their desire for post-humanism, as emancipation from humanism, remains thoroughly humanistic. Humans have aims, humans have purposes. Botox doesn't. While only a glimpse, Botox reveals the potentiality of a physiological ethics that refuses a rational determination of *telos*. This revelation is frustrating, as it speaks to the im/possibility of (human) politics and ethics withdrawn from teleology. Humanity and humanism

⁸²⁵ Like much of this chapter, my use of 'exhaustion' is indebted to Deleuze, who differentiates exhaustion from tiredness: "The tired person has merely exhausted the realization, whereas the exhausted person exhausts the whole of the possible. The tired person can no longer realize, but the exhausted person can no longer possibilize." Gilles Deleuze, "The Exhausted," in *Essays Critical and Clinical*, trans. Daniel W. Smith and Michael A. Greco (Minneapolis: University of Minnesota Press, 1997), 152.

promote means-ends developments through rational activity. To withdraw from these processes reveals something exogenous to humanity, while also revealing the incapacity for that exogenous potentiality to inform a new form of responsibility (*qua* ethics) as the efficient condition of a new finality or *telos*. To ‘grasp’ the exogenous or alien as the basis for a new responsibility or imperative would be to, once again, strip this exogeneity of its alterity through the neoliberal promotion of inclusion. Behar never attempts such an inclusion through Botox. Instead, she stresses the alterity of Botox’s exogeneity by revealing the alterity of the ‘human’ from the sphere of humanity. Paradoxically, the plasticity of the ‘human’ in the operational process of human technics produces the ‘human’ as plastic, as Botox. Humanism and morality are outgrowths of this plastic creation. Each are determined by and through human technics. The embrace of the dynamics of humanity’s plasticity towards a project of emancipation from humanism will only ever lead back to the very plastic formation it seeks emancipation from. Critical post-humanism has, thus far, promoted a humanistic escape from humanism. The very nature of its ‘solution’ works towards its inevitability: a solution that reproduces the problems it attempts to resolve. Throughout, the promotion of (human) reason as the efficient determination of final causality remains steadfastly in place. Thus, it is necessary to return to a discussion of teleology.

Chapter 4, Transductive Post-Humanism Beyond the ‘Ends’ of Humanity and Hegelian Hylomorphism

In chapter 2, I argued that a sufficient critique of humanism requires a stronger critique of rationalism and teleology than is currently produced by critical post-humanism. In chapter 3, I then focused on the influence and critique of rationalism in ethical thought and pursuit of a ‘post-human’ or physiological ‘ethics.’ Working through this development, that chapter closed by stressing the need to return to the question of teleology and the development of an ethics or politics withdrawn from humanity as its efficient cause. This chapter centres this question by focusing teleology. It asks the following research questions: First, does critical post-humanism offer a critique of teleology? Second, if this critique is insufficient, what might a critique of Hegelian teleology look like? Finally, is it possible to determine a normative position or political ontology without an appeal to ends [*telos*]?

Despite the relationship of teleology and humanism, discussions of teleology and critical post-humanism are sparse. For instance, Cary Wolfe’s *What is Posthumanism?* only mentions teleology in passing reference to other work, while Neil Badmington’s *Alien Chic* and Francesca Ferrando’s *Philosophical Posthumanism* do not appear to mention teleology at all. Teleology is never mentioned in the formative issue of *Cultural Critique* where Jill Didur coined the term ‘critical posthumanism,’ and the concept is only mentioned once in the entirety of the reference text *Posthuman Glossary*. Similar to the lack of engagement with Hegel discussed in chapter 2, this general lack of engagement is curious and perplexing. Perhaps the issue is, as Simon Susen suggests, that teleology is passé and no longer worthy of engagement. Perhaps no one actually expresses a teleological position.⁸²⁶ Yet, in many of the scant references to teleology, the term is uncharitably rendered as being closed, pre-determined,

⁸²⁶ Susen, “Reflections on the (Post-)Human Condition,” 75.

and non-contingent.⁸²⁷ As I suggest in chapter 2, Hegel does not align teleology with determinism but instead provides an open, immanently rendered, contingently produced purposiveness. A more thorough and charitable examination of teleology is necessary for shaking off the humanistic orthodoxy that appeals to purpose-oriented political positions extended beyond humanity but determined by human intellection as efficient causality.

Thankfully, there are exceptions to the rule, which provide a foundation for constructing a critique of teleology within critical post-humanism. Among the Derridean contingent, Stefan Herbrechter steadfastly argues for a Derridean critique. Additionally, Donna Haraway and Katherine Hayles discuss teleology in their work on the cyborg and post-humanism, respectively. These three can be taken as a starting point for considering a critique of teleology for critical post-humanism. Herbrechter's centring of 'aporia' and 'porosity,' Haraway's break from human-centered processes, and Hayles' distinctive understanding of teleology through cybernetics all offer components of a critique. Yet, despite the important developments in this work, part of each of found lacking: Herbrechter maintains the human as singularity for post-human futures, while Haraway and Hayles maintain recognition as grounds for a post-human anti-teleology. Each maintains humanity as the efficient cause of a non-human or post-human *telos*. To construct an alternative, the second part of this chapter centres Gilbert Simondon's philosophy of ontogenesis and individuation to pose an alternative to Hegelian and humanistic teleology. Arguing that teleology in both Hegel and Aristotle can be understood as hylomorphic, I turn to Simondon's critique of hylomorphism as a critique of teleology. Working through the conceptual apparatus of his work—by introducing concepts of 'metastability,' 'pre-individual reality,' and 'transduction' among others—I

⁸²⁷ For example, in Susen's critique of Braidotti he aligns 'teleology' with determinism to suggest that no one in the humanities holds a teleological position. Such a critique of teleology is undermined by the open and contingent rendering of teleology offered by Hegel in the *Science of Logic*. See chapter 2 and Susen, "Reflections of the (Post-)Human Condition." See also Banerji, "Individuation, Cosmogogenesis and Technology: Sri Aurobindo and Gilbert Simondon," 257; and Wolfe, *What is Posthumanism?*, 110-111.

argue that Simondon's theory provides an alternative rendering of individuation that is aporetic and indeterminable while refusing human centred processes and breaking from Hegelian (and cybernetic) renderings of teleology. Rather than purposiveness, Simondon centres processes. This enables a critique of Hegel that does not rely on a caricature of his teleology. Such is the opening to a critical post-humanist anti-teleology operating without determinate finality or humanity as efficient causality. To this 'end,' the chapter closes with a brief discussion of ethics and politics without teleology, which might serve as the basis for a more open, or perhaps oblique, political ontology than what is generated through idealist and teleological notions of an embedded, entangled, or interconnected life.

Post-Humanism contra Teleology

Derrida, Aporia, Messianicity

Among the deconstructionist contingent of critical post-humanism, Stefan Herbrechter's *Posthumanism: A Critical Analysis* is one of the few to discuss teleology at length. He focuses Derrida's essay "The Ends of Man." Here, Derrida is critical of the humanistic use of 'end' by Hegel, Husserl, Heidegger, and Sartre, as each appeals to human essence. In contrast to these figures, Derrida aims to deconstruct the metaphysical foundations of humanism in a direct affront to teleology. While Hegel, Husserl, and Heidegger are critical of metaphysical humanism, Derrida suggests that each returns to a notion of human essence. For instance, Hegel's work maintains an essence in the phenomenological dialectic, which "marks the end of man, man past, but by the same token it also marks the achievement of man, the appropriation of his essence. *It is the end of finite man [C'est la fine de l'homme fini]*. The end of the finitude of man, the unity of the finite and the infinite, the finite as the surpassing of the self."⁸²⁸ Humanity's self-overcoming in the dialectical process maintains humanity's 'relevance' in the teleological structure: "The *relève* or *relevance* of man is his *telos* or

⁸²⁸ Derrida, "The Ends of Man," 121.

eschaton.⁸²⁹ Derrida points out that ‘end’ serves a double function: it is both humanity’s overcoming (as finitude) and humanity’s purpose (as *telos*). For Derrida, “What is difficult to think today is an end of man which would not be organized by dialectics of truth and negativity, an end of man which would not be a teleology in the first person plural.”⁸³⁰ Escaping teleology requires one to refuse humanity as both final cause *and* efficient cause. Regarding humanity, the term ‘end’ can refer to both the ‘factual anthropological limit’ and the efficient cause of that limit, the “determined opening or the infinity of a *telos*.”⁸³¹ Herbrechter takes this duality of ‘end’ as a refusal of intrinsic and extrinsic purposiveness in their dialectical sublation. Derrida’s refusal of both ‘I’ and ‘We,’ including the unity of ‘I’ and ‘We,’ provides a critique of existential finality (such as Heidegger’s ‘being-towards-death’) and, more importantly for the discussion at hand, German-idealist renderings of humanistic teleology. This enables Herbrechter’s critique of technological renderings of post-humanization (such as ‘transhumanism’) given that technical renderings of post-humanity maintain humanity as the efficient cause of their post-humanist teleology: the technological ‘end’ of humanity determined through technology as both limit and *telos*.⁸³²

Derrida’s work offers an affront to teleology with an appeal to aporia and porosity. Many of his theoretical interventions, such as the trace, differance, and supplementarity, offer a conceptual excess overflowing both totality and determinacy. The term ‘aporia’ refers to an irresolvable contradiction, logical disjunction, or insoluble puzzle. Aporias originate in Greek philosophy as contradictory imperatives that drive philosophical discussion. For example, in Plato’s *Parmenides*, Zeno and Socrates discuss how something can paradoxically be both ‘like’ and ‘unlike,’ which drives

⁸²⁹ Ibid.

⁸³⁰ Ibid.

⁸³¹ Ibid., 123.

⁸³² Herbrechter, *Posthumanism*, 22.

a larger recapitulation of Plato's theory of the forms.⁸³³ Aporias are important to 20th century French thinkers like Derrida, given the investment in a paradoxical generation of irresolvable oscillation.⁸³⁴ In Derrida's work, aporia often deals with a porosity that cannot be brought into presence or defined. Sarah Kofman argues that this porosity breaks with the logic of identity to offer a generative, untranslatable term within philosophy.⁸³⁵ Deconstruction often takes aporia as the unthought in philosophy that allows philosophy to continue.

The role of aporia in temporality is central to Derrida's critique of teleology. Pheng Cheah emphasizes Derrida's use of temporality in the deconstruction of presence.⁸³⁶ In several texts, Derrida works through Aristotle and Heidegger to argue that temporality is found in porosity and alterity. In *Being and Time*, Heidegger argues that the present 'now' is constituted through humanity's relationship with the future and past. In Heideggerian terminology one might say that the 'now' is constituted in going towards on the basis of already having been with.⁸³⁷ Humanity's 'now' is the projection of the past moving into the future. For Heidegger, this projection or 'thrownness' works around a vulgar understanding of time as a succession of 'nows.'⁸³⁸ As Cheah suggests, Derrida argues that Aristotle already offers a criticism of the vulgar understanding of time in the *Physics*,

⁸³³ See Plato, *Parmenides*, trans. Mary Louis Gill and Paul Ryan, in *Plato: Complete Works*, ed. John M Cooper, 359-397 (Indianapolis: Hackett, 1997). See also Verity Harte, "Aporia in Plato's Parmenides," in *The Aporetic Tradition in Ancient Philosophy*, ed. George Karamanolis and Vasilis Politis (Cambridge: Cambridge University Press, 2018).

⁸³⁴ See the description of 'aporia' in J.C. Mann, "Aporia," in *The Princeton Encyclopedia of Poetry and Poetics*, ed. Roland Greene, Stephen Cushman, Jahan Ramazani, and Paul Rouzer (Princeton: Princeton University Press, 2012), 60. <https://doi-org.proxy1.lib.uwo.ca/10.1515/9781400841424>.

⁸³⁵ Sarah Kofman, "Beyond Aporia?" in *Post-structuralist Classics*, ed. Andrew Benjamin (London: Routledge, 1988).

⁸³⁶ Pheng Cheah, *What is a World?: On Postcolonial Literature as World Literature* (Durham: Duke University Press, 2016).

⁸³⁷ For Heidegger on 'thrownness,' see the discussion of "The Existential Constitution of the 'There,'" in Heidegger, *Being and Time*.

⁸³⁸ There is something to be said about this in relation to Heidegger's use of and critique of Henri Bergson. Bergson is critical of Zeno's theory of movement. Zeno's paradox of the arrow, for instance, suggests that an arrow cannot move given that at each instance in time the arrow is occupying a space. Given that the arrow is motionless at each moment in time, it follows that the arrow cannot move. Bergson argues, however, that Zeno conceives of movement backwards: that motion is primordial motion in stasis. See Bergson, *Creative Evolution*, 335. One might take Heidegger as applying Bergson's spatial analysis to temporality. Notably, Heidegger held that Bergson critiques the 'ontic' treatment of space but remains 'ontic' in his treatment of time. 'Ontic,' here, refers to the treatment of phenomena as 'present-at-hand' or reduced to measurement. In *Being and Time*, 'ontic' is contrasted with 'ontological,' which is aligned with being 'ready-to-hand,' where being reveals itself without reduction to measurement. It follows that Heidegger's is an attempt at an ontological treatment of time.

when he understands the ‘present’ as fleeting and aporetic.⁸³⁹ In “Ousia and Grammē,” Derrida argues that Aristotle recognizes a *physis* of time,⁸⁴⁰ which Aristotle deems aporetic due to being paradoxically stable and unstable. He writes, “Aristotle affirms that the now, in a certain sense, is the same, and in another sense, is the nonsame.”⁸⁴¹ However, the impossibility of affirming two impossibilities does not, for Derrida, result in a dialectical sublation. Rather, it poses a ‘plural logic’ through the paradox: “It appears to be paradoxical enough so that the partitioning [*partage*] among multiple figures of aporia does not oppose figures to each other, but instead installs the haunting of the one in the other.”⁸⁴² The impenetrability of the temporal aporia insists in the haunting of presence by past and future. Cheah suggests that this is central to the temporal interpretation of Derrida that is often ignored in Anglo-American reconstitutions: “Read as an argument about the temporal constitution of presence, [Derrida’s] point is that presence is already riven by the force of a radical alterity in its generation and maintenance.”⁸⁴³ Derrida’s radical alterity of temporality is totally extrinsic to being and completely outside human capabilities.⁸⁴⁴ Temporality is an indeterminacy outside the purview of teleology.

Derrida’s writing on temporality and teleology are not, however, fixed. For example, Étienne Balibar argues that Derrida’s 1993 *Spectres of Marx* makes a conceptual distinction between ‘teleology’ and ‘eschatology,’ which are elided in 1969’s “The Ends of Man.”⁸⁴⁵ In the latter work, Derrida maintains that teleology has an element of finality or purpose in the manner of Hegelian humanism, but eschatology shifts to a theological grounding concerned with the last judgement. Balibar suggests

⁸³⁹ Cheah, *What is World?*, 163.

⁸⁴⁰ Jacques Derrida, “Ousia and Grammē: Note on a Note from *Being and Time*,” in *Margins of Philosophy*, trans. Alan Bass (Chicago: Chicago University Press, 1982), 54.

⁸⁴¹ Ibid.

⁸⁴² Jacques Derrida, *Aporias*, trans. Thomas Dutoit (Stanford: Stanford University Press, 1993), 20.

⁸⁴³ Cheah, *What is World?*, 165.

⁸⁴⁴ Ibid., 166.

⁸⁴⁵ Étienne Balibar, “Eschatology versus Teleology: The Suspended Dialogue between Derrida and Althusser,” in *Derrida and the Time of the Political*, ed. Suzanne Guerlac and Pheng Cheah (Durham: Duke University Press, 2009), 62.

that the use of Walter Benjamin in Derrida's later work opens to a messianic and eschatological dimension. Derrida's formulation of "the messianic, or messianicity without messianism,"⁸⁴⁶ builds an aporetic eschatology through the generation of indeterminacy and aporia. Derrida's messianicity has been described as 'without horizon' and 'worldless.'⁸⁴⁷ Messianicity speaks to an indeterminate future. In this context eschatology is distinct from teleology: where Hegelian teleology consists in determination identified through the internal diremption of spirit, Derridean messianicity is an "attempt to in fact *liberate messianicity* (or the irreducible promise of emancipation) *from its association with eschatological messianicism* (the awaiting of a Redeemer or redeeming force), without the idea of the *coming event* (or the event 'to come')." ⁸⁴⁸ Balibar suggests that this can be taken as a 'point of heresy' that signals the messianic point of rupture but without reducing that point to some divinity or humanity.

This aporetic and contingent consideration of the ~~non~~-eschaton helps recapitulate the deconstructionist anti-teleology in critical post-humanism. Herbrechter describes Derrida's non-teleology as follows:

Derrida could be said to be already arguing here for a posthumanism which uses neither 'I' nor 'we,' which neither uses the finality of the singular human (e.g. the idea of a 'being-towards-death' in existentialism) nor the teleology of any notion of humanity (idealism) to 'anthropocentre' the human so to speak. Instead, Derrida uses a notion of the human as a singularity that is radically open towards the nonhuman other of futurity, beyond any metaphysical horizon and determinedness. Neither dialectic, completion, surpassing, nor renewal, nor disappearance, nor any question regarding the 'essence' of the human.⁸⁴⁹

⁸⁴⁶ Jacques Derrida, "Faith and Knowledge: The Two Sources of 'Religion' at the Limits of Reason Alone," in *Acts of Religion*, trans. Samuel Weber (New York: Routledge, 2002), 56.

⁸⁴⁷ Andrew Santana Kaplan, "Toward an Apocalyptic Hauntology of Black Messianicity: Worldlessness, Trembling and the Gift of (Social) Death," *Chiasma: A Site for Thought* 7, no. 1 (2023): 41-68. <https://ojs.lib.uwo.ca/index.php/chiasma/article/view/16873>.

⁸⁴⁸ Balibar, "Eschatology versus Teleology," 70.

⁸⁴⁹ Herbrechter, *Posthumanism*, 22.

For Herbrechter, the ‘nonhuman other of futurity’ takes the space of a contingent ‘to-come’ that is aporetic and indeterminable. This ‘to-come’ would be distinct from both extrinsic and intrinsic purposiveness. The figure of ‘critical post-humanism’ aims towards a new terrain through aporia in the dual senses of the end(s) of (hu)manity: as both limit and technological overcoming. Yet, despite the promotion of aporia and porosity in Herbrechter’s post-humanism, his use of Derrida moves too quickly into a reformist attitude that shies away from the radical porosity of Derrida’s text towards a politics of recognition that pursues greater “interaction between human and nonhuman actors”⁸⁵⁰ in the reformulated understanding of a ‘posthuman humanity.’⁸⁵¹ Herbrechter’s position of humanity as a ‘radically open singularity’ makes this apparent. While this statement refuses humanity as the final cause of teleological metaphysics, the placement of humanity as ‘radical singularity’ understands humanity as the efficient cause of an aporetic and indeterminable future. The human is still the ‘radical singularity’ that makes post-humanism possible. Why, given the reconsideration of humanity as a ‘posthuman humanity’ should humanity be granted this special position as singularity? As singularity, humanity maintains a special place in any ‘non-teleological’ formulation. As Derrida suggests in his critique of humanism, the maintenance of humanity as efficient causality (towards its own limit) remains teleological. Elsewhere, Herbrechter writes that post-humanism signifies both “a desire or indeed a need to somehow go beyond humanism [... and] display an awareness that neither humanism nor the human can be overcome in any straightforward dialectical or historical fashion.”⁸⁵² Herbrechter embraces a humanistic reform where humanity is ‘re-written’ as ‘*anamnesis*’⁸⁵³ rather than overcome. While this aligns with certain aspects of Derrida’s writings, the notion of re-writing or *anamnesis* maintains humanity as the efficient cause of a ‘non-

⁸⁵⁰ Ibid., 194.

⁸⁵¹ Ibid., 213.

⁸⁵² Herbrechter, “Critical Posthumanism,” 94.

⁸⁵³ Anamnesis is an epistemological concept from the *Phaedo*, in reference to the drawing out or midwife of knowledge.

final’ or ‘non-purposive causality,’ which can be seen in Herbrechter’s appeal to a non-human *telos*. Humanity is the mid-wife of post-humanism. Despite the consistent use of aporia, this project falls back into questions of recognition in institutional frameworks, such as the play for a ‘future posthumanities,’⁸⁵⁴ without providing any account of a material or physiological aporetic genesis (only an ideological one). For Herbrechter, post-humanism is reduced to the recognition of the (post-)human condition. For instance, in thinking about post-humanism as an aporetic monstrosity, Herbrechter writes, “The challenge of posthuman monstrosity in the plurality of its forms requires a critical teratology in view of what Braidotti calls the latest episode within the process of ‘decentring’ Western thinking. Being human is now inevitably shown through with posthuman variables.”⁸⁵⁵ Yet, the indeterminacy of the ‘to-come’ in Derridean messianicity is not simply reducible to a human *telos* but to the teleological and purposive vision generated *from humanity* as the efficient cause of an indeterminate end. Thus, the appeal to *anamnesis* undermines attempts at anti-teleology: who or what is the efficient causality of this re-written *end*? The human, (as ‘radical singularity’), of course. Posing some end—whether this end be the post-humanities or more inclusive modalities of being—is a return to teleological practice by centring human decision making and rational capacities as efficient cause. A veritable post-humanism—even one that may inevitably work with Derrida in appealing to aporia, porosity, and indeterminacy—requires not only the critique of humanity as a final cause but humanity as efficient cause as well.

Science Fictions: The Anti-Teleologies of Haraway and Hayles

A critique of humanity as efficient cause might be found in the scholarship of Donna Haraway. Haraway’s ‘cyborg’ is positioned against both humanist and technological teleologies. Centring science fiction, they note that cyborgs are often foreclosed to an original unity with nature

⁸⁵⁴ Herbrechter, *Posthumanism*, 27.

⁸⁵⁵ *Ibid.*, 112.

and are taken as the *telos* of Western domination (over both women and nature) given that cyborgs signify ‘man in space’ as the final frontier of humanist domination.⁸⁵⁶ Haraway argues, however, that it might be possible to reclaim and affirm the lack of original unity as an affront to teleological finality: “The cyborg skips the step of original unity, of identification with nature in the Western sense. This is its illegitimate promise that might lead to subversion of its teleology.”⁸⁵⁷ Haraway raises the issue of teleology in feminism, suggesting that some feminists align their ideal political tendencies as the *telos* of feminism. This position imposes a teleological sameness across all women.⁸⁵⁸ Haraway offers Catherine MacKinnon’s radical feminism as an example, suggesting that MacKinnon erases differences between women.⁸⁵⁹ For Haraway, ‘difference’ supplants the logic of *telos*, such that “Epistemology is about knowing the difference.”⁸⁶⁰ The appeal to difference is affirmed in Haraway’s subsequent texts, with concepts like ‘diffraction’ and ‘sympoiesis’ working against the sameness of teleological ends.⁸⁶¹ Like Herbrechter, Haraway poses difference as open where teleology is closed.

For example, as mentioned in chapter 2, Haraway takes ‘diffraction’ in opposition to reflexivity and reflection. Where reflexivity only “displaces the same elsewhere” as a form of mimetic repetition, diffraction is posed as “an optical metaphor for the effect to make a difference in the world.”⁸⁶² Karen Barad has expanded on Haraway’s use of ‘diffraction’ through their reading of quantum physics. Here, diffraction describes wave superposition. In classical physics, particles are considered material, while waves are disturbances in oscillating fields.⁸⁶³ Unlike particles, waves

⁸⁵⁶ “In a sense, the cyborg has no origin story in the Western sense—a ‘final’ irony since the cyborg is also the awful apocalyptic *telos* of the ‘West’s’ escalating dominations of abstract individuation, an ultimate self united at last from all dependency, a man in space.” Haraway, *Simians, Cyborgs, and Women*, 150-151.

⁸⁵⁷ *Ibid.*, 151.

⁸⁵⁸ *Ibid.*, 156.

⁸⁵⁹ *Ibid.*, 158.

⁸⁶⁰ *Ibid.*, 161.

⁸⁶¹ Haraway, *Modest_Witness*, 16; Haraway, *Staying with the Trouble*, 33.

⁸⁶² Haraway, *Modest_Witness*, 16.

⁸⁶³ Barad, *Meeting the Universe Halfway*, 76.

overlap and form composite forms that result in a superposition or wave interference.⁸⁶⁴ Diffraction results from the interference: no longer a copy or original, but something “marked by patterns of difference.”⁸⁶⁵ Diffraction is important because it allows for something like an aporetic messianicity to centre material emergence without teleological finality. Barad even suggests that electron diffraction aligns with Derridean temporality:

Electron diffraction is evidence of the fact that an electron can be in *superpositions of states*—that is, an *electron* is not just in one place at a given time (like a particle) but in fact has an ontologically (*hauntologically*) indeterminate position and exhibits a material ghostly non/presence in *multiple places at the same time*.⁸⁶⁶

Electron diffraction speaks a spatiotemporal inseparability driven by difference to extend indeterminate spatiality and trouble classical physics and teleological notions of individuation.⁸⁶⁷

Unlike Herbrechter, Haraway’s promotion of difference and diffraction provides no special place for humanity. “A Cyborg Manifesto” steadfastly troubles dualistic thinking to undercut any separation between human and non-human: there is no appeal to human singularity here. Haraway’s recent work adopts the term ‘sympoiesis’ to think this mutually embedded difference. Sympoiesis attempts to think beyond second order cybernetic developments in ‘autopoiesis.’ Where autopoietic systems are autonomous and self-generating, Haraway claims that sympoietic systems are collective, intra-active, and entangled.⁸⁶⁸ Rather than a physiological or material diffraction in the nature of the human condition, however, Haraway’s appeal to difference aims to reform an understanding of humanity. Like Herbrechter, this is less a revolutionary step than a re-writing of the condition of humanity. Haraway notably focuses the power of storytelling as the basis for “modest possibilities of

⁸⁶⁴ Ibid., 78-9.

⁸⁶⁵ Ibid., 71

⁸⁶⁶ Barad, “Troubling Time/s and Ecologies of Nothingness,” 33.

⁸⁶⁷ Karen Barad, “Diffracting Diffraction: Cutting Together-Apart,” *Parallax* 20, no. 3 (2014): 168-187. <https://doi.org/10.1080/13534645.2014.927623>. 175.

⁸⁶⁸ Haraway, *Staying with the Trouble*, 33.

partial recuperation and getting on together.”⁸⁶⁹ They claim that storytelling is “Finished once and for all with Kantian globalizing cosmopolitics and grumpy human-exceptionalism Heideggerian worlding.”⁸⁷⁰ Instead, storytelling offers a ‘cosmopolitical’ structure of ‘multispecies relationships.’⁸⁷¹ For example, Haraway thinks through the ‘interspecies relatings’ of humans and pigeons to stress the way that humans and pigeons ‘infect each other,’ leading to changes in each’s being-in-the-world. Yet, the close of this ‘story,’ which focuses on how humans and pigeons might continue ‘getting on together’ is incredibly one-sided: a study of how human action, in the building of new infrastructure, would allow humans to compost Pigeon feces without fear of contamination.⁸⁷² Storytelling seems less a multispecies project than a unilateral project of human recognition: one that maintains humanity as the efficient cause of co-species ‘becoming together.’ This ultimately poses that thinking differently about human/non-human relationships is sufficient for producing material shifts towards companionship. While Haraway does push beyond Herbrechter’s emphasis on a human ‘singularity,’ their appeal to storytelling largely remains a politics of recognition where humanity maintains its position as efficient cause who needs to recognize their position within a greater whole. Such a project may undoubtedly work towards better relationships with non-humanity, but it remains inherently humanistic in centring human capabilities as the efficient cause of a more equitable relationality.

An alternative rendering of teleology is granted in N Katherine Hayles discussion of post-humanism and cybernetics. Like Herbrechter and Haraway, Hayles acknowledges the material embeddedness of humanity: “In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and

⁸⁶⁹ Ibid., 10.

⁸⁷⁰ Ibid., 11.

⁸⁷¹ Ibid., 19.

⁸⁷² Ibid., 28.

biological organism, robot teleology and human goals.”⁸⁷³ Yet, Hayles’ project is a distinct attempt to try and circumnavigate a ‘teleology of disembodiment’ occurring in the cybernetic use of bodies. Given the centring of cybernetics, Hayles’ discussion is focused on twentieth-century cybernetic notions of teleology rather than those of Aristotle, Kant, or Hegel. The Cybernetic sense of teleology refers to “a goal achieved through negative feedback.”⁸⁷⁴ Hayles finds the use of teleology by Rosenblueth, Wiener, and Bigelow notable because they maintain the historical baggage of that term:

Keeping a loaded term like teleology in play is not an innocent reinscription. It carries with it a sense of moving toward a goal meaningful to the system pursuing that goal, thus implying that meaning can exist for machines. It also suggests that the behaviorist project has a cosmopolitical dimension appropriate for sweeping vistas of time and space that teleology is usually taken to imply.⁸⁷⁵

Hayles emphasizes the importance of the history of teleology for cybernetics. Despite culling some of the more cosmological aspects, the cybernetic use of teleology maintains a grand design. They continue:

The authors reinforce these implications when they point out that teleology fell into scientific dispute because it posits a ‘final cause’ that exists in time *after* the effects it is supposed to bring about. Their version of teleology circumvents this problem; it does not rely on Aristotelean causality of *any kind* but only on *purposeful action* toward a goal. They suggest that the opposite of teleology is not deterministic causality but is non teleology, that is, random behavior that is not goal-directed [...] The important tension now is not between science and God but between purpose and randomness.⁸⁷⁶

The refusal of divine causality is notable because it suggests that cybernetic teleology is like Hegelian teleology. Cybernetic teleology is not dependent on the primary causality of a prime mover but emerges as immanently generated purposive actions through feedback. Furthermore, this use of

⁸⁷³ Hayles, *How we Became Posthuman*, 3.

⁸⁷⁴ *Ibid.*, 94.

⁸⁷⁵ *Ibid.*, 94-95.

⁸⁷⁶ *Ibid.*, 95, emphasis added.

teleology accurately separates the categories of teleology and determinism by understanding teleology as purposive behavior. Cybernetic teleology requires a stronger critique than those henceforth generated because it is not necessarily opposed to contingency and openness. Through Hayles' account it is possible to suggest that a critique of cybernetic teleology would also serve as a critique of Hegelian teleology. Hayles uses Humberto Maturana and Francisco Varela's notion of autopoiesis (the very autopoiesis denounced by Haraway) to critique first-order cybernetics for presenting teleology as an inference made by an observer on an auto-poietic process.⁸⁷⁷ Here, human consciousness is not granted control but only offers a descriptive account of phenomena. This allows Hayles to present post-humanism as an alternative to teleology:

Emergence replaces teleology; reflexive epistemology replaces objectivism; distributed cognition replaces autonomous will; embodiment replaces a body seen as a support system for the mind; and a dynamic partnership between humans and intelligent machines replaces the liberal humanist subject's manifest destiny to dominate and control nature.⁸⁷⁸

Yet, once again, the promise found in the critique of teleology—which can, as in Derrida, be found in an aporetic emergence—is conflated with a politics of recognition: binding the onto-epistemological claim to the normative one. Hayles' position is that the domination of nature is the result of a faulty, objectivist epistemology. This would mean that a shift in epistemology would, simultaneously, bring about a more harmonious relationship with nature. Hayles appeals to human cognition—in epistemology—as the efficient cause of contemporary domination: a domination that could end through a change in cognition. If only humanity were to recognize its ontological grounding (in emergence and embodiment) with/in a complex ecological structure, then humanity would be able to bring about a dynamic partnership with the non-human others. In thinking these aspects together, Hayles once again falls back into a teleological and purposive structure that takes

⁸⁷⁷ *Ibid.*, 139.

⁸⁷⁸ *Ibid.*, 288.

humanity as the efficient cause of change through rationalization: thinking differently becomes the central aspect of embodied change.⁸⁷⁹

Herbrechter, Haraway, and Hayles each provides theoretical alternatives to humanist teleology. Herbrechter's strength is found in the pursuit of aporia, porosity, and indeterminacy: the opening of an undetermined and dark future. Haraway's strength is found in the appeal to difference and diffraction: the resistance to sameness and universality present in the liberal subject. Hayles' strength is found in understanding that teleology should not be reduced to closedness and determinacy, but instead understands cybernetics as at once teleological, open, and contingent. Yet, in each of their critiques of teleology there is a consistent appeal to a reformed notion of the human, which maintains humanity as the efficient cause of a non-human or post-human future. This occurs through different stages. To use a term developed in the work of Nandita Biswas Mellamphy, Herbrechter's use of humanity as singularity maintains the human as 'in-the-loop' of control: the central decision maker, efficient cause, and nexus of future action.⁸⁸⁰ In contrast, Haraway and Hayles attempt to depart from humanity as efficient cause by thinking about the human as just another actor within auto-poietic (Hayles) or sympoietic (Haraway) process. Both might be considered as taking the human to be 'on-the-loop' of control: as one among many actors in a more democratic emergence of futurity. Yet, for each the appeal to reform within a politics of recognition largely maintains the teleological structure, where human thought ultimately remains the efficient cause generative of a final causality (or purposiveness), even if the human is not the singular decision maker in this development. As in Hegel, Haraway and Hayles retain the human within the mediative process of teleological development. The way 'out-of-the-loop' requires a distinct shift against the most difficult cybernetic and Hegelian variants of teleology.

⁸⁷⁹ For a more thorough critique of this sort of position, see chapter 3.

⁸⁸⁰ Biswas Mellamphy, "Humans 'in-the-loop?'"

A Critique of Hylomorphic Teleology

In Kant, teleology works through the regulative capacity of thought to determine the purposiveness of nature. Thus, critical post-humanism's critique of a separated ontology and reflective epistemology attempts to undermine Kant's humanistic corpus (see chapter 1). Yet, as shown in the discussion of 'ethical life' (chapter 2), it is more difficult to apply this critique to Hegel, given that his system works towards the development of a teleology that is internal to the dialectical process. In this manner, the relationship between Kant and Hegel is reminiscent of Plato and Aristotle: Plato poses intelligible forms [*eidōs*] as substance, which is determinate of matter [*hylē*]. In contrast, Aristotle's hylomorphic schema provides a more complex relationship where substance is constituted in the compound of form [*eidōs*] and matter [*hylē*]. Hegel provides a similar contrast with Kant. Where Kant posits thought as the reflexive determination of nature and transcendental final causality, Hegel posits the unity of thought and nature as determinate of his internally derived final causality. Thus, where Kant's thought unilaterally recognizes final causality through reflective judgement, Hegel takes final causality as determined through the unity—or compound—of thought and nature in the dialectical progression of spirit [*Geist*]. Where Plato and Kant offer a unilateral determination, Aristotle and Hegel propose individuation through compounded mediation. This account is undoubtedly simplistic (lacking a proper understanding of Aristotle's influence on Kant, for instance) but it serves to show how Hegel attempts to distance his project from Kant. What I would like to suggest is that a critique of Hegelian teleology can be made by linking the teleological aspects of Hegel's philosophy to Aristotelean hylomorphism. Thus, the critique of teleology would emerge with a critique of hylomorphism.

Teleology as Hylomorphic

Aristotle's influence on Hegel is well documented. Hegel was fond of lecturing on *De Anima*, even suggesting that "The main aim [*wesentliche Zweck*] of a philosophy of Geist can only be to

reintroduce [*wieder einzuführen*] a self-determining principle of life [*Begriff*] into the theory of mind, and so reinterpret the lessons of those Aristotelean books.”⁸⁸¹ Various aspects of Hegel’s architectonic reflect Aristotle’s philosophy, with many of his innovations finding their implicit root in Aristotle.⁸⁸² Some recent studies denote a hylomorphic reading of Hegel through the development of inner purpose as an immanent individuation determined by the compounding of parts and wholes.⁸⁸³ These accounts centre Hegel’s adaptation of Aristotle’s ‘soul’ into the development of spirit. For instance, Allegra de Laurentiis notes that Hegel’s ‘hylomorphism’ can be read through his immanentist teleology, which “goes beyond his alleged theoretical question for the ‘reconciliation’ of oppositions. Rather than the unification [*Versöhnung*] of ontologically opposite principles, Hegel’s stress is on the internal diremption of the soul’s original unity [*Einheit*]*—*a unity that exists despite the diremption and, thanks to it, is actually a living unity.”⁸⁸⁴ At least in the account of teleology, sublation [*Aufheben*] stresses a unity that emerges through its own separation. Hegel’s teleology thinks less in terms of oppositional mediation, and more in terms of an internal separation unified in its sublation. The ‘original unity’ of the soul divides into nature and thought before its sublation and unity in ethical life. Such a unity works through an attempt to integrate Aristotelean hylomorphism into a more dynamic structure: where the actuality [*entelechia*] of the soul emerges through the sublation of the immaterial and material.

Aristotle innovates on his precursors by suggesting that form is not alien to matter but alive within it. Form is not unilaterally imposed onto matter as an extrinsic cause but constitutes the awakening of potentialities [*dunamis*] in matter. This is described psycho-somatically: “the necessity that *psuchē* be understood as the first entelechy of the right kind of *sōma*, that is, of a physical entity

⁸⁸¹ Hegel cited in Gerad Gentry, “The Concept of Life in German Idealism and Its Aristotelean Roots,” *Intellectual History Review* 31, no 3(2021): 382. <https://doi.org/10.1080/17496977.2021.1957328>.

⁸⁸² Paul Humphrey notes that several aspects of Hegel’s innovation are implicit in Aristotle, such as the transformation of Aristotle’s ‘unmoved mover’ into Hegel’s ‘self-moving mover.’ See Humphrey, “Metaphysics of Mind,” 71.

⁸⁸³ Such as Gentry, “The Concept of Life,” and de Laurentiis, *Hegel’s Anthropology*.

⁸⁸⁴ De Laurentiis, *Hegel’s Anthropology*, 6.

with the potential to become alive.⁸⁸⁵ For Aristotle, the soul awakens through the compounding: the actuality [*entelechia*] that reveals form [*eidos*] as emergent from potentiality [*dunamis*] in matter [*hyle*]. Hegel continues this trajectory by taking spirit as the successive actualization of the soul's potentialities as they are actualized through processes of diremption, sublation, and unity.⁸⁸⁶ Hegel's immanent notion of individuation implicates natural potentialities into actualized spirit. As in Aristotle, the formal and material causes are compounded in the process of individuation.

This account provides a link between a hylomorphic and teleological reading of Hegel: one where Hegel takes Aristotle's soul as historical spirit. In the immanent development of intrinsic purposiveness, the formal cause (spirit) is informed through its sublation with the material cause (nature). Here, actuality emerges as the compound or unity of the living body [*sōma*] and soul [*psuchē*]. As Paul Humphrey notes, the realization of the formal cause in the hylomorphic schema serves, simultaneously, as the final cause for teleology. This is what most closely unites Hegel and Aristotle.⁸⁸⁷ The formal cause, awakened through Hegel's immanent rendering, determines the process as final causality. On this point, de Laurentiis notes that Aristotle's teleology is a form of 'entelechism'—defined as the compound of form [*eidos*] and matter [*hyle*] found in the actualization [*entelechia*] of potency [*dunamis*] through sublation—that Hegel expands upon through the development of an immanently derived final causality.⁸⁸⁸ As discussed in chapter 2, Hegel offers an immanent, internal, or intrinsic teleology. There is no extrinsic designer pulling the strings. For Hegel, internal purposiveness—one occurring through immanent design—serves as both the formal and final cause of teleology. Finality, purpose, or end develops in and through spirit's inter-relational sublation of material and immaterial, nature and thought. The objective becoming of the idea as *in*,

⁸⁸⁵ Ibid., 50.

⁸⁸⁶ Ibid., 52.

⁸⁸⁷ Humphrey, "Metaphysics of Mind," 12.

⁸⁸⁸ De Laurentiis, *Hegel's Anthropology*, 15.

for, and *through itself* serves as the determination of finality, which emerges in the dialectical process. Hegel promotes an internally derived final cause—a *telos*—that formally emerges through his hylomorphism. If Hegel's teleology is linked to hylomorphism, then a critique of hylomorphism is concurrent with a critique of teleology.⁸⁸⁹

Simondon contra Hylomorphism

Gilbert Simondon's critique of Aristotle's hylomorphism offers a forceful affront to Hegel's more difficult rendering of teleology. Simondon is useful given that 1) his development of 'pre-individuality' and 'metastability' provide an account of emergence in line with the indeterminacy of Derridean aporia, while 2) his notion of 'transduction' provides a non-dialectical theory of individuation at odds with both hylomorphism and cybernetic teleology. Simondon's critique of hylomorphism and account of individuation have been described as a "transmutation of how we approach being"⁸⁹⁰ because Simondon challenges Western philosophy's conflation of 'being' and 'individuated being.' Simondon's philosophy provides an account of 'ontogenesis.' While this could be understood as "ontologically productive being,"⁸⁹¹ a stronger definition would understand 'ontogenesis' by way of 'ontogeny.' Ontogeny derives from the Greek for being [*on*] and genesis [*genia*]. Typically, biological studies in ontogeny prioritize the individual over the process of individuation. In contrast, Simondon understand 'ontogenesis' as centring the process of individuation to understand the genesis of being. Thus, the study of ontogenesis focuses on the processes, rather than the stability of, ontology. Simondon provides the following definition.

⁸⁸⁹ Even the most ambitious of Hegel scholars adopts a hylomorphic tendency. For instance, Catherine Malabou's descriptions of 'plasticity' work from Canguilhem to think about "giving the function of a form" or to "designate the act of giving form." Plasticity works by giving form of matter: "'Plastic,' as an adjective, means two things: on the one hand, to be 'susceptible to changes of form' or malleable (clay is a 'plastic' material); and on the other hand, 'having the power to bestow form, the power to mould,' as the expressions 'plastic surgeon' and 'plastic arts' [...] being at once capable of receiving and giving form." Malabou, *The Future of Hegel*, 8.

⁸⁹⁰ Muriel Combes, *Gilbert Simondon and the Philosophy of the Transindividual*, trans. Thomas Lamarre (Cambridge: MIT Press, 2013), 1.

⁸⁹¹ Such is the definition of 'ontogenesis' given by Brian Massumi, *Ontopower: War, Powers, and the State of Perception* (Durham: Duke University Press, 2015), 148.

The word ontogenesis takes on its full meaning if, instead of granting it the restricted and derived sense of the individual's genesis (in opposition to a vaster genesis, for example that of the species), it is made to designate the nature of the being's becoming, that through which the being becomes insofar as it is, qua being [...] unity and identity merely apply to one of the phases of being, posterior to the operation of individuation; these notions cannot help us discover the principle of individuation; they do not apply to ontogenesis understood in the full sense of the term, i.e. to the becoming of the being qua being which splits and phase-shifts while individuating.⁸⁹²

Using this description, Simondon suggests that ontological accounts of hylomorphism and substantialism prioritize individuals over individuation. These accounts lack a proper understanding of ontogenesis.⁸⁹³ One might contrast Simondon and Aristotle. Both agree that to understand a 'being,' one must understand that being in its actuality [*entelechia*]. Aristotle takes 'substance' (or essence) to be the hylomorphic compound of formal actuality [*entelechia*] and material potency [*dunamis*]. In *Metaphysics* IX, actuality is given ontological priority over potency.⁸⁹⁴ This priority posits being as a stable form, which is only secondarily affected by potency. In other words, stable actuality is granted substantial priority, while potency is only understood through changes in that actuality.⁸⁹⁵ In contrast to actuality, *Metaphysics* IX aligns potency with movement and becoming. Actuality is given when potency is incomplete.⁸⁹⁶ Potency is aligned with the accidental instability that produces becoming.⁸⁹⁷ This informs the relationship between form and matter: both form and actuality are

⁸⁹² Simondon, *ILNFI*, 5.

⁸⁹³ *Ibid.*, 1.

⁸⁹⁴ Charlotte Witt notes that actuality is taken as prior to potentiality in several sense: definition [*logos*], being [*ousia*], and time. See Charlotte Witt, *Ways of Being: Potentiality and Actuality in Aristotle's Metaphysics* (Ithaca: Cornell University Press, 2003), 78.

⁸⁹⁵ See Aristotle, *Metaphysics*, 828. This priority is integral to the argument for a prime mover in *Metaphysics* XII, suggesting potency as accidental effects that attempt to emulate the actuality of primary substance. See, for instance, David Sedley, "Teleology, Aristotelean and Platonic," in *Being, Nature, and Life in Aristotle*, ed. James G Lennox and Robert Bolton (Cambridge: Cambridge University Press, 2010). Witt suggests that Aristotle promotes hierarchy between actuality and potency, given that perishable beings—namely, those which only emulate but can never achieve permanence—are taken as diminished and defective. This, Witt suggests, impacts Aristotle's hylomorphic rendering of gender: While men and women are both taken as substance (that is a composite of form and matter, despite form being taken as male and matter as female), Witt argues that Aristotle sees women as incomplete, less actualized, and diminished. For instance, "Aristotle thinks that female animals, as a group, are functionally incomplete with regard to the animal function of reproduction." See Witt, *Ways of Being*, 111.

⁸⁹⁶ Aristotle, *Metaphysics*, 827.

⁸⁹⁷ *Ibid.*, 833.

taken as given, while matter and potency lack resolution.⁸⁹⁸ In contrast, Simondon's understanding of actuality dispenses with this division altogether. In the essay "Technical Mentality," he writes, "If one wants to understand a being completely, one must study it by considering its entelechy, and not in its inactivity or static state."⁸⁹⁹ From an Aristotelean perspective, this is curious, given that it contrasts actuality/entelechy with stasis. Where for Aristotle unstable potency acts upon a stable actuality, for Simondon potentiality *is* actuality. Actuality and potentiality are not distinct parts of a dialectically generated process of becoming but constitute the same entelechy. For Simondon, Aristotle's use of actuality requires an extrinsic potency for change to occur.⁹⁰⁰ Aristotle privileges both stable 'being' and the 'individual' as given, insofar as the individual in its stable actuality is granted ontological priority over changes that might take place.

Aristotle's writings affirm that hylomorphism prioritizes stable actuality to accidental change. Take, for example, *Metaphysics Z VIII*, where primary substance in a brick is taken as the hylomorphic compound of form and matter.⁹⁰¹ Aristotle initially presents the compound of form and matter (i.e. substance) as having ontological priority, noting "substance is the starting point of everything."⁹⁰² Yet, Aristotle consistently presents stable substance as constituting stable actuality, with change (i.e. potency) functioning as an extrinsic instability. It follows that individuation is only a secondary process caused by extrinsic instability or potency. Aristotle's soul-body hylomorphism both testifies to and complicates this hierarchy. Book XI of *Metaphysics Z* aligns the soul with primary substance: "it is also that the soul is the primary substance and the body is matter."⁹⁰³ This

⁸⁹⁸ See Witt, *Ways of Being*, 111-112. On the relationship of matter and potency, see also Russel L Friedman, "Is Matter the Same as Its Potency? Some Fourteenth-Century Answers," *Vivarium* 59, no. 1-2(2021): 123-142, <https://doi.org/10.1163/15685349-12341400>.

⁸⁹⁹ Simondon, "Technical Mentality," In *Gilbert Simondon: Being and Technology*. Edited by Arne de Boever, Alex Murray, Jon Roffe, and Ashley Woodward (Edinburgh: Edinburgh University Press, 2015), 4.

⁹⁰⁰ Simondon, *ILNFI*, 183.

⁹⁰¹ Aristotle, *Metaphysics*, 785.

⁹⁰² *Ibid.*, 786.

⁹⁰³ *Ibid.*, 801.

again suggests a hierarchical division where matter is taken to be both a part of and yet excluded from substance. *De Anima* further complicates this relationship, again aligning the soul with form and the body with matter: “the soul must be a substance in the sense of the form of the natural body having life potentially within it.”⁹⁰⁴ Thus, while both texts contend the compound of form and matter as primary substance, soul-body hylomorphism contradicts this claim by affirming the priority of form over matter as the soul (both form and primary substance) is granted priority over the body and matter. It follows that while Aristotle’s schema contends the actualized individual as determined through the compound of formal and material causes, these causes remain hierarchized states of being. The brick’s actuality is realized when the clay’s potency is actualized in the brick; the soul is actualized when the potentialities of the body are actualized in the soul. Yet, both the brick and the soul in their actuality are granted ontological priority over material causality and potentiality.

Simondon’s account of ontogenesis takes issue with the assumption that actuality is stability. In contrast to Aristotle, his epistemological position works ‘operationally’ or through ‘allagmatics.’ ‘Allagmatics’ takes being as ‘metastable’ rather than stable or unstable. These terms must be understood together. Adopted from technical discourse, Simondon’s use of ‘operation’ refers to a focus on processes rather than stable states. Simon Mills suggests that this is an epistemic refusal of static and substantial structures.⁹⁰⁵ By prioritizing stable and abstracted individuals, substance metaphysics and hylomorphism obstruct the operation of individuation. Hylomorphism accounts for what goes in and what comes out but not the process of individuation itself. The abstraction of ‘form’ and ‘matter’ obscures the processes of becoming in what Simondon refers to as the ‘dark zone’ of individuation.⁹⁰⁶ The actual process of individuation found in this ‘dark zone’ cannot be

⁹⁰⁴ Aristotle, *De Anima*, 555.

⁹⁰⁵ Mills, *Gilbert Simondon*, 24.

⁹⁰⁶ Simondon, *ILNFI*, 3.

adequately represented by the matter-form pairing.⁹⁰⁷ Twentieth-century physics—specifically quantum mechanics—reveals a plasticity immanent to matter. These findings show that the technical operation does not apply an active ‘form’ onto a passive ‘matter,’ which would suggest that form is given to matter (for instance, in the suggestion that the form of a brick is given to the clay). Instead, the technical operation is framed through the dynamic mediation of potentialities that are already present in the clay, which are *limited* by the mold.⁹⁰⁸ Where Aristotle presents matter as being transformed by form, Simondon argues that individuation is the meeting of plastic and elastic forces: an elastic mold intervenes on the clay’s plasticity. Form adds nothing to the clay, given that the mold is a limit rather than an addition.⁹⁰⁹

Just as in Hegel, Simondon provides an intrinsic understanding of the process of individuation.⁹¹⁰ The shift from centring ‘being’ to ‘operation’ is consistent with Simondon’s ‘allagmatic epistemology.’ ‘Allagmatics’ derives from the Greek for change or vicissitude [*allagma*].⁹¹¹ Allagmatics distinguishes Simondon’s project from structuralism, given that allagmatics also comes to inform the structural tendencies of production.⁹¹² Simondon defines allagmatics as a “theory of operations. In the order of sciences, it is symmetrical with a theory of structures and is constituted by a systematized set of particular knowledge.”⁹¹³ Centring operations, allagmatics start from a metastable equilibrium that speaks to the potentialities intrinsic to being, as revealed by physics. Neither stable actuality [*entelechia*], nor unstable potency [*dunamis*], being is metastable. Instead of

⁹⁰⁷ Ibid., 22.

⁹⁰⁸ Ibid.

⁹⁰⁹ Ibid., 27.

⁹¹⁰ Ibid., 28.

⁹¹¹ Taylor Adkins, “A Short List of Gilbert Simondon’s Vocabulary,” *Fractal Ontology* (blog) (2007): <https://fractalontology.wordpress.com/2007/11/28/a-short-list-of-gilbert-simondons-vocabulary/>.

⁹¹² Namely that the structure itself undergoes an allagmatic structuration. See David Scott, *Gilbert Simondon’s Psychic and Collective Individuation: An Introduction* (Edinburgh: Edinburgh University Press, 2014), 10.

⁹¹³ Simondon, *ILNFI vol 2*, 663.

taking being as a sublation of form [*eidos*] and matter [*hylē*], metastability attests to their being information, which consists in the system's potential energy.⁹¹⁴

Pre-individual Reality and Transductive Individuation

A proper critique of Hegelian teleology and hylomorphism requires a more thorough account of individuation and ontogenesis. Hylomorphism presumes being as prior to becoming or becoming as extrinsic to being. This is true even of cybernetics. As Andrew Iliadis has shown, Simondon's work provides a rich and understudied engagement with information theory and cybernetics.⁹¹⁵ This is perhaps best shown through his organization of the Sixth Symposium at Royaumont, on information theory and cybernetics, which Norbert Wiener attended in 1962.⁹¹⁶ As Iliadis notes, cybernetics applies mathematical theories to communication and information: the attempt to compose a closed system with negative and positive feedback loops. Simondon is critical of cybernetics for reducing information to a 'negentropic order' that is only capable of thinking quantitatively.⁹¹⁷ This quantitative rendering of information can be understood as hylomorphic given that information is taken to be completely actualized and without potential. For cybernetics, transformation in information exchange requires extrinsic intervention.⁹¹⁸ In contrast, the metastable and ontogenetic aspects of Simondon's theory of information speak to an immanent dimension, which Iliadis terms 'internal information.' By this Iliadis means that information has an immanent generation and dimension not covered by the extrinsic properties of signals and signs.⁹¹⁹ There is a metastability—rather than stability or instability—at the heart of information.

⁹¹⁴ Both in-formation and information. Simondon, *ILNFI*, 16.

⁹¹⁵ Andrew Iliadis, "Information Ontology: The Meaning of Gilbert Simondon's Concept of Individuation." *Communication + 2*, no. 1(2013): 1-19. <https://doi.org/10.7275/R59884XW>.

⁹¹⁶ See Iliadis et al., "Book Symposium on *Le concept d'information dans la science contemporaine*."

⁹¹⁷ Simondon, *ILNFI*, 245. See also Andrea Bardin, *Epistemology and the Political Philosophy of Gilbert Simondon: Individuation, Technics, Social Systems* (Dordrecht: Springer, 2015), 29.

⁹¹⁸ Bardin, *Epistemology*, 30.

⁹¹⁹ Iliadis, "Information Ontology," 11.

Simondon's account of ontogenesis relies on the idea of a 'pre-individual reality' that is ontologically prior to individuals. He uses the concept of 'pre-individual being' to describe this informational dimension of potentiality immanent to being. He proposes that instead of an extrinsic force, becoming is an immanent part of being that provides the capacity to shift between phases of being. In his words, "pre-individual being is being in which no phase exists."⁹²⁰ Simondon is quite explicit that pre-individual being is distinct from 'unity' (or compound) given that unity relies on already individuated being and identity. Unlike many other concepts in Simondon's work, pre-individual reality is a theoretical hypothesis that is based on, but cannot be directly shown by, quantum physics.⁹²¹ Niels Bohr's theoretical work on complementarity and diffraction attest to the pre-individual potentialities of individuation and becoming in relation to a field.⁹²² Pre-individual being serves as the basis for individuation, which in turn is the basis of individuals.⁹²³ Simondon expresses this dimension through Anaximander's concept of the *apeiron*. His description is notable for taking *apeiron* as both analogous to the pre-individual and nature while also refusing to separate humanity from nature:

The individuated being bears with it a possible future of relational significations to be discovered: the pre-individual is that which founds the spiritual in the collective. One could call *nature* this pre-individual reality that the individual bears with it by seeking to rediscover in the word nature the significations that the pre-Socratic philosophers gave it: the Ionian physiologists found in nature the origins of all types of being prior to individuation; nature is the *reality of the possible*, in the form of this *apeiron* from which Anaximander makes every individuated form emerge: Nature is not the contrary of Man, but the first phase of being, while the second phase is the opposition of the individual and the milieu, the complement of the individual relative to the whole.⁹²⁴

⁹²⁰ Simondon, *ILNFI*, 4.

⁹²¹ *Ibid.*, 370.

⁹²² *Ibid.*, 6, 370. On this point, Simondon writes "In physics, there is a pre-individual being and a post-individual being; a photon disappears and becomes the structural change of an atomic edifice, or instead it changes wavelength, as if it had become other. Individuality becomes functional in the same way; it is not the sole aspect of reality but a certain function of reality." *Ibid.*, 371.

⁹²³ *Ibid.*, 12.

⁹²⁴ *Ibid.*, 343.

The term *apeiron* remains contentious.⁹²⁵ Contemporary scholarship relies on recapitulations of Anaximander in Plato and Aristotle to understand the term. Through these recapitulations, the term is most accurately understood as something finite and natural but nonetheless unlimited. To this extent, Simondon's account largely aligns with contemporary scholarship, given that pre-individual reality is immanent to, rather than extrinsic from, being. A key difference, however, is that scholarship is largely in agreement that *apeiron* does not indicate indeterminacy. Simondon's alliance of the pre-individual with superpositioned states suggests that his use of the term does posit pre-individual reality as indeterminable.⁹²⁶ If not indeterminate, Simondon at least links *apeiron* with the undetermined,⁹²⁷ and suggests that it gives rise to tensions that allow for the individuation of phases of being.⁹²⁸

The production of individuals, through individuation, emerges from tensions in pre-individual being.⁹²⁹ This process is termed transduction. Simondon defines transduction as “a physical, biological, mental, or social operation through which an activity propagates incrementally within a domain by basing this propagation on a structuration of the domain operated from one region to another.”⁹³⁰ In common with other theories of individuation, transduction works through the resolution of tensions. Yet, unlike hylomorphic understandings of production, where form emerges as the stable resolution through the compound or unity of tensions, a transductive resolution of ‘pre-individual tension’ is never fully resolved. This is due to the indeterminate nature of pre-individual potentiality, which “appears initially as an ontogenetic incompatibility but is in actuality merely the other side of the wealth of potentials.”⁹³¹ Thus, while transduction is the operational

⁹²⁵ See for instance, Andrew Gregory, *Anaximander: A Re-assessment* (London: Bloomsbury, 2016).

⁹²⁶ Simondon, *ILNFI*, 6.

⁹²⁷ *Ibid.*, 237, 283.

⁹²⁸ *Ibid.*, 348.

⁹²⁹ *Ibid.*, 14.

⁹³⁰ *Ibid.*, 13.

⁹³¹ *Ibid.*, 15.

resolution of pre-individual ‘problems,’ the inherent incompatibility presented by its indeterminacy never provides a fully resolved actuality. In this way transduction is distinct from both deduction and induction: deduction for requiring an extrinsic condition for resolution (from general to specific); induction for a quantitative conservation of terms (from specific to general).⁹³² For Simondon, this incompatibility signals the need to shift from a discussion of stable ‘form’ to metastable ‘information.’ This use of in(-)formation makes possible the unresolved (or irresolvable) resolution present in transduction.⁹³³ Furthermore, transduction is notable for explaining the co-individuation of disparate ‘phases’ of being and types of individuation. As Iliadis states, “Transduction indicates the meeting of two disparate informational realms and signals the beginning of the process of individuation.”⁹³⁴ Unlike dialectical resolution, which envelops a contradiction in sublation, transduction maintains asymmetry in its development to allow for a mutual, continued development: “In transductive thought, *there is no result of a synthesis but merely a complementary synthetic relation*; synthesis is not effectuated; it is never achieved; there is no synthetic rhythm because, insofar as the operation of synthesis is never effectuated, it cannot become a new thesis.”⁹³⁵ This provides the ground for a continuous distribution of individuations that cut across each other through reciprocal interactions. Transduction happens without enveloping nor collapsing the distinct phases of being. Instead of a mutual envelopment or sublation, the distinct phases of being enter into a co-individuation through their mutual rapport. This ‘rapport’ is described as a ‘singularity’ of communication between distinct orders or phase of being.⁹³⁶ A proper rapport is needed for the mutual benefit of distinct phases. For instance, in several of his writings, Simondon identifies contemporary alienation as being due to an inadequate rapport between the evolution of humanity

⁹³² Ibid.

⁹³³ Ibid., 16.

⁹³⁴ Iliadis, “Information Ontology,” 12-13.

⁹³⁵ Simondon, *ILNFI*, 111.

⁹³⁶ Ibid., 162. This singularity is distinct from Herbrechter, given that it is not a stable individual but a rapport.

and the evolution of technical objects.⁹³⁷ A proper rapport between distinct phases of evolution is necessary for their mutual co-individuation.

There are at least four prominent understandings of ‘pre-individual reality.’ These are worth exploring given that they not only provide a distinction with Hegel, but also show why Simondon might be useful to critical post-humanism as a complementary alternative to Marx and Deleuze. Three of these understandings—those promoted by Paolo Virno, Muriel Combes, and Bernard Stiegler—understand pre-individual being in relationship with the ‘transindividual,’ which is itself a notable example of ‘transduction’ in Simondon’s work. The transindividual is prominent in the second half of *Individuation in Light of Notions of Form and Information*, focusing on the transductive rapport of psychic and collective forms of individuation (the individuation of subjects and society, respectively). The ‘transindividual’ is explicitly distinguished from the ‘interindividual,’ which describes something like a group of independent individuals coming together.⁹³⁸ In this manner, the ‘interindividual’ might be considered along the same lines as ‘interconnection’: a group consisting of distinct individuals coming together. Simondon works to explain the concept of the ‘transindividual’ through a discussion of ‘anxiety.’ Rather than a group, the transindividual emerges through the solitude of an individual who calls herself into question.⁹³⁹ In Simondon’s work, ‘anxiety’ is a feeling that emerges in a self-conscious being who, upon becoming aware that they are ‘incomplete’ or unresolved (which is to say, rather than an individual ‘they’ remain a process undergoing individuation), fears that they will never achieve actualization as a fixed or stable individual.⁹⁴⁰ As Igor Krtolica notes, ‘anxiety’ emerges when the self-conscious being searches “in vain for resolution

⁹³⁷ Gilbert Simondon, “The Limits of Human Progress: A Critical Study,” trans. Sean Cubitt, *Cultural Politics* 6, no. 2 (2010): 229-236, <https://doi.org/10.2752/175174310X12672016548405>. See also Simondon, *MEOT*.

⁹³⁸ Simondon, *ILNFI*, 312.

⁹³⁹ *Ibid.*, 313.

⁹⁴⁰ *Ibid.*, 283.

within itself.”⁹⁴¹ Yet, the ‘interindividual’ or group is incapable of resolving the tensions of anxiety because the group is the annihilation of the individual in favor of the group. The ‘individual’ cannot find its resolution in itself, as individual, nor in the group, as interindividual. It is from this tension, and not in spite of it, that ‘transindividuality’ emerges as a distinct type of individuation closer to intra-action. Simondon writes that ‘transindividuality,’ “*surpasses the individual by extending it*: the transindividual is not exterior to the individual and yet becomes detached to the individual to a certain extent.”⁹⁴² I take this to suggest that, rather than the individual’s envelopment into a group (which would present the transindividual as extrinsic to the individual), the ‘transindividual’ type of individuation resolves as sociality in the mutual rapport of the distinct phases of individual individuation and group individuation. Simondon writes, for instance, “the transindividual does not localize individuals: it makes them coincide, it makes them communicate through significations.”⁹⁴³ Transindividuality is not the mediation nor the sublation of the individual and collective. Instead, transindividuality ‘cuts’ across the individual and collective, and is constitutive of their rapport as distinct (rather than sublated) phases of being. For this reason, Simondon will simultaneously suggest that “individuals are both animated and determined by the group”⁹⁴⁴ but that “[t]he collective’s signification is both transcendent and immanent relative to the anterior individual.”⁹⁴⁵ The individual and interindividual consist as two distinct and anterior phases of individuation, but which can be mutually affected by their mutual rapport in transindividuation, which cuts across both phases. Given this rapport, the transindividual is taken as a ‘transductive operation’ that might be said to ‘transverse’ (transduct + traverse) a pre-individual reality of psychic individuation up through

⁹⁴¹ Igor Krtolica, “The Question of Anxiety in Gilbert Simondon,” in *Gilbert Simondon: Being and Technology*, ed. Arne de Boever, Alex Murray, Jon Roffe, and Ashley Woodward (Edinburgh: Edinburgh University Press, 2013), 74.

⁹⁴² Simondon, *ILNFI*, 314.

⁹⁴³ *Ibid.*, 339.

⁹⁴⁴ See *Ibid.*, 342.

⁹⁴⁵ *Ibid.*, 343.

collective sociality. Rather than ‘interindividual,’ individuation cuts across an “intra-individual psychological problematic [which] leads to the level of the transindividual.”⁹⁴⁶

The first interpretation of ‘pre-individual’ reality is Paolo Virno’s naturalistic rendering. Virno considers the pre-individual as a “quota of reality [which] persists in every subject alongside the individualized component.”⁹⁴⁷ Virno takes pre-individual reality as ontologically prior to the individual and the collective.⁹⁴⁸ Individuation is taken as an operation that is never concluded, while working towards the production of individualized singularities.⁹⁴⁹ Jason Read terms this a ‘naturalistic approach’ because it aligns ‘being’ with a the pre-individual potentialities that can only become actualized in history.⁹⁵⁰ For instance, Virno names pre-individual ‘nature’ as a “generic biological endowment” that can only be individuated through historical (that is to say human) forces.⁹⁵¹ This natural endowment, which Virno aligns with language, habit, and productive forces, constitutes the potentialities that are actualized through collective, historical forms of individuation.⁹⁵² For Virno, pre-individual ‘nature’ is aligned with the physiological conditions of embodiment, which resolve through psychic and collective individuation. Read suggests that Balibar’s understanding of ‘transindividuality’ adopts a similar position to Virno, given that he considers pre-individual being as a human ‘nature’ that is only ever actualized through historical

⁹⁴⁶ Ibid., 179. Simondon’s use of ‘intra-individual’ should be noted, given Barad’s notion of ‘intra-action.’ As Andrea Bardin has suggested, more research on the relationship between Simondon and Barad is necessary. See Andrea Bardin, “Simondon Contra New Materialism: Political Anthropology Reloaded,” *Theory, Culture & Society* 38, no. 5 (September 2021): 25–44. <https://doi.org/10.1177/02632764211012047>.

⁹⁴⁷ Paolo Virno and Jun Fujita Hirose, “Reading Gilbert Simondon: Transindividuality, Technical Activity and Reification,” *Radical Philosophy* 136 (2006). <https://www.radicalphilosophy.com/interview/paolo-virno-reading-gilbert-simondon>.

⁹⁴⁸ Paolo Virno, “Angels and the General Intellect: Individuation in Duns Scotus and Gilbert Simondon,” trans. Nick Heron, *Parrhesia* 7 (2009): 58-67.

⁹⁴⁹ Paolo Virno, *A Grammar of the Multitude: For an Analysis of Contemporary Forms of Life*, trans. Isabella Bertolotti, James Cascaito, and Andrea Casson (Cambridge: Semiotext, 2004): 76-78.

⁹⁵⁰ Jason Read, *The Politics of Transindividuality* (Chicago: Haymarket, 2016).

⁹⁵¹ Virno, *A Grammar of the Multitude*, 77.

⁹⁵² One might rightly note the Marxist infringement on Simondon here, given a dialectical tendency of (human) history to actualize the potentialities in nature. This is the same dialectical determination for which Haraway is critical of Marx. I will touch on this use of Marx in more depth shortly.

intervention.⁹⁵³ Balibar's use of Simondon tends to focus on a reading of 'transindividuality' that is anachronistically applied to Spinoza. He takes Spinoza as offering a 'pre-individual' in tension with the 'collective' as the determinate essence of the 'individual' or 'conatus.'⁹⁵⁴ For both Virno and Balibar, a 'pre-individual nature' is taken in tension with a collective 'history' as the dialectic, problematic resolution that never fully resolves.

Second, Muriel Combes offers what Read has described as a 'relational' interpretation of 'pre-individual' being. While Combes agrees with Virno that individuation is the resolution of tensions between the pre-individual and transindividual phases, she contests the idea of a 'transindividual' that is identical to collective individuation. Combes rightly notes that collective individuation is a form of individuation that Simondon presents as resonant with distinct phases of individuation. Thus, psychic individuation should not be taken as unilaterally conditioned by the mediation of pre-individual nature and a given collective. Instead, both psychic individuation and collective individuation consist in the rapport, resonance, or cut of the psychic phase and the collective phase as two, mutually distinct but intra-related phases of individuation. Transindividuation is neither psychic nor collective but the 'cut' of their metastable rapport. As Combes suggests, a "psyche is constituted at the intersection of a double polarity, between the relation to the world and others and the relation to self."⁹⁵⁵ The transduction of the 'individual' and its milieu (or 'collective') cuts across both phases to continue individuating. Thus, where Virno presents pre-individual reality as potentiality that might be actualized by historical forces (which is a largely hylomorphic schema), Combes more accurately understands transduction and the transindividual as a process that actualizes the pre-individual potentialities that emerge in the tensions between resonant phases of

⁹⁵³ Read, *The Politics of Transindividuality*, 118.

⁹⁵⁴ Étienne Balibar, *Spinoza, the Transindividual*, trans. Mark G.E. Kelly (Edinburgh: Edinburgh University Press, 2020), 56.

⁹⁵⁵ Combes, *Gilbert Simondon*, 30.

individuation. Alberto Toscano helpfully summarizes Combes position: “the preindividual is caught up in a twofold transindividual (or social) relation that concerns, on the one hand, an individual and what is more than itself, and, on the other hand, an individual and another by means of their emotion and preindividual unresolved charge.”⁹⁵⁶ Rather than the resolution of nature in history, Combes takes a relational perspective that poses transindividuality as the rapport of psychic and collective individuation. She terms this the ‘intimacy of the common,’ where pre-individual reality consists in the potentiality of both psychic and collective being. “Before being structured, the collective is, in a sense, already within subjects, in the form of shares of uneffectuated nature, the real potentialities that insist within each of us.”⁹⁵⁷

Given the clear resonance with Marxist literature, it is worth considering both the similarities and differences between Simondon’s transindividuation and Marx’s notion of history. Both the naturalist and relational interpretations of pre-individual being centre a socio-political reading of Simondon that focuses on human individuation and human-centric pre-individual reality. Furthermore, both Virno and Combes are interested in presenting Simondon in conversation with Marx. In *On the Mode of Existence of Technical Object* Simondon is critical of Marx’s theory of alienation. He writes, for instance,

Alienation does indeed emerge the moment the worker is no longer the owner of his means of production, but it does not emerge solely because of this rupture in the link to property. It also emerges outside of all collective relation to the means of production, at the physiological and psychological level of the individual properly speaking. The alienation of man in relation to the machine *does not only have a socio-economic sense; it also has a physio-psychological sense*; the machine no longer prolongs the corporeal schema, neither for workers, *nor for those who possess the machines.*⁹⁵⁸

⁹⁵⁶ Alberto Toscano, “The Disparate: Ontology and Politics in Simondon,” (2007) URL: http://www.after1968.org/app/webroot/uploads/Toscano_Ontology_Politics_Simondon.pdf. [Accessed May 30, 2024]

⁹⁵⁷ Combes, *Gilbert Simondon*, 51.

⁹⁵⁸ Simondon, *MEOT*, 133.

Simondon is critical of Marx's theory of alienation for centring socio-economic development. Several scholars, including Combes, have suggested that Simondon's critique is lacking.⁹⁵⁹ Simon Mills, for instance, suggests that Simondon's critique reduces alienation to a matter of ownership, which fails to think through the production of subjectivity in Marx's work. For Mills, this reduction is grounded in a reading of the early Marx, where alienation is largely aligned with alienation from the mode of production.⁹⁶⁰ He suggests that Marx's later works, particularly *Capital*, show a more complex—in his words 'thermodynamic'—understanding of the process of alienation where the very machinic processes of capitalism come to overdetermine and alienate the worker.⁹⁶¹ While Mills is correct in noting that Simondon is largely uncharitable to Marx's theory of alienation, he notes that there are points where Marx and Simondon are in fundamental disagreement. Foremost, despite sometimes moving into the physio-psychological register, Marx's theory of alienation remains largely hylomorphic. In Marx's theory of alienation, the process of alienation is largely driven by socio-economic factors which produce labour as alienated. This is a unilateral process where the means of production overdetermine labour.⁹⁶² In contrast, Simondon's notion of 'physio-psychological' alienation describes a lack of rapport between humanity and technology. This is not a theory of the unilateral determination of one upon the other, but a consideration of their mutual rapport. For Simondon, the increasing complexity in technological apparatuses have produced a world in which almost no one understands the technical object in its totality.⁹⁶³ As a result, it is not only labour but also the owners of the mode of production who are alienated from its processes. For Simondon, this results in a lack of both human and technological progression as the transductive rapport is incapable of resolving the tensions of two phases of being that are increasingly alien to each other.

⁹⁵⁹ See Combes, *Gilbert Simondon*, 73.

⁹⁶⁰ Mills, *Gilbert Simondon*, 124.

⁹⁶¹ *Ibid.*, 127

⁹⁶² *Ibid.*

⁹⁶³ This point is emphasized by Yuk Hui in *Recursivity and Contingency* (London: Rowman and Littlefield, 2019), 199.

Despite distinct theories of alienation, several attempts have been made to reconcile Simondon with Marx. The earliest attempt is likely made by Herbert Marcuse, who drew upon Simondon to emphasize the use of technics in critical scholarship.⁹⁶⁴ Ian Angus notes that while Marcuse uses Simondon to bolster a theory of technics, he flattens and misses much of Simondon's argument regarding a transductive rapport between humanity and technics, largely siding with Marx against Simondon.⁹⁶⁵ Combes argues that while Marx does centre economic alienation, his critique of political economy concerns the operational relationship of capitalist production that is not strictly economic.⁹⁶⁶ Like Mills, then, Combes attempts to read Marx in such a way that it allows for physio-psychological alienation in addition to the socio-economic alienation typically associated with Marx's account. In a similar move, Virno stresses the congruence between Marx's "Fragment on Machines" and Simondon's understanding of an operational resonance between humanity and technology.

Here, he writes,

Marx coins a concept which, in my view, is central to comprehending the subjectivity of the contemporary multitude. This is a concept, let me say immediately, which is objectively related to Simondon's thesis on the interweaving of pre-individual reality and singularity. It is the concept of the "social individual." It is not by accident, it seems to me, that Marx utilizes this expression in the same pages where he discusses the general intellect, the public intellect. The individual is social because within the individual the general intellect is present.⁹⁶⁷

Rather than attempt to read Marx through Simondon, Virno appears content to read Simondon through Marx. By aligning the 'social individual' with the 'pre-individual,' Virno largely misses the unique properties of Simondon's theory of transduction by simply turning individuation into Hegel's dialectic. As Combes rightly notes, Marx's and Simondon's theories of alienation are

⁹⁶⁴ See Ian Angus, "Logic of Subsumption, Logic of Invention, and Workplace Democracy: Marx, Marcuse, and Simondon," *Philosophy & Technology* 32, no. 4 (December 2019): 613–25. <https://doi.org/10.1007/s13347-018-0324-4>.

⁹⁶⁵ *Ibid.*, 620.

⁹⁶⁶ Combes, *Gilbert Simondon*, 14-15; 72-74.

⁹⁶⁷ Virno, *Grammar*, 80.

distinct: Marx places alienation in the sphere of production as a mixture of exploitation and domination; Simondon locates alienation in the inadequate rapport of humanity and machines.⁹⁶⁸ While the emergence of labour over and against capital—by seizing the means of production, for instance—might be sufficient for overcoming alienation in Marx, it would remain wholly insufficient for overcoming alienation in Simondon’s use. Similarly, emancipation from alienation in Simondon’s account remains insufficient for overcoming alienation in Marx’s use. For Simondon, alienation is not the direct result of a capitalistic economic structure,⁹⁶⁹ but instead due to the lack of proper rapport between two phases of being. As he writes in *On the Mode of Existence of Technical Objects*, “The true path towards the reduction of alienation would not be situated within the domain of the social (with the community of work or class), nor in the domain of inter-individual relationships that social psychology habitually envisages, but at the level of the transindividual collective.”⁹⁷⁰ Given a focus on the physio-psychological determination of humanity through the process of individuation (rather than a historical materialist reading of the unique structuring of humanity through the ever changing mode of production), my analysis will continue through Simondon rather than Marx.⁹⁷¹

A third understanding of ‘pre-individuality’ comes through Bernard Stiegler’s critique of Simondon. Like Virno and Combes, Stiegler centres the transduction of psychic and collective individuation in the production of the transindividual.⁹⁷² Like Virno, he focuses the relationship between cultural objects in their mutual rapport with humanity. Unlike Virno, however, Stielger is critical of Simondon for what he describes as a mythical rendering of pre-individual reality. In

⁹⁶⁸ Combes, *Gilbert Simondon*, 74.

⁹⁶⁹ However, one might suggest it emerges through a transductive resonance with capitalism.

⁹⁷⁰ Simondon, *MEOT*, 254.

⁹⁷¹ This is an area ripe for scholarship. The fact that many readers of Simondon wish to draw him into Marxist scholarship is an issue future scholarship would do well to investigate. This is not to say that Simondon and Marx cannot be compatible. Rather, it is to say that a proper account of alienation in both thinkers would require a thorough theorization of the intersection (perhaps the resonance or rapport) of their distinct projects.

⁹⁷² Bernard Stiegler, *Technics and Time 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins (Stanford: Stanford University Press, 1998), 18.

contrast to Simondon, Stiegler attempts to understand pre-individual reality squarely in the sphere of humanity's rapport with technics: "What Simondon does not see is that there is the technics of memory which make up the world. He does not comprehend that technics, as epiphylogenesis and tertiary rendition frameworks, constitute the pre-individual resources of [individuation]."⁹⁷³ Here, Stiegler attempts a generative re-reading of 'pre-individual' reality that moves beyond Simondon's theory of physical-biological and psycho-somatic individuation to instead think a new form of individuation occurring through 'epi-phylo-genesis.'⁹⁷⁴ A key term in *Technics in Time*, epi-phylo-genesis is defined as "the conservation, accumulation, and sedimentation of successive epigenesis, mutually articulated."⁹⁷⁵ It is, for Stiegler, the building of technical sediment in writing systems. As humans interact with technology, both technology and the human come to develop through their mutual interaction: each step builds upon the previous steps to develop a history of technics (like Nietzsche's typewriter described chapter 3). Despite this attempt to move beyond Simondon, Stiegler's analysis remains bound to the sphere of psycho-social individuation through the treatment of technical memory systems as a pre-individual reality (like Virno's 'nature'), that operates in resonance with psycho-social forms of human individuation. Stiegler's prioritization of writing instruments only concerns human and technical individuation. Thus, while it is a useful intervention, Stiegler's analysis is less useful for critical post-humanism.⁹⁷⁶

Given their emphasis on humanity through psychic and collective individuation, Virno, Combes, and Stiegler can each be distinguished from a fourth interpretation of pre-individual reality, which is given by Gilles Deleuze. Where others are largely concerned with pre-individual relations to

⁹⁷³ Bernard Stiegler, "Chute et élévation: L'Apolitique de Simondon," *Revue Philosophique de la France et l'Etranger* 196, no 3 (2006): 335. <https://jstor.org/stable/41099863>. My translation.

⁹⁷⁴ Stiegler, *Technics and Time 1*, 141.

⁹⁷⁵ *Ibid.*, 140.

⁹⁷⁶ Attempts at thinking Stiegler against the grain could, nevertheless, prove fruitful. See, for example, Jacob Vangeest, "Forest Semiosis: Plant Noesis as Negentropic Potential," *Footprint*, 31: The Epiphylogenetic Turn and Architecture: In (Tertiary) Memory of Bernard Stiegler (2022): 45-56. <https://doi.org/10.7480/footprint.16.1.5606>.

the socio-political register, Deleuze subordinates the socio-political to the metaphysical. This is not without issue, as Deleuze largely ignores the less philosophical aspects of Simondon's oeuvre, such as the wealth of writing on technical objects.⁹⁷⁷ Nevertheless, there are strengths to this analysis. As Toscano notes, "For Deleuze the preindividual is identified neither with human nature (in its neotenic or innate versions) nor with a 'common'."⁹⁷⁸ This shift away from humanity might allow for a reading closer to post-humanism (or Deleuze's more overt anti-humanism). Read argues that Deleuze's distinct focus could be attributed to the fact that he only cites from the first half of *Individuation*, which was published in 1964. The latter half of Simondon's work—those dealing with psychic and collective individuation, including lengthy discussions of the transindividual—were not published until 1984. Yet, this could be read as a boon to Deleuze's interpretation. Despite having access to the totality of *Individuation*, Virno, Combes, and Stiegler largely ignore the processes of physical and biological individuation to focus on psychic and collective individuation. This way of reading Simondon tends to reduce pre-individual reality (and potentiality) to human sociality (i.e. language, habit, mode of production, technics) while ignoring the role of physical and biological individuation in Simondon's ontology. In contrast, Deleuze centres "the general problem of ontogenesis and not a specific problem of psychic and collective individuation."⁹⁷⁹

Given Simondon's account of transduction and ontogenesis, it is difficult to justify attempts that abstract psychic and collective individuation from physical and biological individuation. It is worth quoting Simondon's definition in the introduction:

By transduction we mean a physical, biological, mental, or social operation through which an activity propagates incrementally within a domain by basing this propagation of a structuration of the domain operated from one region to another: each structural region serves as a principle and model, as

⁹⁷⁷ See Iliadis, "Informational Ontology," 9.

⁹⁷⁸ Toscano, "The Disparate," 3.

⁹⁷⁹ Read, *The Politics and Transindividuality*, 121.

an initiator for constituting the following region, such that a modification thereby extends progressively throughout this structuring operation.⁹⁸⁰

The development of each distinct phase of individuation occurs in resonance to the successive phases of individuation within an iterative process occurring through their mutual transformation. Transduction, as central to the operations of individuation, cuts across the phases. Here, each individuation resonates with the others: “Transduction corresponds to this existence of rapports that takes hold when pre-individual being individuates it; it expresses individuation and allows for individuation to be thought; it is therefore a notion that is both metaphysical and logical; *it applies to ontogenesis and is ontogenesis itself.*”⁹⁸¹ Given this definition of transduction in Simondon’s operational account of individuation, it is reasonable to suggest that attempts to abstract psychic and collective individuation from physical and biological individuation go against the transductive spirit of Simondon’s project. These abstractions limit Simondon’s architectonic, insofar as the developments of each successive individuation only work in transductive resonance with prior phases.

Thus, even though Deleuze does not cite the latter half of Simondon’s dissertation (as it hadn’t been published), it is possible to suggest his metaphysical reading offers something more transductive than more recent interpretations. Deleuze recognizes that Simondon proposes a “Whole ontology, according to which Being is never One. As pre-individual, being is more than one—metastable, superposed, simultaneous with itself.”⁹⁸² This informs an account of ‘intensity’ in the fifth chapter of *Difference and Repetition*, which attempts an ontogenetic account of pre-individual reality:

Gilbert Simondon has shown recently that individuation presupposes a prior metastable state—in other words, the existence of ‘disparateness’ such as at least two orders of magnitude or two scales of heterogeneous reality between which potentials are distributed. Such a pre-individual state nevertheless does

⁹⁸⁰ Simondon, *ILNFI*, 13.

⁹⁸¹ *Ibid.*, 14.

⁹⁸² Gilles Deleuze, *Desert Islands and Other Texts 1953-1974*, trans. Mike Taormina, ed. David Lapoujade (Cambridge: Semiotext, 2004): 89.

not lack singularities: the distinctive or singular points are defined by the existence and distribution of potentials.⁹⁸³

Rather than human sociality, Deleuze's use of pre-individual reality stresses an ontogenetic individuation. Deleuze outlines the intersecting aspects of resonant phases of individuation through the development of vital, psychic, and transindividual individuation.⁹⁸⁴ As Read notes, it may be possible to read the 'transindividual' into *Anti-Oedipus's* critique of psychoanalysis, given that psychoanalysis presupposes the individual in the organization of desire.⁹⁸⁵ Toscano appears to affirm Deleuze's reading of Simondon, noting that "Simondon and Deleuze offer a conception of politics as the invention of a communication between initially impossible series; as invention of a common that is not given in advance and which emerges on an ontological background of inequality."⁹⁸⁶

Nevertheless, Deleuze's interpretation is far from definitive. Elsewhere, Toscano writes that where Simondon takes thought as an operational process individuating through and resonant with other phases of individuation, Deleuze demands something more inhuman of thought.⁹⁸⁷ Both Deleuze and Simondon affirm a metastable being, where organization emerges from the problematic of pre-individual reality.⁹⁸⁸ The two differ in relating the individual and individuation: where Deleuze does away with the individual in favor of a pure individuation (i.e. 'difference in itself'), Simondon brings the individual (and the human) back into play through the transductive operation. This can be expressed through their respective readings of Nietzsche. For Simondon, the transindividual is

⁹⁸³ Deleuze, *Difference and Repetition*, 246.

⁹⁸⁴ Deleuze, *Desert Islands*, 89.

⁹⁸⁵ Read, *The Politics of Transindividuality*, 121.

⁹⁸⁶ Toscano, "The Disparate," 3.

⁹⁸⁷ Alberto Toscano, *The Theatre of Production: Philosophy and Individuation Between Kant and Deleuze* (Houndsmill Basingstoke: Palgrave Macmillan, 2006), 197.

⁹⁸⁸ Deleuze, *Difference and Repetition*, 255.

realized through Zarathustra's isolation.⁹⁸⁹ Zarathustra overcomes the individual, inter-individual dichotomy through their transductive resonance:

However, if it is admitted that the transindividual is self-constitutive, it will be seen that the schema of transcendence or the schema of immanence only account for this self-constitution through their simultaneous and reciprocal position; each moment of self-constitution involves the definition of the rapport between the individual and the transindividual as that which *surpasses the individual by extending it*: the transindividual is not exterior to the individual and yet becomes detached from the individual to a certain extent; furthermore, the transcendence that takes root in interiority (or rather, at the limit of interiority and exteriority) does not bring about a dimension of exteriority but a dimension of excess relation to the individual.⁹⁹⁰

For Simondon, the individual is not 'deconstructed' or 'deterritorialized' but remains imbricated in the development of the transindividual through its transductive rapport with the collective. The individual and collective are mutually imbricated in their co-constitutive rapport, *qua* transindividuation. Compare Simondon's statement on Zarathustra to the following from Deleuze:

The great discovery of Nietzsche's philosophy, which marks his break with Schopenhauer and goes under the name of the will to power or the Dionysian world, is the following: no doubt the I and the Self must be replaced by an undifferentiated abyss, but this abyss is neither an impersonal nor an abstract Universal beyond individuation. On the contrary, it is the I and the self which are the abstract universals. They must be replaced, but in and by individuation, in the direction of the individuating factors which consume them and which constitute the fluid world of Dionysus.⁹⁹¹

Deleuze undoes any consideration of the individual for a pure process of individuation.⁹⁹² The two distinct readings can be found through *The Birth of Tragedy*. For Deleuze, the relationship between Apollo and Dionysus in Nietzsche's early work expresses a division between "unity and individuation, willing and appearance, life and suffering."⁹⁹³ Nietzsche takes this mediation as generative of tragedy: the attempt to make stable in the will to truth (Apollo) that which defies

⁹⁸⁹ Simondon, *ILNFI*, 313.

⁹⁹⁰ *Ibid.*, 314.

⁹⁹¹ Deleuze, *Difference and Repetition*, 258.

⁹⁹² Perhaps this is the Bergsonian influence on Deleuze.

⁹⁹³ Deleuze, *Nietzsche and Philosophy*, 11.

stability in the will to power (Dionysus). Deleuze reduces this mediation to a latent reading of Schopenhauer found in Nietzsche's early work.⁹⁹⁴ Thus, Deleuze will promote the Dionysian flux (individuation, will to power) in extrinsic opposition to all transcendental thought (will to truth, individuals, Apollo). Deleuze's anti-humanism withdraws from individuality in favor of a pure flux of differentiation or individuation. Deleuze's claimed anti-Hegelianism leads him to abandon any ontological negativity found in Nietzsche, doing away with the contest of Apollo and Dionysus to purely affirm the latter.⁹⁹⁵ In contrast, Simondon does not dissociate from Nietzsche's ontological negativity nor from the resonance of the individual (Apollo) and individuation (Dionysus). Here, the individual is necessary for the transindividual as a "transductive strategy for *self-overcoming*."⁹⁹⁶ Simondon speaks of the ontogenetic incompatibility between distinct phases of being as the "immanence of the negative." This 'problem' and tension is central to the ongoing resolution of ontogenesis.⁹⁹⁷ The 'problem' of ontology requires the individual; it uses the individual as a 'transductive technology' that is necessary for any change to take place.⁹⁹⁸ For Simondon, this requires resonance or rapport between the individual, collective, the transindividual and all other phases of individuation. The way Simondon relates the individual and transindividual is incredibly similar to how Barbara Stiegler reconciles Nietzschean tragedy through the mutual rapport of stasis and becoming. She writes, "organic memory implies a twofold condition: passive exposure to something that exceeds it (the absolute flux of becoming) and the active reorganization of this wound by the assimilating forces of identity (the artificial product of stases)."⁹⁹⁹ Resolutions of the

⁹⁹⁴ Ibid., 14.

⁹⁹⁵ For a more thorough account of this position, see Barbara Stiegler, "What is Tragic? A Few Questions on the Deleuzian Interpretation of the Eternal Return," *Nietzsche 13/13*. URL: <https://blogs.law.columbia.edu/nietzsche1313/barbara-stiegler-what-is-tragic-a-few-questions-on-the-deleuzian-interpretation-of-the-eternal-return/>.

⁹⁹⁶ Biswas Mellamphy, "The Overhuman," 39.

⁹⁹⁷ Simondon, *ILNI*, 15.

⁹⁹⁸ Biswas Mellamphy, "The Overhuman," 39.

⁹⁹⁹ Stiegler, "What is Tragic?"

tensions in pre-individual being are consistent with the resolution of a physiological wound to produce identity and stability. Where Deleuze absconds with the human, Simondon takes humanity as a necessary bridge towards the Overhuman and transindividuality. For this reason, Simondon should be taken as a more useful ally for the critical post-humanists who wish to maintain the human (against anti-humanism) without a dialectical sublation.

Simondon contra Hegel

Simondon's use of 'pre-individual reality' and 'transduction' contrast with Hegel's teleological and hylomorphic theory of individuation. Instead of stable, complete individuals, Simondon understands actuality [*entelechy*] as centred through operational processes of 'partially individuated *haecceity*'.¹⁰⁰⁰ A Latin term adopted from Duns Scotus, *haecceity* refers to the 'thisness' of a 'this,' or the irreducibility of a thing. *Haecceity* is often distinguished from *quiddity*, a term that refers to Aristotle's notion of a thing's essence. In Simondon's use, *haecceity* does not describe the essence of an individual but the property of a singular operation of individuation. *Haecceity* is always the *haecceity* of an ensemble: the brick's *haecceity* is the operation of the brick's individuation, which consists in the plasticity of the clay as it is limited (and continues to be limited) by the elastic mold. Technical operations must account for *haecceity* in matter. In contrast with Aristotelean potency, which holds form as determined prior to actualization, Simondon argues that potentiality is only determined at the point of actualization. This is because potentiality is alive within actuality. Potentiality allows individuation to transform in a manner congruent with the potentialities and tensions emergent in pre-individual reality. Like a super-positioned particle that is indeterminate prior to observation, so

¹⁰⁰⁰ Simondon, *ILNFI*, 33.

too do pre-individual singularities reveal their potentiality only at the moment of actualization: they ‘snap into place.’¹⁰⁰¹

Once undergoing the process of individuation, it is possible to speak of distinct ‘phases of being’ in their actuality. Pre-individuality reality, which is being without phases, remains immanent even at the stage of individuation. In attempting to study being in accordance with its actuality, Simondon argues that it is necessary to study the distinct ‘phases of being’ in their processes of individuation, rather than attempting to study the essence of a stable individual. This is the core of his critique of hylomorphism:

The error of the hylomorphic schema mainly consists in that it merely authorizes a single entelechy for the individuated being, whereas the being must be conceived as having several phases; the being can have several successive phases that are not entelechies of the same phase and are consequently not iterations.¹⁰⁰²

‘A’ being cannot be reduced to a single entelechy—which is to say a single phase of its being—insofar as it has several phases of being simultaneously: several phases which are resonant and cut across by transduction. A human is at once constituted in a physical phase, a biological phase, an individual or psychic phase, and a collective phase (if not more). To reduce that human to any single phase (such as the individual or inter-individual) misses most of the operative process of that human’s entelechy. Where hylomorphism prioritizes stable individuals, Simondon’s theory of individuation works across this metastability that occurs from the outgrowth of pre-individual

¹⁰⁰¹ Brian Massumi, “Technical Mentality Revisited: Brian Massumi on Gilbert Simondon,” with Arne De Boever, Alex Murray, and Jon Roffe, in *Gilbert Simondon: Being and Technology*, ed. Arne de Boever, Alex Murray, Jon Roffe, and Ashley Woodward (Edinburgh: Edinburgh University Press, 2013), 28.

¹⁰⁰² Simondon, *ILNFI*, 358.

reality. While this theory has its roots in cybernetics,¹⁰⁰³ Simondon moves beyond the hylomorphic implications of cybernetic theory.¹⁰⁰⁴

For Simondon, metastability is taken in reference to pre-individual reality: pre-individual reality undoes the presupposition of being as the compound of individuals and as a stable equilibrium. He argues that the history of philosophy has conceived of being in terms of “stability and instability, rest and movement”¹⁰⁰⁵ without a clear notion of metastability. This is true not only of Aristotle’s division of actuality and potentiality but Hegel’s description of being and nothingness as well. Unlike Aristotle, however, Simondon praises Hegel’s description of individuation, suggesting that Hegel refuses prior attempts “to grasp an immediate and absolute essence of man.”¹⁰⁰⁶ Aligning Hegel and Comte, Simondon praises the 19th century German “vision of human reality and of all philosophical problems grasps the individual not as a fully made reality, endowed by itself and reality and substantiality, but as a being who represents a certain moment of a reality vaster than it.”¹⁰⁰⁷ Hegel grasps at something akin to the *apeiron*. Heaping further praise, Simondon notes that in Hegel “the individual is connected back to the system that surrounds him, even in the absence of material contact, because he is a field.”¹⁰⁰⁸ Through the promotion of an immanent notion of individuation, Hegel takes a notable step away from Aristotle. Here, humanity is no longer taken as given but instead determined through the interaction with its milieu in a dialectical process. Hegel offers an operational account of humanity. For this reason, Read can suggest that Hegel, along with Spinoza and Marx, is a thinker of transindividuality *avant la lettre*. Read cites the *Phenomenology of Spirit’s*

¹⁰⁰³ See Jean-Hugues Barthélémy, “Glossaire Simondon: les 50 grandes entrées dans l’oeuvre,” *Appareil* 16 (2015): 217. <https://doi.org/10.4000/appareil.2253>

¹⁰⁰⁴ Mills notes several ways cybernetics remains susceptible to hylomorphism: it is atomistic in presupposing discrete quanta without a theory of individuation; it fails to address how the transmission of information results in individuation; and it fails to think form as emergent from the process itself. See Mills, *Gilbert Simondon*, 23-24.

¹⁰⁰⁵ Simondon, *ILNFI*, 5.

¹⁰⁰⁶ Simondon, *ILNFI*, vol II, 640.

¹⁰⁰⁷ *Ibid.*, 631.

¹⁰⁰⁸ *Ibid.*

description of the self-conscious as desire to suggest that self-consciousness is not given but something of a transindividual dimension. This reading of transindividuality rests on a mixture of the individual and the collective in ethical life.¹⁰⁰⁹ If Read is correct, it would suggest that Hegel allows for the development of a metastable field a century and a half before Simondon.

Read's account should be contested on two fronts. First, like Virno and Combes, Read tends to appeal only to the pre-individual as it exists in the social dimension. He takes the transindividual to be a mixture of psychic and collective individuation. This position reduces the 'pre-individual' to a form of human nature occurring in the mixture of the individual and the collective, rather than taking pre-individual reality as the indeterminate *apeiron* generative of both psychic and collective individuation simultaneously (and thereby recognizing the resonance of these distinct parts in their co-individuation via resonance). One should note Read's aim is explicitly distinct from my own: like the critical post-humanists, his aim is to overcome the promotion of a separated individualism that is promoted in the popular consciousness.¹⁰¹⁰ Read is correct in noting that both Hegel and Simondon offer a critique of individualism and holism: there are neither stable individuals nor a stable and totalizing society, but instead a metastable reality. In Read's account of Hegel, this figures into a dialectic of the 'I' and 'We' through what he terms "The 'I' that is 'we',"¹⁰¹¹ which speaks to a transindividual individuation. Read's account is, thus, intersubjective: it poses the transindividual as a mixture of the individual and the inter-individual, rather than as a distinct third category. The conclusion to this discussion of Hegel, for instance, suggests that Hegel sees a dialectical progression between collectives and individuals, from which the transindividual might be instantiated.¹⁰¹² Yet, to call this mixture of individual and collective 'transindividual' fails to account for the pre-individual

¹⁰⁰⁹ Read, *The Politics of Transindividuality*, 47.

¹⁰¹⁰ *Ibid.*, 1.

¹⁰¹¹ *Ibid.*, 47.

¹⁰¹² *Ibid.*, 66.

phase as something indeterminate (and aporetic), which is generative through the rapport of individual and collection. While Read's account is operational, it does not speak to ontogenesis.

The lack of pre-individual reality speaks to a second, more foundational issue with Hegel's teleology. As discussed, Hegel's work draws overtly upon Aristotle. Rather than work in terms of a generative, metastable field of pre-individual singularities, Hegel's thought remains grounded in antimony and dialectic. For example, the opening of his discussion of 'The Doctrine of Being' promotes antimony as foundational to first philosophy: "The beginning of philosophy must be either *something mediated* or *something immediate*, and it is easy to show that it can be neither the one nor the other; so either way of beginning runs through contradiction."¹⁰¹³ Hegel's solution is, per de Laurentiis, hylomorphic: the diremption of an immediate unity that is sublated once more. In the first chapter on 'Being,' Hegel promotes 'becoming' as the unity of being and nothingness:

Pure being and pure nothing are therefore the same. The truth is neither being nor nothing, but rather that being has passed over into nothing and nothing into being — 'has passed over,' not passes over. But the truth is just as much that they are not without distinction; it is rather that *they are not the same*, that they are absolutely distinct yet equally unseparated and inseparable, and that *each* immediately *vanishes in its opposite*. Their truth is therefore this *movement* of the immediate vanishing of the one into the other: *becoming*, a movement in which the two are distinguished, but by a distinction which has just as immediately dissolved itself.¹⁰¹⁴

While Hegel does not conceive of human individuals as given in a formal essence (and this is something that should be praised), the production of humanity through this process of becoming nevertheless relies on the stability of being and the instability of nothingness in their unity and mediation. As in Aristotle, becoming rests on the mediation of stable form and unstable matter. Simondon, in contrast, holds the transindividual as located neither in the individual nor collective, nor merely in their mixture: "This reality is called transindividual. Its origin is neither social nor

¹⁰¹³ Hegel, *The Science of Logic*, 21.51, 45.

¹⁰¹⁴ *Ibid.*, 21.70, 60.

individual; this reality is deposited in the individual, carried by the individual, but it does not belong to the individual and is not part of the individual's system of being."¹⁰¹⁵

Hegel would not be so beholden to hylomorphism were it not for his commitment to teleology. His overall operational schema would allow for a more transductive approach—one without appeal to stability or instability—were it not for the need to generate internal purposes through the development of spirit. Hegel's teleology sees the concept [*Begriff*] become idea as its purpose: the goal emerges through the immanent generation of ends. So too in Hegel's political ontology: the resolution of a historical problematic emerges in the form of freedom that can be realized in ethical life. Given the teleological operation, this resolution is determined as final cause through the immanent operation of Hegel's dialectic. Yet, while these ends (the idea and freedom) are rendered operationally, their deployment in Hegel's structure maintains an appeal to formal causality given the necessity of final causality in teleology. Freedom may be operationally determined but because it is determined as a teleological form it is determined prior to its actualization or realization as a phase of individuation. This means that, for Hegel, the dialectical progression of history determines freedom as its aim (*telos*), which it only subsequently moves to actualize. There is an implicit appeal to Aristotle's hylomorphism insofar as the form of freedom precedes the actualization in the process. History becomes the 'brick mold' in the progression of spirit's development, which is taken as the formal cause under Aristotle's taxonomy. Freedom, as a stable form, is imposed on the development of society as the *telos* of ethical life.

Simondon's shift away from both the stable/unstable and form/matter dualism to promote a metastable notion of actuality offers a distinct affront to this teleology. Near the end of *Individuation*, he suggests that any operational endeavor must factor in the resolution of each distinct phase, rather than appeal to origin (primary causality) or end (final causality): "an individual life is neither the

¹⁰¹⁵ Simondon, *ILNFI*, 340.

determined unfolding of what it has been at its origin, nor the preparation of a voyage toward a final end.”¹⁰¹⁶ Each phase must be taken on its own without appeal to primary or final causality.

Proposing ontogenesis in this way, where the temporal series are phases in the metastable ordering, being must be accounted for without reference to final purpose or origin. This allows for the development of multiple phases of being without granting priority to the temporal dimension (as is the case for Hegel). Each phase must be taken as an event at each distinct moment of its entelechy within the rapport of transductive operations.

Simondon speaks of dialectics several times across *Individuation*, most notably when he writes,

[D]ialectics indeed implies the existence of a significative becoming that has a capacity to constitute *essence*, but dialectical becoming changes the being, opposes it, renews it: on the contrary, phases are phases of being; the being is not what passes through phases by modifying it; it is *the being that becomes the being of phases*[...] In the conception of dialectics, being requires becoming, but becoming is nevertheless conceived partially as it was when becoming was considered independent of being, foreign to being, *hostile to its essence*; the becoming of dialectics is *not sufficiently integrated into the being that becomes*; the time of the dialectic has remained the time of being, which is timeless *in essence* but thrown into becoming due to *its existence*.¹⁰¹⁷

Here, Simondon praises Hegelian dialectics for its use of integration, while opposing its use of a preliminary temporality to think either an unfolding genesis or an appeal to final causality.

Dialectics poses temporality as the necessary condition of becoming, while Simondon poses becoming as the necessary condition of temporality. He writes, for instance, “time emerges from the pre-individual just like the other dimensions according to which individuation effectuates itself.”¹⁰¹⁸

Temporality is not determinate of individuation but itself a partially individuated *haecceity* and phase of being. Simondon thinks the temporal dimension alongside other dimensions and phases. To understand *haecceity* in its actuality is to know it at the distinct point in its individuation (both spatially

¹⁰¹⁶ Ibid., 363.

¹⁰¹⁷ Ibid., 364.

¹⁰¹⁸ Ibid., 16.

and temporally), given that each point must be taken as an event within its phase of individuation.

Simondon's promotion of 'becoming' as distinct from a dialectical understanding promotes neither origin nor finality but the persistent resolution of problems:

The being's present is its problematic in the process of resolution, since as such it is bipolar according to time, i.e. phasic insofar as it is problematic. The individuated being is not substance but the being called into question, the being across a problematic, divided, reunited, carried within this problematic that posits itself through the being and makes the being become at the same time as it makes becoming. Becoming is not the becoming of the individuated being but the becoming of the being's individuation: what happens comes about as a calling into question of the being, i.e. as an element of an open problematic, which is what the being's individuation resolves: the individual is contemporaneous with its becoming, since this becoming is that of its individuation; time itself is essence, not as an unfolding of an origin or a tendency toward an end, but as the being's resolute constitution.¹⁰¹⁹

By aligning becoming with the resolution of an immanent problematic, Simondon provides a necessary affront to final causality, given that final causality (as found in Hegel) must promote the final cause as prior to its actualization as the determination of the operation. This appeal to final causality is hylomorphic insofar as the operation of individuation is treated as secondary to the stable form (which in Hegel is the form of freedom or the idea) that is taken as generating the process in the first place.¹⁰²⁰

¹⁰¹⁹ Ibid., 364.

¹⁰²⁰ Some of the more ambitious readings of Hegel tend to maintain a teleological tendency through a retained hylomorphism. Todd McGowan, for instance, offers a strong rebuttal to attempts which think a Hegelian politics through imperative. Understanding Hegel's 'absolute' as "the reconciliation of thought with actuality," McGowan argues that "philosophy should not try to change the world because it cannot. It always arrives too late on the scene to offer concrete political proposals." Todd McGowan, *Emancipation After Hegel: Achieving a Contradictory Revolution* (New York: Columbia University Press, 2019), 196. Here, McGowan rightfully acknowledges the poverty of rational solutions to political problems but maintains an element of finality through the hylomorphic imposition of the 'absolute' (a tendency which Hegelian thought struggles to overcome). On the other hand, Slavoj Žižek's understanding of Hegel as an anti-teleological thinker is quite invigorating and challenging to my position. Žižek posits that, rather than being determined by the 'Old,' the 'New' arises through a 'gap' in reality between the 'Old' and the 'New.' Thus, every novel production is exogenous, a "creation ex nihilo: The Nothingness out of which the New arises in the very gap between the Old-in-itself and the Old-for-the-New." Slavoj Žižek, *Less Than Nothing: Hegel and the Shadow of Dialectical Materialism*. (London: Verso, 2012), 273. Žižek no longer takes the 'absolute' as the teleological 'end' of the dialectical process. Instead, he treats the "Absolute itself as negativity" or a 'gap' in reality, Ibid., 267. While this means that the 'absolute' no longer constitutes final cause in the production of reality, Žižek turns the 'absolute' into both the primary and efficient cause of novel production. He inverts the teleological structure by taking the 'absolute' as the gap. The 'end' is now present from the beginning.

It is perhaps no wonder that Simondon aligns alienation with final causality. Recall that Simondon understands alienation as a lack of resonance or rapport between humans and technical objects. A non-alienated rapport would allow for a transductive resonance that would allow both to mutually evolve. Human development would occur alongside, not in spite of, technological development. By introducing finality into this process, any resonance is disbanded as all causality is reduced to finality. Simondon writes that in a system of proper coherence, the aim of the human-machine pairing results from their mutual resonance.¹⁰²¹ In alienation, however, finality becomes the driving force of the ensemble: “The industrialist, in the same way as the worker, is pushed by finality: he targets a result; herein lies their alienation; the technician is the man of the operation in the course of its accomplishment; he does not take charge of directing the ensemble but rather guides its self-regulation during functioning.”¹⁰²² Alienation is the result of an extrinsic finality imposed onto the system as its aim. Where a cohering transductive ensemble would allow the various phases to develop in resonance and rapport with other phases (without any designated end but only as problematics in the process of resolution), the alienated ensemble is stifled due to the imposed end. Thus, while Hegel’s theory of history does seek to find resonance through the dialectical process, his imposition of finality—even if this imposition is determined internally to the ensemble—stifles the process of resolution in favor of *telos*: “the incompleteness of technics sacrileges problems of finality and enslaves men with respect to ends that he represents to himself as absolute.”¹⁰²³

Transductive Ethics as Politics without *Telos*

Against teleology and hylomorphism, Simondon’s account of ontogenesis promotes an encyclopedic development towards what he terms the ‘transindividual:’ at once the rapport of

¹⁰²¹ Simondon, *MEOT*, 135.

¹⁰²² *Ibid.*, 140.

¹⁰²³ *Ibid.*, 162.

individual and collective but without reduction to either individual nor collective (nor their mixture). Instead, the transindividual promotes an ontogenetic account of both individual and collective as distinct, partially individuated phases of being that nevertheless affect each other. The transindividual emerges through their resonance and rapport. Like Aristotle, Kant, and Hegel, this onto-epistemological account serves as the basis for both an ethics and political ontology. Given his critique of final and formal causality, however, Simondon's project cannot be rooted in teleological nor deontological ethics. Instead, like the integration (or intra-gration) of technics and humanity, Simondon's account of ethics must be transductive.

Given that the transductive account of ontogenesis requires Simondon to develop successive phases of being relating to higher scales of complexity, his discussion of ethics comes near the end of *Individuation*, coming out of the discussions of collective individuation and the transindividual. In the conclusion of that text, he writes, "Can a theory of individuation provide an account of ethics through the intermediary of the notion of information?" He responds to this question: "It can at least serve to lay down the bases of ethics, even if it *cannot name the latter due to the incapacity to present its circumstances.*"¹⁰²⁴ Deontological ethics presents ethics as separated from becoming: an essence that is extrinsic to being. Simondon terms deontological moralism a 'substantializing ethics,' which can be distinguished from an 'ethics of becoming.'¹⁰²⁵ Where deontology takes morality as immutable, an ethics of becoming would take ethics as the result of a resolving process. Unlike Hegel, however, who determines the capacity of 'ethical life' through the hylomorphic sublation of 'abstract right' and 'morality,' Simondon understands ethics as a metastable process of individuation. The division of theoretical ethics and practical ethics maintains a division of extrinsic and intrinsic abstraction totally separated from ontogenesis and individuation. On this account, he writes that "norms of the

¹⁰²⁴ Simondon, *ILNFI*, 373, emphasis in original.

¹⁰²⁵ *Ibid.*, 374.

lines of internal coherence of [metastable] equilibria, and values are the lines according to which the structures of a system translate themselves into structures of the system that replaces the former system.¹⁰²⁶ Normativity must also be considered a phase of individuation undergoing resolution.

Simondon's discussion culminates on this point:

Norms and values do not exist prior to the system of being in which they appear; they are becoming, instead of appearing in becoming without being part of becoming; there is a historicity of the emergence of values, just as there is a historicity in the constitution of norms. Ethics cannot be recreated based on norms or based on values, no more than the being can be recreated based on the forms and matters to which abstractive analysis reduces the conditions of ontogenesis. Ethics is the requirement according to which there is a significant correlation of norms and values. To grasp ethics in its unity requires that one accompany ontogenesis: ethics is the meaning of individuation, the meaning of the synergy of successive individuations.¹⁰²⁷

The promotion of a transductive ethics—one which is neither deontological nor teleological nor hylomorphic—attempts an open account of ethics that is no longer bound to universality but instead takes ethics as developing through the becoming of internal coherence in metastable being. Where Simondon speaks of emancipation from the alienation of hylomorphism, he can only speak in a negative capacity: the future is open and not determined by the conditions of hylomorphic alienation. For this reason, ethics is taken as transductive rather than teleological. As transductive, ethics builds from successive phases of being in their mutual operations of individuation. This is inclusive of not only psychic and collective individuation but of physical and biological individuation as well. It is important to stress the physical and biological given that these aspects have profound effects on psychic and collective individuation (see chapter 3). Alienation is just as much (if not more) a result of physiological processes (wounds, exhaustion) as it is a psychological state. Transduction is, furthermore, necessarily open: cutting across the phases of being in the development and deployment of novel potentialities. It is notable that Simondon locates alienation

¹⁰²⁶ Ibid., 375.

¹⁰²⁷ Ibid., 377.

in the physio-psychological register. Transduction describes operational changes corresponding through the various phases of being developing iteratively in the resolution of pre-individual potentialities. The iterative and evolutionary projection of this individuation wages against any latent teleology adopted from standard forms of humanism. Given Simondon's insistence on individuation and operational production as having priority over individuated, stable forms, the 'goal' for emancipation and ethics can only be operational. Emancipation must, in this context, be understood negatively as the operational resolution of the various phases of being that resolve in their iterative stages of resolution. Insofar as contemporary forms of normativity are generated by and through the sickness of contemporary alienation, the ethics of a novel or post-humanity cannot be known in advance nor generated as a formal goal in the teleological overture. What is known, however, is that emancipation is generated as an operation: not as a stable *telos* nor a formal end but the 'human' as a transductive bridge towards some experimental and hitherto unknown opening.

Chapter 5, Intrastructural Necropolitics: Entanglement, Transparency, and the Conditions of Domination¹⁰²⁸

This chapter seeks to problematize the conclusions of chapters 3 and 4 by centring the question: what if the source of liberation constitutes the very affront to that liberation? In many ways, these preceding chapters interrogate critical post-humanism as an emancipation from humanism. Chapter 3 attempted to think around rationalistic determinations of emancipation by centring the development of ethics in the body. Chapter 4 sought transductive alternatives to a teleological or finalistic form of emancipation by centring the process of individuation against purposive emancipatory politics. Together, these might be taken as setting the stage for a posthuman political ontology that centres the operative production of a transductive embodiment. Following the close of chapter 4, the ethics of such an undertaking could not be determined in advance but would be radically indeterminate and open. This chapter attempts such an undertaking, albeit obliquely.¹⁰²⁹ Rather than provide a straightforward solution to the problems awakened, this chapter continues with the method of problematization. While this thesis has been largely critical of elements of critical post-humanism, I have henceforth spoken positively of Karen Barad's conceptualization of 'entanglement' and 'intra-action.' Most notably, in chapter 3 I drew upon this conceptualization to introduce the notion of intra-gration as a phenomenal production of subjectivity through embodiment. While I remain sympathetic to Barad's project as a whole, this chapter takes that work in an oblique direction by means of problematization. Given that Barad promotes entanglement as an ontological condition, it is worth examining its role in the production and structuring of exclusion. Looking specifically at the material dynamics of racialization, the production of race might be understood as an 'intrastructural necropolitics.' This concept brings

¹⁰²⁸ A version of this chapter has been submitted for publication in *Coils of the Serpent: Journal for the Study of Contemporary Power*, 13: The Necropolitics of Environmental Decline.

¹⁰²⁹ The term oblique, which is inspired by the work of Denise Ferreira da Silva and Paul Virilio, is fully explored near the close of this chapter. It refers to an attempt at a sideways interrogation.

together the term ‘intrastructure,’ which is Denise Ferreira da Silva’s oblique rendering of Karen Barad’s intra-action to think the material-historical construction of the slave’s body,¹⁰³⁰ with ‘necropolitics,’ Achille Mbembe’s consideration of the division of “who may live and who must die.”¹⁰³¹ As primordial and determinate of being, entanglement constitutes the structure of inclusion and exclusion through dynamic, material production. ‘Staying with the trouble’ of this deployment, this chapter stresses the dynamics of ontological exclusion or ‘death’ in the epistemological and ethical dimensions. Drawing from works in Afro-pessimism, the structural production of inclusion and exclusion forecloses the possibility of Barad’s ‘intra-active ethics.’ This is due to a tendency to unwittingly return to the tendencies of representational epistemology and political recognition. To be clear, my aim is not to critique Barad’s ontology of entanglement, which I remain sympathetic to. Rather, I seek to problematize the development of epistemology and ethics as outgrowths of this ontology. To close, I speculate on the potentiality to move ‘forward’ when attempts at moving forward re-integrate the conditions one seeks emancipation from.

Methodologically, this chapter continues a form of critical interrogation and problematization that has been used throughout the thesis. To being, I re-visit the major elements of Barad’s concept of entanglement before subsequently using those principles to, once again, interrogate its commitments. The method of problematization provides a distinction from extrinsic critiques of Barad made in physics.¹⁰³² Furthermore, while there are clear resonances with their work, my method is distinct from that of Cristin Ellis, who offers an extrinsic critique of the appeal to normativity in critical post-humanism by way of an extrinsic critique from Black studies.¹⁰³³ Finally, while I agree

¹⁰³⁰ da Silva, *Unpayable Debt*.

¹⁰³¹ Achille Mbembe, “Necropolitics,” trans. Libby Meintjes, *Public Culture* 15, no 1 (2003): 11.

¹⁰³² See, for example, Jan Faye and Rasmus Jakslund, “Barad, Bohr, and Quantum Mechanics,” *Synthese* 199 (2021): 8231-8255. <https://doi.org/10.1007/s11229-021-03160-1>; Thomas Everth and Laura Gurney, “Emergent Realities: Diffracting Barad within a quantum-realist ontology of matter and politics,” *European Journal for Philosophy of Science* 12, no 3 (2022): 1-20. <https://doi.org/10.1007/s13194-022-00476-8>.

¹⁰³³ Ellis, *Antebellum Posthumanism*.

with both Ellis¹⁰³⁴ and Alexander G. Weheliye¹⁰³⁵ that post-humanism should be critiqued for a failure to look beyond the Western canon, my argument does not take this exclusion as the basis of an extrinsic failing. Instead, I draw upon this exclusion to show the tensions inherent to the project of entanglement and tease out its intrinsic failings.

Intra-active domination

As noted throughout this thesis, scholarship in the critical post-humanities pose theories of connection as a source of emancipation from human exceptionalism and humanist destruction. Promoting ‘entanglement’ and ‘intra-relation,’ Barad argues in favor of an ‘ethico-onto-epistemology’ as the “intertwining of ethics, knowing, and being.”¹⁰³⁶ For the sake of argument, it is worth repeating how this works. ‘Connection’ poses being as ‘intra-active:’ the idea that ‘entanglement’ is primordial to any individual and that the individual is thus constituted through a differential ‘intra-action’ of heterogeneous phenomena. One might recall the discussion of the constitution of humanity in chapter 3. Relation is inherent to beings. Entanglement is an indeterminate but inclusive, dynamic and relational field that is prior to any and every individual. Entanglement is the ontological condition of being and beings. For Barad and other critical post-humanists, entanglement produces a normative vision: the injunction to ‘intra-act responsibly’ by considering the various (inclusive though indeterminate) relations that are constitutive of our being.¹⁰³⁷ Where older metaphysical systems introduced hierarchical tendencies of domination (by treating natural ‘things’ as subordinate to human ‘persons’), an ‘intra-active ethics’ refuses these divisions and justifications for domination¹⁰³⁸

¹⁰³⁴ Ibid., 146.

¹⁰³⁵ Alexander G. Weheliye, *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. (Durham: Duke University Press, 2014), 9-10.

¹⁰³⁶ Barad, *Meeting the Universe Halfway*, 185.

¹⁰³⁷ Ibid., 384.

¹⁰³⁸ Ibid., 392.

Here, I'd like to continue with Barad as an integral example of how critical post-humanism uses the onto-epistemic shift (from separation-reflection to connection-relation) to instruct its ethico-political imperative. Drawing from Niels Bohr, Barad's 'agential realism' poses an 'ethico-onto-epistemology' that takes ethics, ontology and epistemology as 'intra-active' or 'entangled' phenomena.¹⁰³⁹ As discussed in chapter 1, ontology is 'entangled' rather than separate, epistemology is 'diffracted' and relational rather than representational, and ethics is 'situated' rather than deontological and universal. Bohr's interpretation of super-positioned particles in Stern-Gerlach devices is integral to Barad's position, suggesting that a particle's eigenvalue is indeterminate when it is not being measured.¹⁰⁴⁰ For Bohr, an eigenvalue (the characteristic value corresponding to a vector's transformation) only 'exists' under observation, implicating the act of observation in the determination of the value. The value is only individuated as a value through the, as Barad puts it, "individuation-within-and-as-part-of-the-phenomenon enacted in the placement of the cut between 'observer' and 'observed.'"¹⁰⁴¹ This 'cut' informs both the ontological and epistemological (or onto-epistemological) consideration of 'intra-action.' Where the term 'inter-action' poses the coming together of distinct entities to form a composite whole, 'intra-action' conceives of an indeterminate ontological inseparability (or 'entanglement') of phenomena prior to the operation or process of individuation.¹⁰⁴² Like a super-positioned particle, 'individuals' do not precede their entanglements but are constituted by and through their entanglements. The 'individual,' which corresponds more closely with Duns Scotus' notion of *haecceity* (a 'this-ness') than Aristotle's *quiddity* (as 'essence' or 'givenness'), is identified with an operation or process that cuts across disparate material phenomena. For Barad, reality is composed of phenomenal 'intra-actions' (or phenomenal cuts) that

¹⁰³⁹ Ibid., 185.

¹⁰⁴⁰ Ibid., 258-266.

¹⁰⁴¹ Ibid., 321.

¹⁰⁴² Ibid., 139.

are entangled and indeterminate but nevertheless maintain their differential *haecceity* through an operational difference as a singular ‘performance’ of phenomena working through their co-constitution.¹⁰⁴³ The process of individuation and materialization intra-connect through various intra-actions or cuts without essence or *quiddity*.¹⁰⁴⁴ Intra-action refuses any ontological or epistemic privilege as far as priority is granted to phenomenal processes rather than to identities. The ‘individual’ is an ‘individuation’ or *haecceity*: an allagmatic¹⁰⁴⁵ process of intra-active cutting across matter. As Barad writes, “the agential cut enacts a resolution *within* phenomenon of the inherent ontological indeterminacy.”¹⁰⁴⁶

Intra-action is the basis for Barad’s critique of reflective and representational epistemologies. As discussed in chapter 1 and 2, critiques of reflection are not new, as some promotion of a more ‘situated’ or ‘relational’ epistemology has existed at least since Hegel. As discussed in chapter 4, Barad’s concept of ‘diffracted’ epistemology can be placed in distinction with Bruno Latour’s epistemological promotion of ‘factishes,’ which suggest that the histories of the discipline, the tools of measurement, and the values of the discipline are implicated in any empirical findings.¹⁰⁴⁷ Diffraction goes further, by positing that the act of measurement both epistemically *and* ontologically determines the value. Intra-action conceives of ontology and epistemology as intra-active within a phenomenal cut: the entanglement of being is mutually individuated with the individuation of knowledge. Drawing from the work of Judith Butler (which is discussed in chapter 2) intra-action is taken to be ‘performative:’ constituted through their action rather than some intelligible form. Each cut is a material ‘performance.’ Barad’s performative epistemology consists in a break from representation: “unlike representationalism, which positions us above or outside the

¹⁰⁴³ Ibid., 246.

¹⁰⁴⁴ Ibid., 210.

¹⁰⁴⁵ See chapter 4.

¹⁰⁴⁶ Barad, *Meeting the Universe Halfway*, 140.

¹⁰⁴⁷ Latour, “Why Has Critique Run out of Steam?”

world we allegedly might reflect on, a performative account insists on understanding thinking, observing, and theorizing as practices of engagements with, and as part of, the world in which we have our being.”¹⁰⁴⁸ For Barad, this constitutes an onto-epistemic shift where human rationality is not separate from the world under observation. Instead, the observer is implicated in their research as co-constituted in and through the performance of observation.

Representational epistemology relies on binary distinctions between a rational ‘human’ and a represented ‘non-human’ or ‘nature.’ For critical post-humanists, this binary imposes divisions where those included in the category of ‘humanity’ are justified in the subordination and domination of ‘non-humans.’ ‘Entanglement’ and ‘intra-action’ attempt to undermine this justification. Barad argues that a break from the ‘metaphysics of individualism’ undoes ‘traditional ethics’ in favor of ‘intra-active ethics.’¹⁰⁴⁹ This poses that ‘ethics’ must account for the material intra-actions of one’s entanglement. Barad promotes a broader ‘responsibility,’ which “entails an ongoing responsiveness to the entanglements of self and other.”¹⁰⁵⁰ More recently, their work poses this as ‘response-ability,’ which takes entanglement as a starting point for “being ethically in touch with others, as opposed to pretending to theorize from the outside [...] which is a form of violence.”¹⁰⁵¹ Ethics is, thus, distinguished from this representational ‘violence’—a violence aligned with the classical justification for domination. Through intra-action, this situated ethics is posed as fundamentally ontological: entanglements are constituted through “irreducible relations of responsibility.”¹⁰⁵² Thus, ethics, ontology, and epistemology are ‘ethico-onto-epistemic’ or intra-connected. This is not to say, as René Rosfort has suggested, that Barad conflates these domains.¹⁰⁵³ Rather, this term poses that

¹⁰⁴⁸ Barad, *Meeting the Universe Halfway*, 133.

¹⁰⁴⁹ *Ibid.*, 393.

¹⁰⁵⁰ *Ibid.*, 394.

¹⁰⁵¹ Barad and Gandorfer, “Political Desirings,” 24.

¹⁰⁵² Barad, “What Flashes Up,” 48.

¹⁰⁵³ René Rosfort, “Different Kinds of Matter(s) – Subjectivity, Body, and Ethics in Barad’s Materialism,” *Kvinder, Kon & Forskning* 1&2 (2012): 61.

these categories are co-constitutive, though analytically distinct, *haecceities* that are determined through their mutual cuts.¹⁰⁵⁴ The conceptualization of entanglement promotes a process-oriented, allagmatic reading where ontology, epistemology, and ethics necessarily individuate together. Each alter the others. As Barad notes, “An agential realist ontology (which is neither singular nor one) is in this sense an undoing of the conventional notions of ontology and an undercutting of the colonizing epistemic impulse to give over what the world is.”¹⁰⁵⁵ Barad and others working in this field should be praised for this commitment to moving away from humanistic justifications for the domination of nature, and for providing a starting point for thinking more intra-active, relational ethical obligations.

Despite Barad’s claims to the contrary,¹⁰⁵⁶ both their ontological and epistemological developments functionally operate as if they were descriptive positions relating to the reality of being and knowing. ‘Functional,’ as one may recall from chapter 1, derives from the philosophy of mind as an attempt to develop an understanding of mental states through action rather than a hermeneutics of intention. Even if Barad asserts that their work does not attempt an onto-epistemic ‘grasping’ of reality or a superior form of epistemic certainty,¹⁰⁵⁷ but is instead ‘radically open,’¹⁰⁵⁸ their deployment of ‘entanglement’ and ‘intra-action’ functionally posit a fundamental (rather than world-historical) onto-epistemology. I adopt these terms from Martin Heidegger and Karl Marx, respectively. Where a world-historical ontology shifts according to material changes in the base and

¹⁰⁵⁴ See Matz Hammarström, “(Mis)understanding Intra-active Entanglement – Comments on René Rosfort’s Criticism of Karen Barad’s Agential Realism,” *Kvinder, Kon & Forskning* 4 (2012): 40.

¹⁰⁵⁵ Barad and Gandorfer, “Political Desirings,” 16.

¹⁰⁵⁶ For example, in Barad, “Troubling Time/s and Ecologies of Nothingness,” 220, Barad writes on historical possibilities as not generated through epistemological uncertainty: “Crucially, these ‘possibilities’ are *not* to be thought of in the usual way: the diffraction pattern is *not* a manifestation of an uncertainty in our knowledge—it is not that each history is merely possible until we know more, and then ultimately only one will be actualized—the superposition marks ontology indeterminacy (not epistemological uncertainty), and the diffraction pattern indicates that *each history coexists with the others.*”

¹⁰⁵⁷ As they do in their interview with Gandorfer, see Barad and Gandorfer, “Political Desirings,” 45.

¹⁰⁵⁸ *Ibid.*, 16.

super-structure, a fundamental ontology seeks the conditions necessary for any ontological claim. While a world-historical ontology is open to change, a fundamental ontology is primordial to both change and temporality. Take, for example, the opening of *Meeting the Universe Halfway*: “Existence is not an individual affair. Individuals do not preexist their interactions; rather, individuals emerge through and as part of their entangled intra-relating.”¹⁰⁵⁹ Barad’s claim is not a situated, localized, or standpoint determination, but a fundamental ontological one. Their claim is that ontology *is* entangled intra-relating. It is highly unlikely, for instance, that Barad would suggest that the ontological stability of Platonic forms or Leibnizian pre-established harmony was at one point constitutive of reality. Rather, these positions are taken as faulty epistemic representations of the ‘metaphysics of individualism’ that Barad and other post-humanists argue against. I want to make clear: I am not suggesting that entanglement is identical to prior ‘dominant’ forms of ontology. I am only suggesting that it functions in a structurally similar manner. Barad (and other critical post-humanists) provide an important corrective: one that centers creation care against the violence of humanistic domination. Their position *is* certainly ‘radically open’ on the level of world historical phenomena, which remain open, indeterminate, and unfixed. Nevertheless, entanglement should be understood as an onto-epistemic position that provides a more accurate description of reality and the fundamental nature of being. Epistemically, Barad pursues a more accurate description of reality. Despite its best efforts, Barad’s consideration of entanglement is a reflective epistemology. In the last instance, while Barad might be an epistemic relativist,¹⁰⁶⁰ their epistemology is grounded in an ontological (or at least meta-ontological) objectivism. This is the objectivity of entanglement.

Insofar as entanglement is a fundamental ontology, it is difficult to espouse an intra-connected ‘ethico-onto-epistemology.’ Barad’s normative concerns notably provide an imperative for the

¹⁰⁵⁹ Barad, *Meeting the Universe Halfway*, ix.

¹⁰⁶⁰ See, for instance, *Ibid.*, 44.

adoption of ‘posthumanist ethics.’¹⁰⁶¹ The imposition of ‘response-ability’ links to a better understanding of humanity’s intra-active participation as “being ethically in touch with the other”¹⁰⁶² or “to take responsibility for the role that we play in the world’s differential becoming.”¹⁰⁶³ These are important ethical principles that are worthy of pursuit. Yet, if entanglement provides a ‘true’ account of onto-epistemic reality and the production of knowledge, then the very conditions of humanistic domination—which Barad and other critical post-humanists like to identify with the ‘violence’ of the ‘dominant’ onto-epistemic separation in the ‘metaphysics of individualism’—must necessarily emerge out of the conditions of entanglement. Sexualized, racialized, homophobic, ableist, gender-based, anthropocentric, and species-based forms of violence result *from* intra-active entanglements, not unilateral ideals determined through theories of perception.

Intrastructural Necropolitics

Barad’s theorization of entanglement may still pose a way forward. One recent analysis of their work stresses that intra-action determines not only inclusion but exclusion.¹⁰⁶⁴ This is true. Barad discusses the role intra-action plays in the development of exclusion throughout *Meeting the Universe Halfway*. Stressing ‘exclusion’ is beneficial to thinking through the entangled co-production of domination. On the topic of exclusion, it is worth pondering the narratives often excluded from critical post-humanism, which has been critiqued as having neo-colonial aspirations,¹⁰⁶⁵ and often fails to account for the developments of race and racialization.¹⁰⁶⁶ For instance, Jasbir Puar notes the tendency of ‘post-humanism,’ object oriented ontology, and new materialism to offer ‘unraced

¹⁰⁶¹ Ibid., 392.

¹⁰⁶² Barad and Gandorfer, “Political Desirings,” 24.

¹⁰⁶³ Barad, *Meeting the Universe Halfway*, 396.

¹⁰⁶⁴ Gregory Hollin et al., “(Dis)entangling Barad: Materialism and Ethics,” *Social Studies of Science* 47, no. 6 (2017): 918-941.

¹⁰⁶⁵ These sorts of claims have been put forward in the work of Watson, “Cosmopolitics and the Subaltern,” Butler, “Making Enhancement Equitable,” Martin, “Subaltern perspectives in post-human theory,” Polsky, *The Dark Posthuman*.

¹⁰⁶⁶ See Weheliye, *Habeas Viscus*; Zakiyyah Iman Jackson, “Outer Worlds: The Persistence of Race in Movement ‘Beyond the Human,’” *GLQ: A Journal of Lesbian and Gay Studies* 21, no 2(2015): 215-218; and Ellis, *Antebellum Posthumanism*

genealogies.¹⁰⁶⁷ Critical post-humanism has been accused of failing to work through ‘Blackness’ in pursuit of a universal inclusion.¹⁰⁶⁸ As Stephanie Polsky notes, “Blackness remains relegated to the substructure of the world.”¹⁰⁶⁹ For example, during one notable roundtable, several prominent thinkers associated with the critical ‘post-humanities’ and new materialism theorized the ‘Plantationocene’ as the “slavery of plants,”¹⁰⁷⁰ without ever referencing the role of Black slaves on the plantation.¹⁰⁷¹ Attempts to theorize intra-active entanglements through plants, animals, and fungi ‘re-write’ the exclusion of Blackness by minimizing “the ways in which racial politics structure plantation life.”¹⁰⁷² Where does Barad’s work fit into this picture? While their work does make mention of race as one of several ‘material-social factors’ that arise through the process of exclusion,¹⁰⁷³ and their work recognizes entanglement as ‘racialized,’¹⁰⁷⁴ critics have suggested that they largely fail to provide a thorough account of critical genealogies from queer, colonized, or racial scholarship.¹⁰⁷⁵

It is curious that while scholarship in the critical post-humanities is quick to invoke the work of Black and post-colonial scholarship, there is little to no engagement with more recent scholarship working through the ontological structuring of Blackness in relation to humanity, even though such engagements would “deepen posthumanist thought.”¹⁰⁷⁶ One exception might be Rosi Braidotti, who—as is noted in chapter 1—works through the scholarship of Aimé Césaire, Frantz Fanon, and Sylvia Wynter from Black scholarship, and the work of Edward Said, Paul Gilroy, and Homi Bhabha

¹⁰⁶⁷ Puar, *The Right to Main*, 25-26.

¹⁰⁶⁸ Butler, “Making Enhancement Equitable,” 109-116.

¹⁰⁶⁹ Polsky, *The Dark Posthuman*, 151.

¹⁰⁷⁰ Haraway et al., “Anthropologists are Talking – About the Anthropocene,” *Ethnos: Journal of Anthropology* 81 (2016): 556. <https://doi.org/10.1080/00141844.2015.1105838>.

¹⁰⁷¹ Polsky, *The Dark Posthuman*, 107-109.

¹⁰⁷² Janae Davis et al., “Anthropocene, Capitalocene, ... Plantationocene?: A Manifesto for Ecological Justice in an Age of Global Crisis.” *Geography Compass* 13, no. 5 (2019): 5. <https://doi.org/10.1111/gec3.12438>.

¹⁰⁷³ Barad, *Meeting the Universe Halfway*, 224.

¹⁰⁷⁴ Barad, “Troubling Time,” 227.

¹⁰⁷⁵ See the critique given by Bargetz and Sanos, “Feminist matters, critiques and the future of the political,” 510.

¹⁰⁷⁶ See Jackson, “Animal,” 676.

from post-colonial theory. Yet, it remains curious that Braidotti's work continually sidesteps engagement with more recent work that considers the ontological foreclosure of human identity (the way many populations have been systematically precluded from the category of 'humanity'). For example, Braidotti's rare discussion of Afro-pessimism is largely dismissive and uncharitable.¹⁰⁷⁷ Misreading Black dispossession as a form of alienation,¹⁰⁷⁸ Braidotti quickly sides with the 'affirmative' position of 'Afro-futurism' because it posits the "generative capacities to overturn that negative historical past by imagining better."¹⁰⁷⁹ Even beyond Braidotti's erasure of contemporary racialization by placing the destructions of humanism in a 'negative historical past' (which is itself an issue in need of address), it is worth examining how her generation of 'inclusion' works towards the exclusion of Blackness. Braidotti largely takes Blackness as another example to universalize their post-humanist schema. Black people become another figure within the larger framework of 'posthumanist solidarity.'¹⁰⁸⁰ Braidotti's reading of Sylvia Wynter is telling: they adopt Wynter's "revision of Humanism in relation to concepts of Blackness,"¹⁰⁸¹ to reduce Black experiences as one ingredient in a flat ontology where "we-are-in-this-together-but-we-are-not-the-same."¹⁰⁸² Rather than a dialogic and situated difference, which 'but-we-are-not-the-same' attempts to keep alive, this universal inclusion erases the situated and unique production of Blackness. Having used Wynter's

¹⁰⁷⁷ Rosi Braidotti, *Posthuman Feminism* (London: Polity, 2021), 224-229.

¹⁰⁷⁸ Ibid., 225. Afro-pessimists, such as Frank Wilderson III, are quick clear that Black dispossession is distinct from forms of alienation. In *Red, White and Black: Cinema and the Structure of U.S. Antagonism* (Durham: Duke University Press, 2010), 7, Wilderson III suggests that Black dispossession consists in, "The Black, a subject who is always already positioned as Slave." Due to this structural fixity, dispossession must be understood as distinct from alienation. Alienation exists within a world-historical antagonism of exploitation that can, theoretically, be overcome in the process of emancipation. Black dispossession, in contrast, makes emancipation 'paradigmatically impossible.' Wilderson III writes, "if a Black is the very antithesis of a human subject, as imagined by Marxism and psychoanalysis, then his or her paradigmatic exile is not simply a function of repressive practices on the part of institutions (as political science and sociology would have it). This banishment from the Human fold is to be found most profoundly in the emancipatory mediations of Black people's staunchest 'allies'." Ibid, 9. This makes dispossession "something infinitely more severe than exploitation and alienation" Ibid.

¹⁰⁷⁹ Braidotti, *Posthuman Feminism*, 224.

¹⁰⁸⁰ Ibid., 229.

¹⁰⁸¹ Rosi Braidotti, *Posthuman Knowledge* (London: Polity, 2019), 160.

¹⁰⁸² Ibid., 161.

scholarship as an example of a ‘missing people,’ Braidotti quickly moves onto what she is really interested in: the development of a “Critical PostHumanities.”¹⁰⁸³ Blackness is reduced to an example of the inclusive nature of the ‘Critical PostHumanities’ design. It is interesting, furthermore, that Braidotti is largely content to work with Black scholarship that—perhaps outside of Fanon—remains steadfastly humanistic: maintaining the promise of liberal individualism for Black people. This form of ‘romantic humanism,’ (a phrase adopted from Calvin Warren),¹⁰⁸⁴ contains a ‘plea’ for those historically produced as ‘non-human’ to now be recognized as ‘human.’¹⁰⁸⁵ Yet, if it is the case that Blackness constitutes “a structural position of noncommunicability in the face of all other positions,”¹⁰⁸⁶ such a recognition is structurally, which is to say *ontologically*, impossible. This is worth teasing out.

If ‘entanglement’ and ‘intra-action’ are ontologically true (at a fundamental or meta-ontological level), then intra-action is a condition of domination. Domination emerges through intra-action as the material practices or performances that cut across being. Barad’s concept might be better understood when traced through the production of domination. In *Unpayable Debt*, Denise Ferreira da Silva uses Barad to think through these processes. Drawing inspiration from ‘intra-action,’ da Silva conceives of ‘intrastructure’ as an onto-epistemological and political architecture.¹⁰⁸⁷ Intrastructure can be understood as the intra-active or allagmatic production of colonial, racial, juridical, and capitalist structures. Da Silva positively draws upon Barad’s concepts to expose the ‘wounded captive body,’ produced within a racialized intrastructure. This task, which ‘blackness alone’ can perform, seeks to “unravel the interpretive episteme” of post-Enlightenment thought.¹⁰⁸⁸

¹⁰⁸³ Ibid., 162.

¹⁰⁸⁴ Calvin Warren, *Ontological Terror: Blackness, Nihilism, and Emancipation* (Durham: Duke University Press, 2018), 91.

¹⁰⁸⁵ See Zakiyyah Iman Jackson, *Becoming Human: Matter and Meaning in an Antiblack World* (New York: New York University Press, 2020), 1.

¹⁰⁸⁶ Wilderson III, *Red, White, Black*, 59.

¹⁰⁸⁷ Da Silva, *Unpayable Debt*, 28.

¹⁰⁸⁸ Ibid.

I take da Silva's 'intrastructure' as an oblique extension of intra-action. Intrastructure signals the intra-active conditions of inclusion and exclusion, as well as an indeterminate domination, through performative cuts. It shows how performativity is concretized in the structures of domination. Separation emerges through, not in spite of, entanglement and relation. Whilst drawing positively upon Barad, da Silva's analysis bypasses Barad in at least two ways (which I explicate below): first, they more concretely centre the production of racialization through intra-action (which Barad allows for but does not discuss in depth); second, as I highlight in my forthcoming discussion of the 'oblique,' they acknowledge the incapacity to truly overcome representational thought, which provides a strategic way through epistemic representation not possible for Barad.

The production of racialization, as highlighted by da Silva, bridges with a racialized Necropolitics. Achille Mbembe introduces this concept to conceive of the "subjugation of life to the power of death,"¹⁰⁸⁹ as deployed through what he terms "technolog[ies] of racist power."¹⁰⁹⁰ From the slave ship to the plantation, slaves are technologically molded by 'Slavery's technologies,'¹⁰⁹¹ as an "accumulable and fungible" object of instrumental rationality by way of a structuring violence applied to the body or 'flesh.'¹⁰⁹² These technologies include both the 'hold' of the slave ship¹⁰⁹³ and the whipping post.¹⁰⁹⁴ 'Necropolitics' describes the 'living death' inscribed on the body as a site of memory.¹⁰⁹⁵ For Mbembe, race is not given (as *quiddity*) but produced through a racialized machinery and instrumental calculus.¹⁰⁹⁶ Both the 'human' and 'Blackness' are plastic and malleable in their

¹⁰⁸⁹ Mbembe, "Necropolitics," 39.

¹⁰⁹⁰ Achille Mbembe, *Necropolitics*, trans. Steven Corcoran (Durham: Duke University Press, 2019), 18.

¹⁰⁹¹ Wilderson III, *Red, White, and Black*, 106.

¹⁰⁹² *Ibid.*, 14.

¹⁰⁹³ See Christina Sharpe, *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016).

¹⁰⁹⁴ Mbembe, "Necropolitics," 23.

¹⁰⁹⁵ Francisco Ferrándiz and Antonius CGM Robben, "Introduction: The Ethnography of Exhumations," in *Necropolitics: Mass Graves and Exhumations in the Age of Human Rights*, ed. Francisco Ferrándiz and Antonius CGM Robben (Philadelphia: University of Pennsylvania Press, 2015).

¹⁰⁹⁶ Achille Mbembe, *Critique of Black Reason*, trans. Laruen Dubois (Durham: Duke University Press, 2017), 79.

intra-relation. Exclusion takes the form of a psycho-somatic inscription. Drawing upon Fanon, Mbembe notes these inscriptions work through “cuts, wounds, and injuries.”¹⁰⁹⁷

This structuring violence is the foundation of Black ‘dispossession’ that operates by rendering a fungible object for human use and accumulation.¹⁰⁹⁸ Hortense Spillers describes this violence as ontologically distinguishing the ‘body’ from the ‘flesh,’ with the latter conceived as susceptible to a ‘total objectification.’¹⁰⁹⁹ Wilderson III notes this production as a “violence which turns the body into flesh, ripped apart literally and imaginatively destroys the possibility of ontology, because it positions the Black in an infinite and indeterminate horrifying and open vulnerability.”¹¹⁰⁰ These are “technologies of accumulation and fungibility”¹¹⁰¹ or what Weheliye terms a ‘racializing assemblage:’ a “set of sociopolitical processes that discipline humanity into full humans, not-quite-humans, and nonhumans.”¹¹⁰² While this violence is structural, it is also repeated historically from the slave ship to the whipping post to Jim Crow to the continued threat and use of police violence. Steve Martinot and Jared Sexton show how “the impunity of racist police violence” maintains the onto-epistemic reproduction of racialization of fungibility.¹¹⁰³ This is at once the ‘performance’ and ‘practice’ of Blackness.¹¹⁰⁴ Through the repeated incidents of police abuse of Black people for entertainment (through the use of measures like stop and frisk and the gratification of violence against the flesh), this foundational violence constitutes the infrastructural necropolitical division of (white) life and (Black) death. Nevertheless, necropolitical and infrastructural violence should not be understood as

¹⁰⁹⁷ Ibid., 174.

¹⁰⁹⁸ Sylvia Hartman, *Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America* (Oxford: Oxford University Press, 1997), 25.

¹⁰⁹⁹ Hortense Spillers, “Mama’s Baby, Papa’s Maybe: An American Grammar Book,” *Diacritics* 17, no. 2(1987): 68. <https://doi.org/10.2307/464747>.

¹¹⁰⁰ Wilderson III, *Red, White, and Black*, 38.

¹¹⁰¹ Ibid., 55.

¹¹⁰² Weheliye, *Habeas Viscus*, 4.

¹¹⁰³ Steve Martinot and Jared Sexton, “The Avant-Garde of White Supremacy,” *Social Identities* 9, no. 2 (2003): 169-181. <https://doi.org/10.1080/1350463032000101542>.

¹¹⁰⁴ Hartman, *Scenes of Subjection*, 58.

the unilateral imposition of violence by one identity upon or against another, but the intra-active co-production—the ‘cut’—of inclusion and exclusion of sovereignty and subjectivity. To bring intra-action and necropolitics together posits the material inscription (*qua* violence) of racialization through the mutually entangled production of the ‘human’ and the (fungible) object. This is a material instantiation and/or performance. Thus, while (as Mbembe repeatedly suggests) race is not material, racialization is a material, psycho-somatic process of persistent wounding and inscription through a foundational violence against the flesh.

Structures of Exclusion

To be fair to Barad, their more recent work in political theory and political theology does come closer to addressing something like an infrastructural necropolitics. For instance, they pose that ‘response-ability’ emerges within the concretizations of an entangled domination, promoting an attempt to recognize and seek reparations for the exclusions produced in intra-action: “to come to terms with the infinite depths of our inhumanity, and out of the resulting devastation, to nourish the infinitely rich ground of possibility for living and dying otherwise.”¹¹⁰⁵ This is a step in the right direction: a focus on the destructive tendencies of entanglement. Yet, the claimed intra-connection of Barad’s ‘ethic-onto-epistemology’ falls apart when one attempts to read the ethical or normative production of ‘response-ability’ as entangled with the onto-epistemic production of material intra-action. In understanding ethics as entangled with material phenomena, Barad takes ethicality as materially instantiated, rather than grounded in representation or a social contract.¹¹⁰⁶ The issue with this is that, insofar as entanglement consists in ‘ethico-onto-epistemology,’ it is necessarily the case that all ethical, ontological, and epistemological positions—including the ‘dominant’ forms grounded

¹¹⁰⁵ Barad, “Troubling Time/s,” 242.

¹¹⁰⁶ See Malgorzata Kowalcze, “Is matter ethical? Is ethics material? An enquiry into the ethical dimension of Karen Barad’s ethico-onto-epistemological project,” *Culture, Theory, and Critique* 63, no. 1(2022): 15. <https://doi.org/10.1080/14735784.2023.2190903>.

in a ‘metaphysics of individualism’—are instantiated through intra-active processes. In other words, the positions of Plato, Aristotle, Kant, and Hegel must necessarily be understood as performative cuts that emerge through intra-active processes. Insofar as both ‘intra-active ethics’ and ‘traditional ethics’ emerge through material intra-action, the promotion of one against the other is necessarily placed in the realm of material instantiation. This would mean that in its various configurations, ‘ethics’ is always instituted through differential apparatuses of power (and *not* through the power of rational judgement, reflection in pure reason, or a social contract). And yet, Barad and other critical post-humanists consistently appeal to the rhetoric of imperative: “We *need* to meet the universe halfway;”¹¹⁰⁷ “We *need* to switch episteme right now;”¹¹⁰⁸ “it is *urgent* to set a new posthuman agenda.”¹¹⁰⁹ However, by appealing to an imperative to adopt an ‘intra-active ethics’ or ‘responsibility’ against ‘traditional ethics,’ these positions cannot be understood as instantiated through material intra-active processes but instead return to the purview of rationality, recognition, and representation (as is discussed in chapter 3). Imperative centres rationality in the appeal to think differently.

Appeals to imperative betray that entanglement, as ontological condition, is insufficient for emancipation from humanism. By offering an imperative, the ethical positions provided by theorists of entanglement and connection retain humanistic models of representation. One might recall that Barad conceives of representation as a sort of ‘violence’ grounded in human exceptionalism that imposes mediated representations onto reality.¹¹¹⁰ For Barad, entanglement denies representational epistemology in favor of “a direct material engagement with the world.”¹¹¹¹ As I have articulated thus far, while Barad is able to deny representationalism on the level of studied phenomena, they are

¹¹⁰⁷ Barad, *Meeting the Universe Halfway*, 397. Emphasis mine.

¹¹⁰⁸ Francesca Ferrando, “The Party of the Anthropocene: Post-humanism, Environmentalism, and the Post-Anthropocentric Paradigm Shift,” *Relations: Beyond Anthropocentrism* 4, no. 2 (2016): 170. Emphasis mine.

¹¹⁰⁹ Rosi Braidotti, *The Posthuman* (London: Polity, 2013), 196. Emphasis mine.

¹¹¹⁰ Barad and Gandorfer, “Political Desirings,” 21, 32.

¹¹¹¹ Barad, *Meeting the Universe Halfway*, 49.

committed to a fundamental position (of entanglement and intra-action) that attests to a fixed underlying ontology. Functionally, the property of entanglement operates as the foundation for subsequent world-historical ontological, epistemological, and ethical commitments. Entanglement is the foundation of performativity, but entanglement is not itself a performance. Thus, Barad provides an ontological account of the truth of a primordial reality, which constitutes an attempt to provide a superior representation of reality. Entanglement is a foundational narrative. Barad is not fond of representation, suggesting that it displays a ‘linguistic narcissism,’ assumes a separation and mediation between independent entities, and is a “failure to take account of the practices through which representations are produced.”¹¹¹² Representationalism takes ‘knowledge’ as the act of a rational observer who is at once reflecting on and imposing, by using their representational ideas or concepts, their determination of reality.¹¹¹³ Representationalism is bound to both ‘metaphysical individualism’ and ‘humanism,’ given that humans are provided the unique, rational capacity for reflection and representation.¹¹¹⁴ Humans are ontologically separated and capable of epistemic reflection (as per chapter 1). While a performative epistemology notably shifts away from certain confines of representation and reflection on the level of individuating *haecceities*, the maintained promotion of a fundamental ontological foundation (even if that foundation is itself constituted as indeterminacy) maintains a representational account and continuation of the humanist project. Barad’s work seeks a superior understanding of the fundamental principles of the human condition (as entanglement) to develop superior models for thinking ethics and epistemology. Entanglement functionally maintains the humanistic impulse for better representations of reality. While, ontologically, entanglement shifts the object of ethicality beyond human-centredness (and this is something to be praised), the project remains epistemically similar to ethical justifications of

¹¹¹² Ibid., 42, 47, 53.

¹¹¹³ Ibid., 86.

¹¹¹⁴ Ibid., 134.

humanism, given that it continues to valorize the capacity of rationality to accurately represent the world. Representation remains the foundation of ethics.

Because ethics is maintained through the appeal to imperative, the conditions of ethics are simultaneously maintained through a principle of recognition: humans must recognize entanglement and then act in accordance with an ethics befitting that recognition. The condition of ethicality may be materially instantiated but the appeal to imperative reveals that the instantiation must be subsequently recognized and acted upon. Here we might build on earlier chapters to think through the social and historical ramifications of this repetition. As Ellis notes, “This powerfully expanded map of the entanglements of being and knowing does not tell us what we ought to do with its information.”¹¹¹⁵ This is where critical post-humanism runs into problems. Barad cannot maintain that any specific form of ethics is superior to any other without an appeal to representation and reflection. Any ethical promotion—whether it be deontological, utilitarian, virtue ethics, or even divine command theory—is always, by way of entanglement, materially instantiated. Material instantiation cannot, on its own, provide the basis for ethics. This mandates the need for imperative. The appeal to imperative maintains a principle of recognition: to recognize ‘our’ entanglements as the ground for ethics. Recognition serves as the basis of Barad’s ‘response-ability,’ what others have termed ‘ecologies of repair,’¹¹¹⁶ and what I have described as ‘post-humanist ethics.’ Despite the appeal to a process-oriented ontology, critical post-humanism has been accused of having a “faith in liberal recognition” by “extending recognition to nonhuman being[s].”¹¹¹⁷ Unlike some other critical post-humanists, Barad *does* account for intra-active exclusion.¹¹¹⁸ Yet, their appeal to recognition, as evidenced through the ethical imperative of ‘accountability,’ remains bound to representation.¹¹¹⁹

¹¹¹⁵ Ellis, *Antebellum Posthumanism*, 165.

¹¹¹⁶ Blanco-Wells, “Ecologies of Repair.”

¹¹¹⁷ Ellis, *Antebellum Posthumanism*, 155, 152.

¹¹¹⁸ For example, Barad, *Meeting the Universe Halfway*, 392.

¹¹¹⁹ *Ibid.*, 135.

While ethical recognition may appear inviting, racial scholarship suggests recognition often exacerbates division and domination. Infrastructural necropolitics expresses the allagmatic cut of inclusion and exclusion: the “scission of humanity into ‘useful’ and ‘useless.’”¹¹²⁰ Technologies of racialization instill a material cut between the ‘Human’ and the fungible, accumulable object. Scholarship on the foreclosure of humanity to Blackness is often suspicious of the inclusion of Black fungibility into human recognition (where an ontological exclusion would mandate a subsequent ethical inclusion through recognition). For instance, like Barad, Saidiya V. Hartman’s *Scenes of Subjection* notes the violence of recognition to “tether, bind, and oppress” rather than liberate.¹¹²¹ She describes how the bifurcated structure of ‘human’ and ‘object’ allagmatically reinscribes Blackness. Hartman notes a letter from Abraham Lincoln where, regarding the condition of twelve slaves chained together, he notes their apparent ‘contentment’ amidst their captivity. This ‘recognition’ of Black subjectivity as ‘content’ in captivity is described as a violent imposition of white representation.¹¹²² As Zakiyyah Iman Jackson notes, liberal humanization serves as a ‘technology’ of Black fungibility: “Blackness has been central to [...] liberal humanism: the black body is an essential index for the calculation of degree of humanity and the measure of human progress.”¹¹²³ Liberal recognition maintains Blackness as a fungible token of its own progress. The inclusion of a ‘select’ group of Black people into the sphere of ‘humanity’ repeats the tendency of recognizing the slave as subject and object: to recognize the slave as a person in select circumstances (such as the juridical increase of liability for unreasonable violence against slaves) and not others (the decriminalization of violence when necessary to preserve the institution of slavery). This doubling “shrouded the violence of such a beneficent and humane gesture.”¹¹²⁴ As I mentioned in chapter 1,

¹¹²⁰ Mbembe, *Necropolitics*, 12.

¹¹²¹ Hartman, *Scenes of Subjection*, 5.

¹¹²² *Ibid.*, 34-35.

¹¹²³ Jackson, *Becoming Human*, 96.

¹¹²⁴ Hartman, *Scenes of Subjection*, 94.

Fanon expresses how Blackness faces the double bind of a universal ‘bodily schema’ and ‘historical-racial schema:’ at once a part of the universal humanist project and a representative of their ancestry and race.¹¹²⁵ These twin universalities at once include and exclude. Any attempt to achieve a liberal universalism in the first is thwarted by the second: one might be a teacher or physician but only ever “the Negro teacher, the Negro physician.”¹¹²⁶

For Afro-pessimists like Calvin Warren and Frank Wilderson III, the structuring, ontological exclusion of Blackness from humanity necessarily forecloses the possibility of inclusion. As Mbembe’s concept of necropolitics suggests, humanity is determined by way of an intra-active (or intrastructural) exclusion: “Humanity recognizes itself in the Other that it is not.”¹¹²⁷ As Fanon suggests, “Ontology does not allow us to understand the being of the black man, since it ignores the lived experience. For not only must the black man be black; he must be black in relation to the white man.”¹¹²⁸ If Black dispossession is a structural condition of recognition, then the very attempt at recognize reinforces Black dispossession as an intrastructural cut that co-determines Black fungibility and white identity. Warren provides an example of freedom certificates given to emancipated Blacks in the pre-civil war United States: “[F]reedom papers deceive through appearance.”¹¹²⁹ Beyond the fact that the paper could easily be physically destroyed, their logic reveals dispossession in the structure of recognition. The emancipated Black person was required to present their papers to any figure of authority who requested them. Under the law of the Fugitive Slave Act of 1850, this authority would include all white citizens.¹¹³⁰ Structurally, the condition of freedom was bound to the white gaze. Reciprocally, white power is bound to Black subordination. The (Black) fungible object is always already dependent on (white) humanity to instigate and

¹¹²⁵ Fanon, *Black Skins, White Masks*, 91.

¹¹²⁶ *Ibid.*, 97.

¹¹²⁷ Ronald Judy quoted in Wilderson III, *Red, Black, and White*, 42.

¹¹²⁸ Fanon, *Black Skins, White Masks*, 90.

¹¹²⁹ Warren, *Ontological Terror*, 102.

¹¹³⁰ *Ibid.*, 104-5.

recognize its freedom. If the paper goes unrecognized (or is destroyed) that freedom vanishes. The Kantian bifurcation of human/thing is continually re-enacted and re-performed through the insistence of white recognition of Black being. Recognition structurally re-enforces the incapacity to be recognized. Black freedom is always at the threshold of being withdrawn: this recurs through police killings, including the murder of George Floyd,¹¹³¹ and the racial hoax, as exemplified in the ‘Central Park birdwatching incident.’¹¹³² As Warren writes, “Renisha McBride, Jordon Davis, Kody Ingham, Amadou Diallo, Aiyana Stanley-Jones, Frederick Jermain Carter, Chavis Carter, Timothy Stansbury, Hadiya Pendleton, Oscar Grant, Sean Bell, Kendrec McDade, Trayvon Martin, and Mike Brown, among others, constitute a fatal rupture of the Political.”¹¹³³

Beyond the structural impossibility of Blackness, Warren and Wilderson III both hold Black dispossession as the condition of white possibility. This takes both the form of police violence, but also attempts by white liberals towards Black inclusion. For Wilderson III, this comes in the form of Blackness as an absolute Other, against which claims to sovereignty can be expressed.¹¹³⁴ In his terms, “Blackness cannot be dis-imbricated from slaveness.”¹¹³⁵ Blackness is necessarily integrated (intra-grated) outside the world order as slave. He suggests that “from the incoherence of Black Death, America generates the coherence of white life.”¹¹³⁶ From its inception, the United States and capitalism have been anti-Black. This foundation is retained in both the prison-industrial complex and the continued violence against Black people. For Wilderson III, Blackness serves as the

¹¹³¹ Michelle A Stephens, “We Have Never Been White: Afropessimism, Black Rage, and What the Pandemic Helped me Learn About Race (and Psychoanalysis),” *The Psychoanalytic Quarterly* 91, no. 2 (2022): 319-347. <https://doi.org/10.1080/00332828.2022.2096797>.

¹¹³² Kathryn Russel-Brown, “The Dog Walker, The Birdwatcher, and Racial Violence: The Manifest Need to Punish Racial Hoaxes,” *University of Florida Journal of Law and Public Policy* 31, no. 1 (2020): 1-10. <https://scholarship.law.ufl.edu/ilpp/vol31/iss1/11>.

¹¹³³ Calvin Warren, “Black Nihilism and the Politics of Hope,” *CR: The New Centennial Review* 15, no. 1 (2015): 217.

¹¹³⁴ Wilderson III, *Red, Black, and White*, 45.

¹¹³⁵ Frank Wilderson III, “Black and the Master/Slave Relation,” *Afro-Pessimism: An Introduction* (Minneapolis: Racked & Dispatched, 2017), 20.

¹¹³⁶ Frank Wilderson III, “The Prison Slave as Hegemony’s (Silent) Scandal,” *Social Justice* 30, no. 2(2003) 23.

foundation for (white) civil society. Adopting Spillers' use of the term, Black 'flesh' is allagmatically inscribed as non-white and non-human to allow the perpetuation of white sovereignty. The division of the white worker and Black slave instigates a division in capitalism's history: "work is a white category [...] from the very beginning we [Blacks] were meant to accumulate and die."¹¹³⁷ Warren affirms, "The American dream, then, is realized through black suffering. It is the humiliated, incarcerated, mutilated, and terrorized black body that serves as the vestibule for the Democracy that is to come [...] it almost becomes impossible to think the Political without black suffering."¹¹³⁸ If Wilderson III is right in suggesting that Black dispossession serves as the production of white-human possibility, then Black dispossession constitutes the very conditions of possibility necessary for recognition.¹¹³⁹ The recognition of Black humanity is self-defeating, affirming dispossession in the very act of recognition. Even if Afro-pessimism is incorrect in aligning Black dispossession as the necessary underside of white possibility, it is difficult to work past the reality that "Democracy, the plantation, and the colonial empire are objectively part of the same historical matrix. The originary and structuring fact lies at the heart of every historical understanding of the violence of the contemporary social order."¹¹⁴⁰ Entanglement is a condition of domination.

Oblique Apostacy

Entanglement remains within the purview of what da Silva terms the 'transparency thesis,' "the ontoepistemological account that institutes 'being and meaning' as effects of interiority and temporality."¹¹⁴¹ Transparency invokes both the 'transparent I' (Kantian self-reflective representation) and a 'transcendental poiesis' (Hegelian immanentization of reason as ruler of the

¹¹³⁷ Frank Wilderson III, "Gramsci's Black Marx: Wither the Slave in Civil Society?" *Social Identities* 9, no. 2 (2003): 238. <https://doi.org/10.1080/1350463032000101579>.

¹¹³⁸ Warren, "Black Nihilism," 217.

¹¹³⁹ Wilderson III, *Red, Black, and White*, 43.

¹¹⁴⁰ Mbembe, *Necropolitics*, 23.

¹¹⁴¹ da Silva, *Toward a Global Idea of Race*, 4.

universe), to form the rational ‘will to truth’ of modern thought (as discussed in chapter 2).¹¹⁴² With a rationally grounded representation serving as the basis for truth, transparency is central to what da Silva terms an ‘analytics of raciality,’ which links to the allagmatic production of race and raciality through the representations of transparency.¹¹⁴³ As da Silva notes, transparency remains the ontological assumption of most critical scholarship, including post-structuralist—and we might add critical post-humanist—strategies that attempt to challenge historicity as representation, which “rehearse the very historicity they challenge.”¹¹⁴⁴ Both ‘human’ and ‘Black fungibility’ emerge through a transparent grammar of “racial and cisheteropatriarchal subjugation.”¹¹⁴⁵ While world-historical, the violence of this transparent grammar repeats in every instance of transparency to designate a distinction between ‘human’ and ‘thing,’ ‘dignity’ and ‘fungibility.’¹¹⁴⁶ Thus, any appeal to recognition in transparency reveals the impossibility of that recognition. Humanism’s ‘transparent I’ consistently repeats this subjugation by mediating between itself and the ‘non-human.’ Yet, da Silva is not satisfied either with attempts that fail to address this persistent reproduction, such as Judith Butler’s return to Hegel,¹¹⁴⁷ nor those that attempt to completely escape the grammars of transparency. Critical post-humanism can be taken as an example of the latter, given that its attempts to abscond representation has “but (re)produced its (highly productive) effects.”¹¹⁴⁸ The difficulty, as da Silva positions it, is to struggle with/in the grammar of transparency. To abandon this grammar does not seem to be an option, lest one “fall into risible oblivion” with Nietzsche’s madman.¹¹⁴⁹

Intrastructural violence is not a thing of the past in need of repair but an ongoing allagmatic process of transparency. This thesis cannot escape its trap: I remain fully within the realm of the

¹¹⁴² Ibid., 20.

¹¹⁴³ Ibid., 3.

¹¹⁴⁴ Ibid., 167-168.

¹¹⁴⁵ Da Silva, *Unpayable Debt*, 49.

¹¹⁴⁶ Ibid., 24.

¹¹⁴⁷ Da Silva, *Towards a Global Idea of Race*, 5.

¹¹⁴⁸ Ibid., 260.

¹¹⁴⁹ Ibid.

aims of representation and transparency, while recognizing the poverty and violence of those principles. As discussed in chapter 4, the tendency to pose a way ‘forward’ seems an error, given that attempts to move ‘forward’ with a goal-oriented or teleological approach would appear to repeat the tendencies of possibility and transparency without adequately separating from the anti-Blackness inherent to those principles. In this sense, my conclusions are slightly distinct from many Black critics of post-humanism, such as Ellis, Butler, and Jackson, who often maintain a hope in the possibility of bridging Black scholarship with critical post-humanism.¹¹⁵⁰ While these ‘possibilities’ may offer a way forward, I remain skeptical that post-humanism offers a true epistemological shift (even if it does offer an important ontological one). These are tensions acknowledged by da Silva. Neither the adoption nor the complete refusal of transparency are available positions. Instead of seeking a way ‘forward,’ da Silva opts for “facing modern representation sideways through an oblique engagement.”¹¹⁵¹ An oblique engagement is notable for refusing to adopt the sufficiency of the position engaged with. The ‘oblique’ might be understood through da Silva’s use of ‘hacking,’ which “is not so much a method, as it is refusal as a mode of engagement.”¹¹⁵² I take da Silva’s use of Barad to be oblique: an attempt to turn ontological indeterminacy against inclusion and towards infrastructure. ‘Infrastructure’ is a strategic use of ‘intra-action.’ Oblique engagements and hacking aim at an indeterminacy that radicalizes Barad: “a Nothing by which I mean Everything and Anything else that the World as we know it today.”¹¹⁵³ Because it is oblique, infrastructure does not posit a clean break from representationalism. Like Barad, da Silva sees representation as violent. Yet, the strategy of an oblique engagement recognizes the impossibility of escaping representation. Rather than an ethics grounded in representation and recognition, the oblique tendencies of

¹¹⁵⁰ Ellis, *Antebellum Posthumanism*, 168; Butler, “Making Enhancement Equitable,” 108; Jackson, “Animal.”

¹¹⁵¹ Da Silva, *Towards a Global Idea of Race*, 260.

¹¹⁵² Denise Ferreira da Silva, “Hacking the Subject: Black Feminism and Refusal beyond the Limits of Critique,” *philoSOPHIA* 8, no. 1 (2017): 22. <https://doi.org/10.1353/phi.2018.0001>.

¹¹⁵³ *Ibid.*, 38.

intrastructure reflect a politics of power: one that takes the incapacity of thought to escape representation as a starting point. Recognition cannot serve as the determination of ethical ‘accountability’ but only an indetermination.

Oblique engagements align with what Warren terms ‘black nihilism.’ For Warren, “[n]ihilism, then, presents itself as the philosophical reflection of social decay; it offers a political-philosophical death (the death of ground as the only ‘hope’ for the world).”¹¹⁵⁴ When life structurally determines death, the affirmation of death serves as im/possible ungrounding. Black nihilism takes on the tendency of an ‘active nihilism’ in the Nietzschean sense: for Warren, a ‘political apostacy’ that renounces the Political itself: “As political apostate, the black nihilist renounces the idol of anti-blackness, but refuses to participate in the ruse of replacing one idol with another [...] We can think of political apostacy then, as an *active nihilism* when an ‘alternative’ political arrangement is impossible.”¹¹⁵⁵ Such is the ‘affirmation’ of ‘nothing’: the oblique tendency to disrupt the rules by taking the rules seriously and on their own terms. The oblique engagement of Black nihilism might be best described through Jared Sexton’s statement, “The most radical negation of the anti-black world is the most radical affirmation of a blackened world. Afro-pessimism is ‘not but the nothing other than’ black optimism.”¹¹⁵⁶ The oblique affirmation is nothing other than the affirmation of the end of the world.

In his youth, the French anarchist and cultural theorist Paul Virilio worked with architect Claude Parent to develop what they termed the ‘oblique function:’ an architecture without distinct floors or walls, using a series of inclined planes to impose a consistent visible and gravitational

¹¹⁵⁴ Warren, “Black Nihilism,” 224.

¹¹⁵⁵ *Ibid.*, 233.

¹¹⁵⁶ Jared Sexton, “The Social life of Social Death,” *InTensions Journal* 5 (2011): 37. <https://doi.org/10.25071/1913-5874/37359>.

‘instability.’¹¹⁵⁷ While Virilio’s work on technology is often taken as conservative,¹¹⁵⁸ his concept of the oblique function, and several offhand remarks, suggest something much closer to Warren’s ‘active nihilism’ and da Silva’s own use of the oblique. Virilio’s work is filled with references to an ‘integral accident’—something greater than a paradigm shift that would ‘explode’ the world—caused by bio-technological and ‘dromological’ (accelerating) innovations.¹¹⁵⁹ Virilio differs from other critics of speed, however, in never appealing to a rationalistic or reflective moralism. When questioned on his ‘negativity’ regarding technological progress, Virilio responds: “I am not at all negative [...] I am not crying about progress. I am not crying about the despair of the world. I am profoundly excited by catastrophe. This is what it means to be a *revelationary*. It’s not a turn away from the gaze of negativity. One must look at negativity with a mirror.”¹¹⁶⁰ Neither promoting some utopic future, nor defending humanity against catastrophe, Virilio seeks what catastrophe reveals. This response is incredibly oblique: Virilio shifts the stakes to undermine the game according to its rules. He affirms techno-scientific progress because of (and not in spite of) the acceleration towards catastrophe. Da Silva’s use of the oblique, to affirm a Black and active nihilism in the face of impossibility, works to reveal something similar about the structuring of the ‘human’ and ‘Blackness’ without a simple affirmation or refusal of transparency.

If repair is not possible—that is, if the conditions for (Black) possibility simultaneously render (Black) possibility impossible—then perhaps an oblique affirmative refusal or active nihilism is all that is available. An oblique account of ‘critical post-humanism,’ ‘entanglement,’ and ‘intra-action’ would not simply abandon those terms, nor fully accept them, but instead attempt their use through and against themselves. Neither the simple affirmation of critical post-humanism’s ethical

¹¹⁵⁷ For discussion of the oblique function, see Esen Gökçe Özdamar, “Inclined Planes and the Oblique Function as a Resistance to Gravity,” *Interiors* 12, no. 1 (2022): 50-74. <https://doi.org/10.1080/20419112.2022.2030956>.

¹¹⁵⁸ See, for example, William Connolly, *Neuropolitics: Thinking, Culture, Speed* (Minneapolis: University of Minnesota Press, 2002), 78.

¹¹⁵⁹ See Paul Virilio, *Grey Ecology*, trans. Drew Burk (New York: Atropos Press, 2009), 31.

¹¹⁶⁰ *Ibid.*, 52.

accountability nor the simple rejection of its transparency in a return to a metaphysics of individualism. Instead, the usage might follow something like da Silva's adoption through the development of infrastructure as an oblique rendering of intra-action. In this chapter, I have pushed towards such an oblique rendering through a discussion of infrastructural necropolitics. This is an attempt to work without offering a solution nor an aim but only an allagmatic rendering that maps the tendencies of its operations.

Conclusion, At the Point of Closure: Oblique Potentialities

This thesis has been largely motivated by two research questions that emerge from critical post-humanism's attempted emancipation from humanism. First, are the principles of critical post-humanism consistent with its aims? Second, if the principles of critical post-humanism are inconsistent with its aims, then what might constitute a veritable post-humanism? To answer these questions, this work adopted a method of problematization. The first chapter diagrammed contemporary notions of critical post-humanism by tracing their emergence through Western philosophical thought. Beginning with Immanuel Kant, this chapter diagrammed both the aims and principles of critical post-humanism. Understanding critical post-humanism as distinct from both transitional humanism and cybernetics, its aim is understood as an emancipation from humanism (not an emancipation from the human). Furthermore, working through Kant's transcendental humanism, this chapter diagrammed how critical post-humanism attempts this emancipation through principles of ontological connection, epistemological relation, and situated ethics. Respectively, these are contrasted with Kant's ontological separation, epistemological reflection, and deontological morality. Working from this diagram, subsequent chapters problematized the relationship of these principles from their emancipatory aim. If the aim of critical post-humanism is an emancipation from humanism, then connection, relation, and situatedness should be consistent with and sufficient for emancipation. The second chapter challenged this sufficiency. While connection, relation, and situatedness are distinct from Kantian humanism (including the categorical imperative), they remain largely congruent with G.W.F. Hegel's ethico-political project. Focusing on similarities between these principles and Hegel's critique of Kant through the development of 'ethical life,' chapter 2 argued connection, relation, and situatedness are insufficient for emancipation from humanism. Working in the domain of political ontology, this chapter attempted to answer the first research question stating that, as it currently operates, the principles of critical post-humanism

remain insufficient for its aim. Connection, relation, and situatedness do not produce a break from humanism.

With this insufficiency established, the third, fourth, and fifth chapters shifted towards the second research question. Given the insufficiency of critical post-humanism's principles, I ask: what conditions or principles would be necessary for a veritable post-humanism? Using the criteria established in the second part of chapter 2, which identified humanism with rationalism and teleology, the question is refocused: what criteria would allow for a veritable post-humanism foreclosed to rationalism and teleology? Readers seeking a direct answer or 'solution' to this question or 'problem' are likely to be disappointed. Methodologically, these chapters maintain the practice of critical interrogation and problematization established in the introduction: to focus the problem of critical post-humanism as a gesture or operation akin to an ontogenetic *haecceity*. The reason for this is likely clearer now than when presented in the introduction. My goal has never been to provide a solution that would instantiate a veritable post-human, post-humanism, or post-humanities (as emancipation from the human, humanism, or humanities). Strategically, I have refused the logic of solution. This refusal begins by recognizing the recurring structure of solution-based thinking: that solutions reproduce the issues of intentionality (*qua* rationalism) and ends (teleology) that the problematization of humanism seeks to overcome. For critical post-humanism, the logic of recurrence emerges through the designation of any 'post-human' or 'more than human' end, which inherently invokes a rationally determined (chapter 3), teleological (chapter 4) and thus human structure. Chapter 5 opens with the question, what if the logic of liberation constitutes the very affront to that liberation? Here, that question can be re-written, what if the logic of solution inherently renders every solution to humanism untenable? To pose a solution to humanism's rationalism and teleology—whether that be Rosi Braidotti's cosmopolitan post-humanism (chapters 2,3), Patricia MacCormack's cessation of human reproduction (chapter 3), Stefan Herbrechter's

human singularity, Donna Haraway's sympoietic systems (chapter 4), or Karen Barad's intra-active entanglement (chapter 5)—is to fall back into a framework of rationalism and teleology: to pose some end by means of the rational powers of human thought.

Rather than pose a solution to the problems established in the first two chapters, the latter three have attempted to gesture at operational tendencies or what I would term oblique potentialities. Focusing on problems rather than solutions—in the ontogenetic development of physiological ethics, politics without ends, and the oblique aspects of affirmative nihilism—these chapters refuse the tendency to impose a form onto matter. Here, it is necessary to distinguish 'oblique potentiality' from 'imagined possibilities.' While contemporary literature is often quick to adopt the language of 'imagining differently' by providing 'novel possibilities,' any focus on problems requires one to remain skeptical of the possible. The possible operates in a symmetrical opposition with the 'given.' Thus, the possible operates under the purview of solution: a critical solution inaugurated through the emancipation from the given.¹¹⁶¹ The possible might rightly be identified with the exhaustive recurrence of neoliberalism.¹¹⁶² Over the course of these chapters, the gestures I have identified do not designate possible alternatives to the given but instead attempt to reveal a glimpse of oblique potentialities. The oblique, as identified through the work of Denise Ferreira da Silva and Paul Virilio in chapter 5, recognizes the impossibility of ever truly escaping transparency. Yet, following da Silva, it attempts to disrupt the rules by taking the rules seriously. Here, my method of problematization does not seek a transcendent or transcendental solution through the lens of possibility, but only attempts to awaken something akin to pre-individual potentiality: the immanent potentiality that remains alien to human rationality. One might 'hack' the tendencies of transparency to provide an oblique account that refuses the transcendental tendencies

¹¹⁶¹ See Daniel Colucciello Barber, "World-Making and Grammatical Impasse," *Qui Parle* 25, no 1-2 (Fall/Winter 2016): 179-206.

¹¹⁶² As I briefly suggest in chapter 3 by way of Deleuze, "The Exhausted."

of rationalist teleology. Given that these gestures must refuse the tendencies of solution and possibility, they can only ever be operative: focusing on ontogenesis and process rather than providing a designation or end. This is not a normative valuation. It is only a strategic one. If one is to venture outside the purview of humanism (*qua* rationalism and teleology), then one must work on the operative register. Throughout, my aim remains modest, but this does not mean it should be taken as trivial. I have not posed a solution to the human nor (post-)humanism in the form of an alternative *telos* or possibility. Instead, this work has emphasized their problems or problematic as operative.

Thus, this thesis has attempted to shift from a logic of transparency and the given to a logic of ontogenesis. Towards this, these chapters have pursued the operative tendencies of the body, embodiment, and physiology, alongside their concurrent wounds, sickness, and exhaustion. This is perhaps most clear in chapter 3, which focuses on physiological ethics to think ethics not in terms of normative evaluation but instead as something operationally and physiologically instantiated. Reading the 'human' as a physiological construction, all normative considerations (including ethics) must be taken as operational: determined by ongoing physiological conditions. Rather than pose a solution to ethical problems, this chapter focuses the condition of ethicality. In order to determine an alternative ethics, or an alternative mode of valuation, it is not enough to think differently. Insofar as the physiological operation remains unchanged, any 'novel' thought is always already designated by the same operative process. Thus, the construction of an alternative ethics must focus the physiological operation determinate of human thought. In line with oblique potentiality, the production of physiological ethics speaks to immanent potentialities that might instantiate an alternative way of thinking. This alternative cannot, however, be constructed in advance as an alternative possibility. Here, my turn to 'Botox ethics' consists in withdrawing from and refusing the

transcendental tendency of possibility and exhaustion by focusing on the immanent opening of indeterminate yet generative potentialities.

While working on different terrain, chapter 4 provides a similar focus on the operative constitution of ethico-political philosophy by speculating on the refusal of hylomorphic teleology. By reading Simondon's notion of transduction against Hegel's teleology, this chapter focuses a study of process and operation—through the concept of ontogenesis—that refuses the formal condition of *telos* and finality. Recognizing alienation as resulting from the imposition of extrinsic possibility onto a system, this chapter identifies the production of resonance and rapport across phases of being as the opening of oblique potentiality. Resonance and rapport, rather than an always already identified *telos*, structure the process of political participation without appealing to prescriptive ends. While less overtly focused on the body and embodiment, this focus on resonance and rapport provides a strong overlap with the immanent generation of oblique potentiality. Simondon's 'transductive ethics' notes the incapacity to determine, through any extrinsic (which is to say rational) capacity, the 'substance' of ethics in advance. Rather, a transductive and operative ethico-political project opens to potentialities awakened through a negative capacity. Here, the task of 'emancipation'—including the emancipation from humanism—is not designated as form but only as an operation without any known end.

Together, these chapters help to centre the question of emancipation that emerges in chapter 5: to think emancipation (liberation, solution) when the structure of emancipation forecloses the emancipatory aim. Here, I follow da Silva to recognize the incapacity to ever truly shift away from logics of transparency: this thesis is, after all, communicated in a highly rational voice and remains firmly within the purview of transparency. Focusing on Karen Barad, this chapter recognizes that even attempts to critique representational epistemology, which includes attempts to centre embodied ethics and transductive politics (as in chapter 3 and 4), remain within the purview of

representationalism. If the reader expected to find the meeting of physiological ethics and transductive politics as a determined program, this chapter worked to subvert that expectation. Where chapters 3 and 4 focused steadfastly on issues of rationalism and teleology, respectively, chapter 5 shifted to focus on the operative tendencies of thought to reproduce structures of exclusion. Rather than think through the more physiological or resonant capacity of oblique potentiality, this chapter focused on how to maintain an oblique capacity within the structure of thought itself. Focusing on the socio-material instantiation of ‘intrastructural necropolitics,’ this chapter suggests that the given cannot be altered through any designated solution. Rather, the withdrawal from thought by way of an ‘oblique’ or ‘Black nihilism’ might centre withdrawal from and refusal of the structure of solution *within* the impossibility of transparency.

Through this gestural tendency, my hope is that this work might speak to new potentialities and resolutions from which new scholarship will emerge. First, building from the third chapter’s discussion of ‘Botox,’ future scholarship should interrogate both issues of alienation and exogeny that are rendered by taking the ‘human’ as plastic. The tendency of human as ‘plastic’ speaks to both its malleability and its inevitability. The use of Botox attempts to reveal a glimpse of the oblique potentiality that is alien to rational thought. Here, I have followed Nandita Biswas Mellamphy in focusing the alien or ‘Xeno’: that which lies outside rational interpretation. While Biswas Mellamphy has focused on Object-Oriented Feminism and Xenofeminism, there remains ample room for expanding the discussion of ‘Xeno’ and exogeny. I have two domains in mind for future research: the first, as is already invoked in chapter 5, is da Silva’s discussion of Nietzsche’s madman. Madness, along with idiocy and stupidity, have been taken as areas of study in critical scholarship. Nevertheless, they remain understudied within discourse in the critical post-humanities. Engagement with these studies might allow critical post-humanism to consider post-human notions of signification that exist outside rationalized production. Second, where madness remains the domain

of the voice, scholarship might shift towards a foreclosure of the voice: the silence of trees. While studies of plant epistemology have thrived within critical plant studies, a more thorough study of what is truly alien in plant life—what might be termed ‘Xeno-Arborescence’—remains an area ripe for inquiry. Trees, as exogenous from the human, might offer a foundation for considering the basis of something truly post-human: to not apply human categories onto plant life but instead to adopt plant categories when considering human life. Trees do not appear to have purposes or ends. Work on Xeno-Arborescence may invoke a glimpse of this alien domain: one exogenous to the human form of teleology.

Second, building from the fourth chapter’s discussion of resonance, future scholarship might also focus on the resonance between humans and a variety of non-human phases of being. Two obvious candidates emerge: first, a continued study of what might constitute ‘proper resonance’ between various natural phases of life; second, a continued study of what might constitute ‘proper resonance’ between humanity and emerging areas of technology. Both studies would maintain an operational resonance with the history of critical post-humanism. The latter candidate is particularly interesting. Given the relatively new emergence of algorithmic technologies, including those often termed ‘artificial intelligence’ (AI), the transductive resonance (or lack of resonance) that cuts across the human and technological phases of being is an area ripe for critical inquiry. It is useful to think both the human impact on AI and the (physiological) production of humanity through AI. For instance, what impact might AI have on the determination of human temporality? Furthermore, can we consider an ontogenetic or operative account of AI? In line with these areas of inquiry, further study is needed to account for Simondon’s ‘humanism.’ While there is initial study in this domain—often focusing on an account of Simondon’s ‘dangerous humanism’ in relationship to Marx and Heidegger—more work is needed to distinguish the unique tendencies of Simondon’s approach, especially in relationship with critical post-humanism.

Finally, building from the fifth chapter's study of 'infrastructural necropolitics,' future scholarship might continue to investigate further developments of 'negativity' in the sphere of political ontology. This chapter follows a great deal of recent scholarship focused on aspects of negativity in continental philosophy and cultural studies. In addition to Afro-pessimism, I am indebted to studies that have investigated the problem of political negativity in the work of Gilles Deleuze, as well as the work of 'non-standard philosophy,' which has been put forward by François Laruelle. Regarding this chapter in particular, future scholarship might focus more steadfastly on issues of negativity in critical post-humanism, which tends to work within a largely affirmative capacity of inclusion. In the spirit of this chapter, future work in the critical post-humanities would do well to focus on oblique uses of its own conceptualizations—such as da Silva's use of 'infrastructure' to 'hack' Barad's 'intra-action'—to think through the structural tensions inherent to its own project. This would be consistent with critical post-humanism's echoed refrain of 'staying with the trouble.'

To close, I would like to stress that the oblique potentiality of the body and physiology speak to something irreducible and antagonistic to both the given and the possible. The possibility of 'post-humanity' could only ever designate the 'post-human' or 'post-humanism' as outgrowths of humanity (by way of rational deduction and teleological design). Instead, by rendering both the 'post-human' and 'post-humanism' only ever in the domain of an immanent and oblique potentiality, one might acknowledge their being as inarticulable, indeterminate, and alien. This reflects my attempt, throughout this thesis, to centre a study of 'critical post-humanism' as a problem, gesture, and diagram. This thesis does not offer a program, position, nor a performance, which would instantiate the possible emergence of the post-human, post-humanism, or the post-humanities. On the contrary, my focus on the problem of post-humanism has stressed the impossibility of such a project. Insofar as I have moved away from the domain of positivity and solution, I have only

attempted to speculate—through a negative and at times apophatic lens—the problem or problematics inherent to the human, all too human horizon, which inherently blocks such a program and design.

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Curriculum Vitae

Education

Doctor of Philosophy. 2024. Theory and Criticism, Western University.
 Master of Arts. 2020. Theory and Criticism, Western University.
 Master of Library and Information Studies. 2016. Library and Information Studies, University of British Columbia.
 Bachelor of Arts. 2014. Political Science, Calvin University.

Honours and Awards

2021-2024. Social Sciences and Humanities Research Council (SSHRC) Joseph Armand Bombardier Canada Graduate Scholarship (CGS) Doctoral Scholarship.
 2021. Ontario Graduate Scholarship.
 2020. Provost's Entrance Scholarship, University of Western Ontario.
 2019. Social Sciences and Humanities Research Council (SSHRC) Joseph Armand Bombardier Canada Graduate Scholarship (CGS M) Master's Scholarship.
 2019. Ontario Graduate Scholarship.
 2018. Ontario Graduate Scholarship.
 2018. Dean's Entrance Scholarship, University of Western Ontario.

Selected Publications

2024. With Nandita Biswas Mellamphy. "Human All too Human? Anthropocene Narratives, Posthumanisms, and the Problem of 'Post-Anthropocentrism.'" *The Anthropocene Review*. 0(0): 1-15. <https://doi.org/10.1177/20530196241237249>
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 2022. "Forest Semiosis: Plant Noesis as Negantropic Potential." *Footprint 30: Epiphylogenetic Turn in Architecture: In (Tertiary) Memory of Stiegler*. <https://doi.org/10.7480/footprint.16.1.5606>.
 2022. With Jeremy R. Smith. "Aleatory Gnosis: In(ter)vention and Quantagonism." *Philo-Fictions: La Revue des non-philosophies* 5: Énergie, un sort à défendre: 103-120.
 2020. "Deleuzian Problematics: On the Determination of Thought." *La Deleuziana: Online Journal of Philosophy* 11: 81-98. <http://www.ladeleuziana.org/2020/06/01/11-differential-heterogenesis/>.
 2018. "Affirming Decay: Towards the Possibility of a Future Oriented Diagonal Left for Detroit's Abandoned Population." *The Scattered Pelican*. Spring. <https://thescatteredpelican.com/2018/04/29/affirming-decay-towards-the-possibility-of-a-future-oriented-diagonal-left-for-detroits-abandoned-population/>
 2016. With Blake Hawkins. "How to be a #critlib: Reflections on Implementing Critical Theory in Practice." *See Also*, 2(1), 10. <https://doi.org/10.14288/sa.v0i2>.

Selected Book Reviews

2022, "Christine Daigle and Terrance H. McDonald (eds.), *From Deleuze and Guattari to Posthumanism: Philosophies of Immanence*." *Rhizomes: Cultural Studies in Emerging Knowledge*, no. 38, doi:10.20415/rhiz/038.r04. <http://www.rhizomes.net/issue38/vangeest.html>

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Selected Research Presentations

2024. "My intelligence is still far too human: Alan Moore's *Swamp Thing* and the Ec(h)ological Expansion of (Post)humanity." *Cultural Studies Association* 2024. May 30-June 1.
2024. "Spectres of Humanism: Hauntological Resonance in Alan Moore's *Swamp Thing*." *Theory Sessions*. Centre for the Study of Theory and Criticism. April 5.
2024. "Post-Human ethics? The physiological overcoming of human moralism." *ACLA* 2024. Montreal, QB: Palais des congrès de Montréal. March 14-17.
2024. "Without Reference: On Non-Philosophical Reading." *Acts of Reading: Non-Philosophy and the Humanities*. Tulsa, OK: University of Oklahoma. February 23-24.
2023. "Thresholds of (Post)Humanism." *Thinking at the Limit: Philosophy's Futures*. Duquesne G.S.I.P. Conference. Pittsburgh, PA: Duquesne University. March 31-April 2.
2022. "Nietzschean Therapeutics and Contemporary Cosmopolitanism." *ore*, UK. June 23-26.
2021. "Fascist Thresholds: Swann in Love and the Destruction of the Face." *Deconstruction Contra Fascist Mythologies*. At *ACLA 2021*. Montreal, QB: Palais des congrès de Montréal. April 8-11.
2021. "In(ter)venting the Bifurcated Virtual: Pushing Through the Virtual Threshold." At *NeMLA 2021*. Buffalo, NY: University of Buffalo. March 10-14.
2020. "At the Border: The Nomos of the Camp." At *Camp/Camp: The Collision of Style and Biopolitics*. London, Ontario: University of Western Ontario. October 1-2.
2019. "Non?Axioms: On the determination or problematic of the axiom." Theory Session, The Centre for the Study of Theory and Criticism. London, Ontario: University of Western Ontario. September 24.
2019. "Against Positivity: Deterritorialize Deleuze." At *Negativity, Pessimisms and Sad Affects in the Study of Religion*. Toronto, Ontario: University of Toronto. April 18-19.
2019. "Will God Forgive Us? Nietzschean Overcoming in First Reformed." Presented at *GPSA 2019: Liberating the Future*. Montreal, QC: Concordia University. (March 29-30, 2019).
2019. "Nietzschean Plasticity: Laruelle and the Chiasma." At *Code/Decode/Recode*. London, Ontario: University of Western Ontario. March 14-15.
2019. "Calamity: Overcoming the Accelerated Accident." At *Worlds Without Us*. Victoria, British Columbia: University of Victoria. February 22-24.
2017. "Towards and Ethics of Difference: The Pluralist Library." At *CAPAL17: Foundations & Futures: Critical Reflections on the Past, Present, and Possibilities of Academic Librarianship*, Congress of the Humanities and Social Sciences. Toronto, Ontario: Ryerson University. May 27-June 2. <http://capalibrarians.org/capal-conference-2017/>.

2017. O'Brien, H., McKay, J., & Vangeest, J. "Learning From the News: The role of Topic, Multimedia and Interest in Knowledge Retention" (pp. 185-193). Presented at CHIIR '17, Oslo, Norway, ACM. <https://dl.acm.org/authorize.cfm?key=N22266>

Professional Service

2023. Chief Editor, *Chiasma: A Site for Thought* Issue 7: *Non/Non-Being/Negativity*. URL: <https://ojs.lib.uwo.ca/index.php/chiasma/issue/view/1526>

2020. General Editor, *Chiasma: A Site for Thought*; Issue #6: *Disenchantment*. URL: <https://ojs.lib.uwo.ca/index.php/chiasma/issue/view/1524>

2019. General Editor, *Chiasma: A Site for Thought*; Issue #5: *To Be a Body*. URL: <https://ojs.lib.uwo.ca/index.php/chiasma/issue/view/850>

I have reviewed articles for:

- *Interconnections: Journal of Posthumanism*
- *ETPTC, The Society for Existential and Phenomenological Theory and Culture / Théorie et culture existentialistes et phénoménologiques (EPTC/TCEP)*