An Aesthetic Relational Worldview

A Study in the Process Philosophy of Alfred North Whitehead

by

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Submitted to the School of English, Communication and Philosophy, Cardiff University

in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

2020

Abstract

This thesis starts by introducing the theme of sensuous connections between one and other. I discuss the desire for epistemic kinship and philosophical concerns with objectivity which echo those of the natural sciences. At first, the focus is the ways in which various philosophies have attempted to bridge the gap between one and other. Then, there is a move to concentrating in particular on Alfred North Whitehead's process metaphysics, a system of thought that helps conceive a description of reality that is made out of the processes defined by their relation to other processes. I sketch out features of Whitehead's speculative philosophy which serves as a description of philosophical method. I then outline a description of reality as an interrelated web of prehensions which start from physical, empirical base, moves to the imaginative realm of conceptual possibility and is narrowed down to the propositions which lead to creative novelty. The case is made that in its most generalised form, this process of concrescence is a basic aesthetic mode of being, shared by human and non-human occasions of experience. I argue that coming to see the world as being constructed out of highly social processes in which we - our species and ourselves as individuals - are integral participants, bridges the modern chasm between individual and whole. I take Nietzsche's notion of passive nihilism to be a symptom of such a gap and attempt to solve this problem using the framework of aesthetic education as means to attune oneself with the co-constructive processes which connect them with the immanent and intrinsic value in the systems around them. Finally, I engage with wider cosmopolitical implications of adopting attunement to the vibrancy of such processes, even if they are felt not known, and show the relevance of such an endeavour to an ethical disposition that is based on aesthetic feeling and directed to social change.

Acknowledgements¹

This thesis would not have come into existence without the help and input of so many people. First and foremost, heartfelt thanks to my supervisor, Dr Josh Robinson, without whose encouragement this thesis would not have been written. I could not have asked for a better mentor and I am grateful to have had such stimulating philosophical conversation and valuable, thoughtful comments about my work. Thank you so much for your confidence in me, your always sound advice, as well as your good humour which have been continuously uplifting throughout the project.

I am indebted to several conversations I've had about my thesis, in particular with Peter Sidgwick, Andrew Edgar, Laurent Milesi and Mary Edwards. Thank you to Rhian Rattray for excellent administration and to the entire group of postgraduate students at the ENCAP office, whose intellectual encouragement and personal friendships have kept me motivated. I am also grateful to the entire research community at the Husserl-Archives at KU Leuven for their warm hospitality and the stimulating conversations that inspired many of the thoughts developed in this thesis.

Thank you to the students I have taught at Cardiff University, with whom it has been a pleasure to tackle some of philosophy's most complex questions. My deepest appreciation to Jernej Markelj, who enlightened me on many aspects of pantheism; and to Marine Furet, inspiring colleague and invaluable friend. Sincere gratitude to so many others – in Cardiff, Malta and elsewhere– who have offered emotional and intellectual support along the way.

Finally, with profound recognition of the Scicluna clan, my family, for their unwavering support and their fantastically vital ethos.

¹ This research has been jointly funded by the Endeavour Scholarships Scheme, Ministry for Education and Employment, Malta and the PGR Starter Bursary Award, School of English, Communication and Philosophy, Cardiff University (ENCAP).

Abbreviations

The following titles are the principal works of Alfred North Whitehead consulted in this thesis. They are henceforth abbreviated and cited parenthetically in-text.

AE	The Aims of Education and Other Essays (New York: The Macmillan Company,
	1929)
AI	Adventures of Ideas (New York: The Free Press, 1961)
CN	The Concept of Nature (Cambridge: Cambridge University Press, 1986)
FR	The Function of Reason (Boston: Beacon Press, 1958)
IM	An Introduction to Mathematics (New York: Dover Publications, Inc., 2017)
MT	Modes of Thought (New York: The Free Press, 1968)
PR	Process and Reality: An Essay in Cosmology, eds. David Ray Griffin and Donald
	W. Sherburne (New York: The Free Press, 1978)
RM	Religion in the Making (Cambridge: Cambridge University Press, 1926)
S	Symbolism, Its Meaning and Effect (New York: Capricorn Books, 1958)
SMW	Science and the Modern World (New York: Pelican Mentor Books, 1948)
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Introduction

This thesis is concerned with the themes of individuality and relational connections between one and other. It starts by discussing Thomas Nagel's question 'What is it like to be a bat' and reads in that question an irreducible curiosity about the cosmological dimension of the world and our relationship to the many entities in it. In vignette style, I point to various philosophies of relational experiences which have attempted to bridge the gap between one and another, before turning to the process philosophy of Alfred North Whitehead, which will serve as the primary philosophical lynchpin of this thesis.

The sixteenth century astronomical drama of the Copernican revolution, in which there was an abrupt transformation of the picture of the skies from geocentric to heliocentric serves as an apt analogy to the decentralisation of the human, who was now rudely heretically, even – shown the reality of his embeddedness in a vaster cosmological setting than was ever conceptualised before. Sigmund Freud invokes this upset as a narcissist blow to humanity, a blow that Jean Laplanche describes tersely: 'if man is no longer at the centre of the universe, not only are all cosmogonies and creation myths contradicted, but all pantheons forged in the image of man or centred on man are thereby devalorized'.¹ The vast consequences unfold in the defensive manner proper to the anxieties of such a terrible loss of self-regard and are echoed back to us now in the ensuing modern philosophies intent on emphasising man's unique reflective features which are capable of constructing the phenomena around us. Immanuel Kant's transcendental realism, for instance, holds that we can know nothing about the nature of objects around us apart from our mind's operations. That is to say, we can know nothing about objects except what we receive from 'our mode of perceiving them, which is peculiar to us. [...] the whole human race.'² There is here a specific kind of commentary about the relationship between nature and man:

From the very start we are involved in the argument between nature and man [...] so that the common division of the world into subject and object, inner world and outer world, body and soul, is no longer adequate and leads us into difficulties.

¹ Jean Laplanche, *Essays on Otherness*, ed. John Fletcher (London and New York: Routledge, 1999) p. 57. ² Immanuel Kant, 'Transcendental Aesthetic' in *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Palgrave Macmillan, 2007) §81, A42. See also A491 and A373.

Thus, even in science the object of research is no longer nature in itself, but man's investigation of nature. Here again, man confronts himself alone.³

The difficulty that Heisenberg sees, being a physicist, is that the division never allows the precise measurement of variables. There will always be an approximation, a gap between the observer and the observed. Hence, the epistemological pessimism which takes us far away from the thrill of Galileo's telescope at which 'the secrets of the universe were delivered to human cognition'.⁴ The contemporary intellectual ethos had been shaped by the idea that invariable and absolute laws of the kind given by Galileo or Newton. But then come relativism and its messages of uncertainty principles and many frames of truths, which lead to man confronting himself alone, certainly at a distance from the nature he observes. It is perhaps the same alienated view that holds that the only reliable truth is one's own thought - I think therefore I am - which at least, guarantees one's own existence. From the egoic perspective, this kind of human exceptionalism is very tempting indeed. It emphasises reason as the distinctive feature of humanity which sets us apart and which allows us to render others as 'for-us'. The modern emphasis on cognitive capacity justifies the continued reign of the rational man at the Ptolemaic centre – man is exceptional in his constructive capabilities, yet effectively bifurcated and alienated from the world he supposedly constructs.

Its Method - Speculative Thinking

Whitehead's very first sentences in *Process and Reality* represent an ambitious largescale vision to formulate a theory of everything via an interpretative speculative philosophical scheme 'Speculative philosophy,' he writes, 'is the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted.' He continues, 'By this notion of interpretation I mean that everything of which we are conscious, as enjoyed, perceived, willed or thought, shall have a particular instance of the general scheme. Thus, the philosophical scheme should be coherent, logical, and with respect to its interpretation, applicable and adequate' (PR, 3). Examining and accounting for singular and particular instances of

³ Werner Heisenberg, *The Physicist's Conception of Nature* (London: Hutchinson Scientific and Technical, 1958) p. 24.

⁴ Hannah Arendt, *The Human Condition* (Chicago and London: University of Chicago Press, 1998) p. 260.

experience means ensuring that they are logically consistent with the 'general scheme' of the actual world. This is one of the most important aspects of Whitehead's speculative scheme: nothing may remain wholly abstract. Any singular object must be exemplified: 'no entity can be conceived in complete abstraction from the system of the universe, and that it is the business of speculative philosophy to exhibit this truth' (PR, 3).

If we speculate about the inner subjective life of any entity, such considerations must always be tied to the concrete world of experience. Likewise, as we shall see in more depth, when we speculate about the inner lives of non-conscious, non-human objects we are not departing from some purely abstract metaphysical terrain, but we are always grounded in coherent, logical respect for the observable facts. Furthermore, any speculation must be empirical: applicable and adequate to the actual world. As Whitehead emphasises, any speculative interpretation will necessarily involve some abstraction, but we must ensure that the mode of the abstraction remains rational and empirical – that is, coherent with the 'system of the universe' and the data at our disposal. To underline the point, speculation always arises from the world as it is. To be defended as a plausible method of knowledge, speculation must distance itself from its derogatory dictionary meaning of 'conjecture [...] as opposed to practice, fact, action' and instead be thought of as the natural ally of the 'irreducible and stubborn facts' which serve as its starting point.⁵

But speculation also requires the element of imaginative construction alongside its rational and empirical components. Whitehead makes the case for imagination with vivid force, using the guiding metaphor of an aeroplane soaring through the sky:

The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observation; it makes a flight in the thin air of imaginative generalization; and it again lands for renewed observation rendered acute by rational interpretation. (PR, 5).

⁵ 'Speculation' in Oxford English Dictionary

<https://www.oed.com/view/Entry/186113?rskey=JEtlMM&result=1&isAdvanced=false#eid> [accessed 18 October 2020].

The image of the plane in mid-air frames imagination as the initial hypothesis-formation stage in the process of scientific or day-to-day discovery. Following on from 'particular observation' or material specificity which spurred the speculative hypothesis-making to begin with, imaginative construction is prompted by questions of the kind 'what if...' and postulates 'counterfactual alternatives to reality'. The analogy of the speculative aeroplane emphasises the, free imagination or the creative force which makes articulations of 'what could be' possible. This is not to dismiss or deny the 'ground of particular observation', but to push back against the limits of observation without being committed to producing any explanation. This lack of commitment follows from the very definition of hypothesis, which is always without outcome as yet.

Thus, as 'a method productive of important knowledge', speculative philosophy relies in some part on imaginative and creative possibilities but is more than a collection of idle fanciful. The practice of the speculative imagination encompasses hypothetical thinking that involves thinking concretely about a thing or an event that is not (yet) phenomenologically present to us. Under this definition, an object which belongs to the realm of the imagination can take many forms: a counterfactual thought experiment which posits alternative facts and their likely consequences; fictional characters and settings; fantastical creatures; and possible futures, whether they are made intelligible by television shows, films or novels. All of these can be classified as products of the imagination since there is no direct one-to-one correspondence between the object of my imaginings and the fixed empirically observable reality. That is to say, there can be no rigorous demonstration of a structurally consistent match between the imagined object and the physical realm despite the fact that the imaginative scenario is consistent with the empirical facts as we know them. This is speculative thinking as the process thinker inherits it, expressed with the greatest elegance by Whitehead: 'Philosophy can exclude nothing' (MT, 2). The final stage of speculation is the landing of the flight, upon which the abstract formulations made in mid-air are concretised and may illuminate our understanding of and response to the world they return to. Philosophies which base themselves on speculation as a conceptual tool follow lines of questioning about the unknown and in so doing, 'point thought outside itself' in order to orient the thinker to others' experiences. In other words, the task of speculation is not only to gesture to the unknown but also to actively give rise to possible, not-yet-actual scenarios.

Its Topic - Process Metaphysics

Another concern of this thesis is the metaphysical system that is laid out in *Process and Reality*. This book is really a work of systematisation; it is a deep interpretation of reality with categorial complexities that really saturate the phrase 'philosophy can exclude nothing'. The interpretation of reality that it promotes involves *transition* as a universal feature of existence which applies from the most trivial simplest cases of being to the most momentous. With Whitehead's metaphysics, there is always a tinge of movement – 'concrescence' is the passing from one drop of experience to the next; 'creative novelty' begets the new at the behest of the old. And there is always very particular attention paid to describing the simplest, most basic case of process reality so that this can essentially serve as a template for the rest of the complexities that follow. Whitehead starts from the bottom-up, from the lowest case, instead of top-down, from conscious mental activity. And so, it is necessary to understand what this simplest case, the prehension, or the non-conscious direct transference which involves prehensions being integrated into a concrete, creative unity.

This thesis investigates the foundational elemental structure of Whitehead's metaphysics which depends heavily on prehensions, the idea of rhythm, transference and change alongside subjects with internal constitutions, and on the very simplest cases in which this occurs. For Whitehead, 'experience has been explained in a thoroughly topsy-turvy fashion, the wrong end first', and these primordial 'feelings' come prior to anything like conscious mental activity (PR, 162). This project in process metaphysics thus aims at conceptualising experience as a primordial process of feeling not dependent on, yet constructive of conscious mentality. This dissertation is concerned with how feeling actively constructs in a bottom-up direction, where truths are produced and entangled within experience, through a variety of processes and practices. The situation is further complexified when the 'players' that produce this embodied, creative truth are humans, but also everything else, an entire ecology made of the smallest of initial causes, operating under the same metaphysical rubric and thereby have the capacity to integrate in our experiences and each other's experience. The absolute majority of subjective experiences are based on aesthetic experience, free

of cognition – 'consciousness is the crown of experience, only occasionally attained, not its necessary base' (PR, 267).

A central tenant of this study is the that the entities in the world are forever making themselves felt to each other. Their vibratory and affective ways are always sometimes broadly and vaguely, and sometimes sharply, dripping with symbolic significance - crossing each other's paths. I am neither elevated above my fellow beings on account of my cognitive capacity, nor am I nihilistically excluded from the metaphysical picture altogether. 'I am not the spectator, I am involved, and it is my involvement in a point of view which makes possible both the finiteness of my perception and its opening out upon the complete world as a horizon of every perception.'⁶ Whitehead's approach is such that a mutual world-building takes the form of sympoeitic and animated co-creation. And while 'twenty centuries of stony sleep' may bring themselves to bear with full force on any individual, so too does the apex of any individual emanate its own affective, constructive forces outwards towards the base, or towards the larger cosmological setting.⁷ The universe becomes a locum of sliding scale interactions between general and abstract experience and particular individuals, where each actual entity has its own what-is-it-likeness, its own vibrations and its own subjective aims yet is conceived as a product of experience arising out of impersonal data.

It is not accurate to say that in process metaphysics, considers the bi-directional reversibility between one's own particular (human) experience and the general material conditions it fits into. In particular, I focus on the ways that metaphor facilitates means of grasping outwards and generalising from one's individual experiences *and* how metaphor plays a role in the attunement to some vague impersonality implicit in the personal. As an imaginative device its function is to create what Mary Gerhart and Allan Russell call a 'nascent moment', which brings to the awareness a connection, or a 'discovery of unsuspected relationships between objects'.⁸

⁶ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London and New York: Routledge, 2003) p. 354.

⁷ William Butler Yeats, 'The Second Coming', *Poetry Foundation*,

https://www.poetryfoundation.org/poems/43290/the-second-coming [last accessed 6 December 2020].

⁸ Mary Gerhart and Allan Russell, Metaphoric Process: The Creation of Scientific and Religious

And this is important because it can help lift the prevailing disparity between humanity and its habitat and highlight the aesthetic cosmological conditions that are always already there and which we have in common with the entities around us. Though there are reasons to diagnose the world as valueless, I believe that a focus on aesthetic experience can evoke intensities that counter the modern feeling of isolation and the consequent nihilistic tendency of retreat from action.

The Problem

That is how the poet John Keats describes his emotional state as he sits down, pen to paper, willing words to form themselves so that he might cease his procrastination and respond to his friend Bailey.

You see how I have delayed; and even now I have but a confused idea of what I should be about. My intellect must be in a degenerating state—it must be—for when I should be writing about—God knows what – I am troubling you with moods of my own mind, or rather body, for mind there is none.⁹

This thesis was born out of an underlying concern with a tendency towards a similar apathetic mood stemming from a mindset that runs along the following lines - our ability as humans to influence and alter the conditions of our own existence let alone the existence of others is minuscule. Therefore, the logically consistent course of action is to shy away from efforts surrounding self-endurance (one feels as if one is under water yet one would scarcely kick to come to the top) as well as societal participation (delays in response). In a recent article, Jeff McCarty bemusingly calls this state of desensitisation the 'Fuck It Ideology'.¹⁰ On a less light-hearted note but on a similar theoretical trajectory, Alain Ehrenburg, theorises emotional states of dejection in connection with depressive mental states. His take is that the wholesale abdication of social participation, let alone ethical responsibility is intimately related to the fact that

Understanding (Fort Worth: Texas Christian Univ., 1984) pp. 186-89. Octavio Paz, *The Siren and the Seashell: And Other Essays on Poets and Poetry*, trans. Lysander Kemp and Margaret Sayers Peden (Austin; University of Texas Press, 1976) p. 154.

⁹ John Keats, *Selected Letters of John Keats*, ed. Grant F. Scott (Cambridge, Mass.: Harvard University Press, 2002) p. 127.

¹⁰ Jeff McCarty, 'The Fuck It Ideology' *Human Civilisation Reformation Coalition*, 4 Dec 2020

<a>https://www.hcrcoalition.com/the-fuck-it-ideology> [last accessed 5 December 2020].

'the depressed individual is unable to measure up; he is tired of having to become himself^{.11} Ehrenburg touches the heart of the issue with the words 'become himself'. The emotional state under discussion is one where passionate intensity is effectively paused because the individual feels as though he is segregated from the entire process of *becoming*. The depressed individual knows this as a period when nothing makes sense except indolence and inertia. There is no emotional attitude here – to cite Keats again, 'pain had no sting, and pleasure's wreathe no flower'.¹² The weakened state at issue is not the inverse of ecstasy, nor a synonym for melancholy. It is precisely the absence of those any state at all, a nihilist state, where one feels nothing, feels like nothing and looks forward to nothing. In the fourth chapter we shall see that this segregated psychological state was theorised by Friedrich Nietzsche under the concept of nihilism, neatly summarised by Simon Critchley as 'the breakdown of the order of meaning, where all that was posited as a transcendent source of value in pre-Kantian metaphysics becomes null and void, where there are no cognitive skyhooks upon which to hang a meaning for life.'¹³ The problem that will occupy us in this chapter is partly the shabbiness of what passes for meaning and value, and, more specifically, the passive nihilistic response to such a realisation, which is precisely the generalised declaration of meaningless and the ensuing unwillingness to react further. In response, this thesis is partial to the desire 'to work through passive nihilism' by affirming 'the world and life' against the isolating culture of thought that is engendered by the Ptolemaic mindset and by the passive nihilistic worldview that 'values are a fluke in an uncaring and fundamentally entropic universe'.¹⁴

A Tentative Solution

¹² John Keats, 'Ode on Indolence', *Poetry Foundation*

¹¹ Alain Ehrenburg, *Weariness of the Self: Diagnosing the History of Depression in the Contemporary Age* (Montreal: McGill-Queen's University Press, 2010) p. 4.

<https://www.poetryfoundation.org/poems/52995/ode-on-indolence> [last accessed 6 December 2020].

¹³ Simon Critchley, *A Companion to Continental Philosophy*, eds. Simon Critchley and William R. Schroeder (Hoboken, New Jersey: Blackwell Publishing Ltd., 1999) p. 12.

¹⁴ William E. Connolly, *Political Theory and Modernity* (Ithaca and London: Cornell University Press, 1993) p. 15. Matthew D. Segall, 'Cosmos, Anthropos, and Theos in Harman, Teilhard, and Whitehead'

Footnotes2Plato, 12 Jul 2011 <https://footnotes2plato.com/2011/07/12/cosmos-anthropos-and-theos-in-harman-teilhard-and-whitehead/> [accessed 4 December 2020].

'Philosophy begins in wonder. And in the end, when philosophic thought has done its best, the wonder remains' (MT, 169). With the overarching motivation to maintain this sense of wonder in the nihilist, this thesis turns to the affirmational capacity of aesthetic value. Following a reframed metaphysical foundation that is based on feeling rather than on reason, I argue that what is needed is a method whereby we can cultivate in us a sensitivity to the primitive underpinning of interactions between entities. In this respect, the final pages that make up the body of this thesis echo Barry Whitney's key thesis that

despite our finite, vulnerable and precarious nature as human beings, we have an inherent creativity, an inner drive that seeks meaningful experiences [...] I submit that creatures not only have this need for meaning and value (the former gained through the latter, as aesthetic value) but we also have this opportunity – at every moment to experience it. Indeed, no matter how bleak, limited or disadvantaged our circumstances may be at particular moments, there is always an opportunity to experience at least some aesthetic value.¹⁵

The trouble is, however, that we are so used to not being cognizant of the primitive character of emotion that we have difficulty attuning to the sociality or commingling of feeling and to the intrinsic value of those entities around us. Throughout this project, I will sometimes refer to this 'feeling the feeling in another' and 'feeling conformally with another' as empathy (PR, 162). In the Whiteheadian context, where the term feeling is generalised to mean that entities tacitly feel their surrounding data and selectively incorporate them (the data) into their own stream of experience, empathy could perhaps similarly be generalised to mean an alignment with our causally efficacious perception and help us become more acutely sentient of the vibrancy of all the members in the buzzing world.¹⁶

What is needed is a heightened sense of ontological empathy to let in more of those sense-data, which in their deepest and vaguest character have been knocking on the door of our attention. This paradigm shift of empathy is a crucial step to seeing oneself

¹⁵ Barry L. Whitney, 'An Aesthetic Solution to the Problem of Evil,' *Philosophy of Religion* 35.1(1994) 21-37 (p. 30).

¹⁶ Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham and London: Duke University Press, 2010).

as embedded within an ecological network. I proceed with the awareness that the passive nihilist is indeed desensitised from the emotional basis of experience, but in the course of the discussion I shall claim that cultivating empathetic sensitivity can be done through with reference to stimulation of aesthetic disposition, or as Whitehead call it, aesthetic education. In *Aims of Education*, Whitehead describes art generically as a *felt* act whereby the environment is reorganised into a new pattern so as to elicit attention to aesthetic values. He is suggesting that art is a kind of activity of selecting and attending in order to feel the feeling of others, to feel *with* organisms as varied as bats or rocks. What is involved in this kind of empathy is an attunement to the emotional tones of the world around us, to appreciate the emotional intensities of experience, to set up kinships with the organisms around us.

Finally, this thesis concludes with an outlook towards a method of adopting emotional attunement to the world. I suggest that 'aesthetic education' may be for this purpose, it being a distinct form of affect involving two forks of training: first, a deliberate training out of 'the habit of ignoring the intrinsic worth of the environment which must be allowed its weight in any consideration of final ends' (SMW, 196). Second, it develops the aim to replace that habit with another: 'the habit of apprehending such an organism in its completeness' (SMW, 200). As is entailed in the word 'training', there is involved a dedicated and continual fostering and engagement in practices which accentuate one's empathetic (feeling-saturated) modes of attachment to the world. The hope is that the neutered nihilistic stance begins to transform under this lens to an active force of engagement which focuses more on the affective dimensions of connectivity.

Chapter 1 – What is it like?

Perhaps I am no one. True, I have a body And I cannot escape from it. I would like to fly out of my head, but that is out of the question. It is written on the tablet of destiny that I am stuck here in this human form. That being the case I would like to call attention to my problem.

■ Anne Sexton, 'The Poet of Ignorance'¹

When I was twenty-two, I got my first real job as a middle-school English teacher. I was faced with a group of twenty or so maroon-clad students. They were a kind enough audience to sit through my overly zealous renditions of William Wordsworth's 'I Wandered Lonely as a Cloud'. For two hours every other week I was slotted for a Writing lesson. But how do you bait creative writing out of twelve-year olds? How does one catch a cloud and pin it down? In my GCSE arsenal I had descriptive essays, abstract one-word titles and narrative type essays with prompts ('Write a story that ends with the sentence...'). I had 80 minutes to capture the students' imagination, help them find the words to articulate their vision and frame it into a 250-word story. After a few years of trial and error, one of my most reliable writing lessons became 'A day in the life of X'. The main idea was simple. The students would start from the circumstances of their own life. What kinds of encounters did they have with the target object? A mind-map would ensue, in groups perhaps. They would then proceed to empirical research. If the target-object was a pilot, maybe they would tell me (briefly; that was the challenge really) about a science lesson about Newton's Laws of Motion. Then some vicarious speculation. How does a pilot feel every time they land a plane? Relief? Boredom? And what about the aeroplane? If it had an inner life, what attitude would it have to the incessant waves of tourists or the views it flies over? During/after a build-up of brainstorming, I would ask my students to transfer that energy on paper – anything that

¹ Anne Sexton, 'The Poet of Ignorance' in *The Complete Poems of Anne Sexton* (Boston, MA: Mariner Books, 1999) pp. 433-434.

came to mind, references, jokes. At home, they needed to take that plan and work on the joints until a story came out. I would mark the final essays, I told them, on how well they mastered the art of imagining alien circumstances and how vividly they conveyed their speculations about those circumstances. What I wanted to come away with was a crisp and descriptive sense of what, according to them, it was like to be that thing.

But, a philosopher-teacher asks, what is it like to be anything? Perhaps the simplest answer is the analogy already described. The closest I can get to the other's inner experience comes if I am attentive to the other's experience, if I put myself in the other's shoes and imagine what it's like to be that object. Thomas Nagel, the cognitive philosopher, weighs in with his provocatively titled paper 'What is it Like to Be a Bat?'² For him, the problem of extrapolating the inner life of other minds is both intractable and unique. It is intractable because there seems to be no other method but to imagine what, given my own experience, it would be like for *me* to be a bat. If I were a bat, he asks, how would *I* feel in a totally dark cave? Or in Kafka's version of the same question: what would it be like to retain my mental life but trade my body for that of a cockroach's?³ Ian McEwan's recent satirical novella *The Cockroach*, a nod to Kafka's story, turns the question on its head: 'what is it like to be a man, particularly a man at the head of the United Kingdom who is attempting to deliver Brexit?'⁴ Similar 'what-isit-like' concerns appear in science fiction narratives from Philip K. Dick's classic Do *Androids Dream of Electric Sheep?* to Spike Jonze's *Her.*⁵ The specific problem these two both grapple with is whether bioengineered androids fall in love as we can. But the general question that they and others in their genre seem to be rehearsing over and over is this: is the experience of others like ours? And yet while questions keep persistently repeating themselves in cultural products such as film and fiction, it seems that we all can do is indulge our own mental resources in answer. Unfortunately, as a

⁴ Ian McEwan is concerned with trying to empathise with the ruling classes of the United Kingdom, and also with Leave voters (both of whom he admits, he finds it difficult relate to). 'I think I understand the process by which people came to vote for Brexit: we've had many, many years of austerity, lots of government services have been cut back.' BBC Radio 4, 'Ian McEwan on "The Cockroach", *Today*, 24 Sep 2019 <https://www.bbc.co.uk/programmes/p07p51ys> [accessed 24 September 2019]. Ian McEwan, *The Cockroach* (New York: Vintage Publishing, 2019).

² Thomas Nagel, 'What Is It Like to Be A Bat?', *The Philosophical Review*, 83 (1974), 435-450.

³ Franz Kafka, 'The Metamorphosis' in *The Metamorphosis and Other Stories* (Mineola, New York: Dover Publications, Inc., 1996) pp. 11-53.

⁵ Philip K. Dick, *Do Androids Dream of Electric Sheep?* (Los Angeles, CA: Boom! Studios, 2010). Spike Jonze (dir.), Her (Sony Pictures Releasing, 2013.

consequence, we hardly touch on the real issue, which is, as Nagel pinpoints, not 'what would it be like for me to be a bat?' but actually 'what it is like for *the bat* to be a bat'.

Intractable as the problem may be, philosophers, those absurd yet endearing creatures (Nagel's description) 'share the general human weakness for explanations of what is incomprehensible in terms for what is familiar and well understood'.⁶ Here we come to the uniqueness of the problem. Philosophers (and English Language teachers) simply cannot shake off the intuition that there must be something it is like to be another thing and to undergo certain physical processes as opposed to others. We know from being subjects ourselves that there is a subjective character of experience and *still* we must admit that 'no presently available conception gives us a clue' as to how to satisfactorily account for the subjectivity of others.⁷

Desire and Frustration

When confronted with dispersed relations, one might become persistently preoccupied with bringing them all together, to see separate things anew as unified by willing a synthesis between them. ⁸ In more familiar terms, we crave connections. The irreducible curiosity of man is well-documented and the pervasive impulse to seek in the human species has attracted some of the biggest names in psychology and neuroscience.⁹ The strength of curiosity is such that it compels those who have the means to dig deep into their pockets, to finance discoveries of continents, moons and whole new galaxies as they realise their desire for (epistemic) kinship with the world around them.¹⁰ But why? Possible motivations are Aristotle's famous 'all men by nature desire to know', or an

⁶ Nagel, p. 445.

⁷ Ibid. Perhaps the most well-known philosophical meditation on this problem is Descartes who can be found people-watching from his window. How can he be justified in his belief that they are really people and not hats and coats which cover automatic machines? The answer for him can only be the strength of inference, made possible by the intellectual operations of the *cogito*. And yet the question persists.
⁸ Latour probes Serres' desire to make distinct voices echo in unison. Serres replies with by detailing the 'will toward synthesis,' his tendency to start with dispersed relations and theorise one thing with respect to the other. For him it is connections and cords which characterises the classical virtues of philosophy. Michel Serres and Bruno Latour, *Conversations on Science, Culture and Time* (Ann Arbor: University of Michigan Press, 1998) p. 88.

⁹ Celeste Kidd and Benjamin Y. Hayden, 'The Psychology and Neuroscience of Curiosity', *Neuron*, 88 (2015), 449-460.

¹⁰ This is not to underestimate the considerable political and economic motivations which stand alongside epistemic drives to make such discoveries.

evolutionary aversion to hermetic isolation or even a socio-psychological fear of missing out on connections not yet made.¹¹ The latter has recently entered popular culture as FOMO and though it typically refers to interaction over social media it can be generalised to a 'pervasive apprehension that others might be having rewarding experiences from which one is absent.'¹² The point is an awareness of and anxiety about one's own insular experience – insular by virtue of being uniquely one's own – and an acute desire to venture outside of it. If the possibility of recalibrating one's connective experiences exists, then one is driven by the desire to do so. But if there is no obvious way forward, the deep desire for relatedness to the world may turn to anxiety that world is 'out there' and I am in here, in my own self, apart from it. Be it motivated by epistemological excitement or an evolutionary, relational anxiety or (more likely) an intricate blend, the question 'what is it like' resonates because it speaks to a certain felt lack which one feels drawn to satisfy.¹³

Once one has identified one's own thirst to connect with experience that is not one's own, one might experiment with specific methods to induce kindred relationships with the things around. The ever-sharpening advance of science represent one notable attempt to clarify this desire for understanding. For instance, by studying the physiological state of arousal, we hope to somehow make sense of the fever that grips us in sexual response. By spending hours reading about how less activation of serotonin autoreceptors will result in higher serotonin levels we attempt to get a handle on the seemingly idiosyncratic nature of an anxiety disorder. Science promises a way out of uncertainty. We no longer need to appeal to our unreliable imagination or to a higher supernatural power, but to scientific journal articles where one is assured a standardised grasp of technical knowledge. Thus, to the question 'what is it like to be a bat,' a bat researcher may readily answer by structuring their response in the

¹¹ Aristotle, *Metaphysics*, trans. Hugh Lawson-Tancred (London: Penguin, 1998) 980a21.

¹² Andrew K. Przybylski, Kou Murayama, Cody R. DeHann et al., 'Motivational, emotional, and behavioural correlates of fear of missing out', *Computers in Human Behaviour*, 29(2013), 1841–1848.

¹³ The desire for taking in the other can be paralleled with Plato's account of humans' lack and consequent desire for completion. Aristophanes claims that humans once had spherical bodies with two sets of sexual organs. After an attempted coup, Zeus decided to cut them in half. The humans now felt lonely (even if they had no memory of ever being whole) and were drawn to spending their time searching for something that was missing. When they finally found their other half, they would find satisfaction in the complete consumption of the other and be able to go about their life serenely. Plato, *Symposium*, trans. Alexander Nehamas and Paul Woodruff (Indianapolis: Hackett Publishing, 1989) 189c-193e.

impersonal rules which govern the bat's anatomy or its unique perception by echolocation. In this way, the human's burning desire to know 'what it's like' is tempered by their capacity to rationalize and render the bat's experience in objective and descriptive terms. But even if it were possible to describe every property of the bat's experience in physical experience, it seems that this does not quite get to the heart of Nagel's question. Are the brute facts not enough to understand experience? What other answer can there be to 'what is it like to be a bat?' than to know that the bat gets around at night by following a mental map of its surroundings, which it creates by constantly emitting a high frequency sound? What better satiation to our epistemological drive can we have than a biological/evolutionary explanation of the bat's experience? Surely studies in molecular evolution and systematic biology can assuage the restless seeker that 'there are no mysterious incalculable forces that come into play, but rather one can, in principle, master all things by calculation'?¹⁴ In other words, what kind of phenomenological account does a philosopher seek if she asks, 'what is it like', which the physical facts that are offered by the scientist do not seem to convey?

One way to get to the heart of these questions is to consider Plato's memorable account of the allegory of the cave. In the familiar anecdote, people live under the earth in a cave, shackled to the wall with their back to a fire, the light of which is carrying shadows of objects that lie between the people and the fire. The prisoners never manage to see anything besides the shadows of the artefacts. Except one fortuitous day, a prisoner is set free from his chains and is able to look at the painful glare of the firelight, go nearer to the artefacts which he had previously only known as shadows and, most painfully, exit the cave and look directly into the blinding sun. It is clear to the liberated prisoner that the people in his previous dwelling place hold misled judgements about the shadows. He goes back to the cave and tries to enlighten the others. Yet – and here is the important bit – those who had remained shackled see that the freed person's eyes are ruined by the glare of the sun. They remain absolutely unimpressed by their friend's

¹⁴ Max Weber, 'Science as a Vocation', in *From Max Weber: Essays in Sociology*, eds. H.H. Gerth and C. Wright Mills (Oxon: Routledge, 1970) pp. 129-158 (p. 139). See chapter 4 for further discussion on the modern comforts of mastering things by calculation.

account of his adventures under the sun and therefore categorically reject his opinions about the shadows and the world above.¹⁵

The kernel of relevance the Allegory holds for this thesis is that it tries to explain the deep feeling of frustration we sometimes feel when we are unable to translate the character of our first-person experience, which is accessible from our point of view, into an accessible experiential fact for others. Much as one may desire to describe one's own phenomenal point of view, it seems that there will always be the difficulty that the freed prisoner faces upon the return to the cave: the frustration of untranslatability of experience. And the incommensurability goes both ways: how can the prisoners, never having left the cave of their own subjective experience, make any sort of leap into the subjective experience of their enthusiastic friend? The freed prisoner, armed with both 'objective facts *par excellence*' (the sun exists, the shadows are a representation) *and* the subjective facts of his experience, may effectively be able to intellectually rationalize with the still-chained prisoners about the former but not the latter. The prisoners are not unintelligent, they just understandably cannot relate to the first-person experience being presented to them because, put as simply as possible, they have not had that experience themselves. Similarly, more than two thousand years later, Nagel refers to 'a Martian scientist with no understanding of visual perception'.¹⁶ The alien scientist, like the shackled prisoners, is perfectly capable of intellectually understanding the workings of physical phenomena even if he has never experienced them. Likewise, the human species can have a very clear understanding of the bat's neurophysiological makeup even if our visual perceptions are quite different from that of a bat's. This is possible because as we have seen before, the physical facts of the bat's experience can still be reliably, if distantly, understood by organisms who do not have the bat's subjective perceptual view.

Yet we hit a (cave) wall when we realise that the prisoners are still unmotivated to make their journey outside the cave, and that the Martian scientist still meets an imaginative obstacle when attempting to make an experiential connection to 'the human *concept* of rainbow, lightning or cloud, or the place these things occupy in our

¹⁵ Plato, *Republic*, trans. Desmond Lee (London: Penguin, 2003) 514a,2–517a,7.

¹⁶ Nagel, p. 443.

phenomenal world'.¹⁷ Whereas scientific understanding of the bat makes sense from any perceptual view because it is such an impersonal form of authority, the trouble is the move from the objective to subjective characterisation of the bat's experience. With increased intellectualisation, we are like the preached-to prisoners in the cave. We have the boons of teleological efficiency and rational calculation but no adequate 'provocation of the joyful recognition of one's profound attachment to life', nothing that soothes the frustration of realising that, try as we might to understand the freed prisoner's viewpoint, we only have *our own* subjective experience to keep us company.¹⁸ Those experiential aspects which elude intellectualisation are linked to the inner life of the experiencer. Though the prisoner's experience of the sun is not vague to the prisoner who has directly experienced it, it turns out (perhaps even to the surprise of the freed prisoner himself) that it is startingly ineffable. The ineffability of subjective experience is the source of suffering for the freed prisoner who desperately tries in vain to convey his empirical riches. Yet since he cannot do better than intellectual explanations, and since these leave the shackled prisoners cold and impassioned. At the risk of psychologising the perennial Platonic prisoners, it is not hard to imagine that the prisoners bitterly feel reproach for their experienced friend. Perhaps they are jealous of this particular stream of experience which they cannot subjectively grasp or perhaps they regard it to be incongruent with the facts and logic they know to be true. In any case, they remain in lassitude and disgust, quite literally, in the dark.¹⁹

Fuzziness, Prickles and Goo

¹⁷ Ibid.

¹⁸ Jane Bennett, *The Enchantment of the Modern World: Attachments, Crossings and Ethics* (Princeton and Oxford: Princeton University Press, 2001) p. 62. This is the interminable problem for empiricists who emphasise the role of third person, object account of the world but reject what they consider to be vague, emotional and unreliable appeals to the first-person case. See John R. Searle, 'Indeterminacy, Empiricism, and the First Person', *The Journal of Philosophy*, 84(1987) 123-146.

¹⁹ That subjective experience is linked to ineffability is a point particularly linked to religious experience. In his lectures, William James points to ineffability as the first of the four qualities of a religious experiences, along with noetic quality, transiency and passivity. 'One must have musical ears to know the value of a symphony; one must have been in love one's self to understand a lover's state of mind. Lacking the heart or ear, we cannot interpret the musician or the lover justly, and are even likely to consider him weak-minded or absurd. The mystic finds that most of us accord to his experiences an equally incompetent treatment.' William James, *The Varieties of Religious Experience: A Study in Human Nature* (New York: Longmans, Green and Co, 1917) p. 370.

In the course of our inquiry into 'what is it like to be another thing for the thing' there will necessarily be a considerable amount of vagueness, speculation or what Ben Woodard worriedly calls 'ontological fuzziness'.²⁰ 'Ontological fuzziness' is a colourful, if typically, pejorative term which refers to the foundations of reality (as well as our conceptions of it) as having soft, even artificial placeholder edges rather than crisp, clear parameters. What this effectively means is that certain types of thought (such as this thesis, probably) proceed by trading the urge to formalise and clarify for taking non-common-sensical questions such as 'what is it like to be a rock?' seriously. The counterfactual nature of this question vis-à-vis rocks flies in the face of the static borders that typically separate entities assumed to have experience (i.e., the animate and the conscious amongst us) from those which are normally excluded from that category. So, it may not be so 'fuzzy' to talk about the inner qualitative experience of our neighbour or a warm-blooded animal like a chimpanzee or a well-loved pet because our cognitive proximity to these creatures makes questions about their subjectivity seem 'obvious.' But does a tree have experience? Does a rock, or an atom? Does 'what-is-itlike-ness' go all the way down? As the cognitive gulf between us and the thing in question widens, the fuzz grows alongside.

Perhaps the most concise (and by far the most entertaining) distinction between 'fuzzy' and 'hard-line' approaches is Alan Watts' video collaboration with South Park creators Trey Parker and Matt Stone. In 'On Prickles and Goo', Watts identifies two personality types in the history of philosophy: Prickles and Goo. The prickly people, drawn as grey squares with sharp spikes, insist on rigour and precision: 'they're edgy like that'. They accuse Goo of being 'disgustingly vague and miasmic and mystical.' The goo people, colourful blobs with googly eyes, sneer at the prickly sort who 'know the words but don't know the music'. The video concludes with a pleasant compromise – the world is actually 'gooey prickles' and 'prickly goo,' blurriness and sharp focus in tandem, and we are always playing with the two.²¹ One cannot help but smile at the idea of philosophers on both ends of the academic spectrum living in harmony as 'gooey prickles' and

²⁰ Ben Woodard, 'The Twilight of Becoming (and Process)', *Naught Thought*, 17 Aug 2011, <https://naughtthought.wordpress.com/2011/08/17/the-twilight-of-becoming-and-process/> [accessed 16 September 2019]

²¹ Uploaded by Jamie Anderson, 'Alan Watts – On Prickles and Goo', *YouTube*, 15 Dec 2012, <https://www.youtube.com/watch?v=D4vHnM8WPvU> [accessed 16 September 2019].

'prickly goo'. But as entertaining as that hybrid conclusion may be, that vision is unfortunately tinged with some degree of scepticism because these different approaches are not just idiosyncratic personality quirks but actually betray profoundly held divergent convictions about the character and goals of the philosophical project.

Before I go on to explain why I am more given to the values espoused by fuzziness and goo, I want to proceed with the caveat that, as a core principle, I agree with Daniel Dennett that we ought to be opportunistic in our approach.

[...] we must wade in opportunistically and attempt to achieve a stable vision by playing off against each other a variety of intuitions, empirical findings and theories, rigorous arguments and imaginative thought experiments.²²

Dennett shows how ultimately, the two approaches are not necessarily incompatible and could be used to serve each other in complementary ways. Indeed, the rehearsed dance of the analytic approach versus the continental, rigorous versus fuzzy, sciences versus arts is frankly repetitive. It always stars 'the same camps, the same divisions, the same punches.' Though the purported aim is the advancement of thought, truly, absolute bifurcation serves no advance 'except on the social chessboard and in the conquest of power'²³. It serves my purposes much better to align myself with methods that are congruent with the task I have set myself, using every advantageous tool in the toolbox, rather than align myself with any camp at all. And yet, my academic apprenticeship has taught me that alternative prickly and gooey thinking tools often have conflicting or even mutually incompatible intellectual justifications and backgrounds and that, on a pragmatic level at least, it is sometimes necessary to cease one's hedging and make some definitive commitment to the tools best suited to the task at hand.

What Watts identifies as the prickly brand of philosophy is characteristic of the Anglo-American tradition, which, inspired by developments of modern formal logic, has the

²² Daniel C. Dennett, *The Intentional Stance* (Cambridge, MA and London, England: MIT Press, 1989) p. 4.
²³ Serres and Latour, *Conversations on Science, Culture and Time*, p. 37. Serres laments academic debates which serve little purpose but to further the profiles of those who participate in them. There is no excitement, 'nothing is at risk'.

basic goal of conceptual clarity. Modern analytic metaphysics, in particular, has been largely contoured by concerns with logical objectivity (Frege), realism (Moore and Russell) and commitment to scientific language which has good a chance of shedding some light on the mysterious ontological structure of the world and its cosmological relevance. And although analytic metaphysics has seen somewhat of a revival over the course of the last century, the questions it asks are ancient enough. Imagine being part of a hunter-gatherer society, a pawn of the elements, always one storm away from your entire community making it through the winter. Even now, when disaster strikes in the form of hurricane or epidemic or personal misfortune, the willingness to believe in some kind of karma or supernatural punishment remains pervasive.²⁴ The most immense of suffering – the epistemological suffering of one's own ignorance, not being excluded – is made easier to bear if it is not senseless but couched in some order or rational calculation. Cast adrift in what Alexander Pope calls the 'mighty maze,' the temptation of finding the sense in it all seems insurmountable.²⁵ It leads the philosopher in search of divine ultimate truths and, eventually, to their writing desk where they dispassionately use the enlightened methods of modern science to map out an adequate blueprint for the maze (SMW, 81).

Thus, we find a constellation of rationalist philosophers guided by optimism about the capacity of human reason in the acquisition of knowledge. Descartes' representative theory of perception involves the *judicium* (judgement) validated by the assurance of the power and goodness of God. Without cognitive inferences, he argues, all we have are sense impressions which are merely a disconnected series of different qualitative states.²⁶ Similarly, Leibniz's mathematical work taught him how to treat the quantitative infinite in a rational manner, but he certainly also uses it to further his theological commitments.²⁷ In more general terms, the philosophical approach that emphasises

²⁴ On rationalising contingencies see Dominic Johnson, *God Is Watching You: How the Fear of God Makes Us Human* (Oxford: Oxford University Press, 2016). William E. Connolly also opens his book *Facing the Planetary* with a prelude on human mythmaking as a means to structure meaning in a cosmos that doesn't meet our rational expectations. William E. Connolly, 'Prelude: Myth and the Planetary' in *Facing the Planetary: Entangled Humanism and the Politics of Swarming* (Durham and London: Duke University Press, 2017) pp. 1-9.

²⁵ Alexander Pope, *An Essay on Man* (New York: Samuel R. Wells, 1875) p. 12.

²⁶ René Descartes, *Meditations on First Philosophy. With Selections from the Objections and Replies*, trans and ed. John Cottingham (Cambridge: Cambridge University Press, 1996) pp. 20-21.

²⁷ Ohad Nachtomy, 'On Living Mirrors and Mites: Leibniz's Encounter with Pascal on Infinity and Living Things Circa 1696' in *Oxford Studies in Early Modern Philosophy*, eds. Daniel Garber and Donald

reason as the primary source of knowledge sees it as its (divine) goal to emulate the positive sciences in the name of rigor and clarity.²⁸ The craftsmanship of so-called prickly approaches, then, is that of precisely identifying the problem, enumerating calculable axiomatic premises, making inferences explicitly, presenting clear arguments and counterarguments and establishing sound, valid and true conclusions. In the quest for cumulative progress on precisely defined problems, analytic philosophy offers 'an increasing theoretical mastery of reality by means of increasingly abstract and precise concepts.' ²⁹ For instance, in optimistic pursuit of the real, Daniel Dennett's method is typically scientific in that it is invariably preoccupied with proofs of truths which supersede falsities. On the realm of consciousness, Dennett writes: 'whatever the true theory of the mind turns out to be, it will overturn some of our prior convictions.'³⁰ We see this culture of progress-by-overturning reflected in academic culture at large. Refereed journal articles which measure the progress of academics, mimic the modus operandi of 'objective, materialistic, third-person world of the physical sciences.' ³¹ And so, the spirit of Franz Brentano's fourth habilitation thesis title - Vera philosophiae *methodus nulla alia nisi scientiae naturalis est* (trans. The true method of philosophy is none other than that of natural sciences) – remains palpable in the corridors of many philosophy departments worldwide which self-identify as analytic departments.³²

By contradistinction, the fuzzy approach seems positively hippy-like. Where scientific approaches to philosophy depend on structuring and narrowing down, fuzziness

Rutherford (Oxford: Oxford University Press, 2018) p. 177.

²⁸ C.f. the guiding role of practical reason in Kant's metaphysics and moral philosophy: 'Metaphysics is absolutely impossible, or is at best a random, bungling attempt to build a castle in the air' if we do not separate our experiential/ empirical knowledge from practical reason. For Kant it is the latter, not the former, that forms the foundation of moral philosophy. Immanuel Kant, *Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as a Science*, trans. James W. Ellington, 2nd edn (Indianapolis: Hackett Publishing Company, Inc: 2001) p. 65.

²⁹ Weber, *From Max Weber*, p. 293.

³⁰ Dennett, *The Intentional Stance*, p. 6.

³¹ Ibid., p. 5. A point also made by Markus Gabriel in this interview. Graham Harman and Markus Gabriel, 'Graham Harman interviews Markus Gabriel', *Edinburgh University Press Blog*, 23 Sep 2016 https://euppublishingblog.com/2016/09/23/graham-harman-interviews-markus-gabriel/ [accessed 14 May 2018]

³² The distinction between analytic and continental philosophy may have once pointed to a geographical characterisation (philosophy done on the European continent as opposed to philosophy done in the Anglo-American world) but this seems problematic now from a colonial perspective. It would be interesting however, to draw up a map of philosophical academic activity to see where we can identify similar approaches being practiced or similar topics being discussed worldwide.

prioritises an open-handedness with regard to what can be considered a serious matter of inquiry. As Nagel observes,

To the extent that such no-nonsense theories [of logical positivists and linguistic analysts] have an effect, they merely threaten to impoverish the intellectual landscape for a while by inhibiting the serious expression of certain questions. In the name of liberation, these movements have offered us intellectual repression.³³

Rather than labour against inexactness and imprecisions, ontological fuzziness tolerates vagueness under the understanding that reality itself is indeed vague rather than precise, absurd rather than rational, indifferent rather than designed. Intractable questions - and this goes especially for the impossible question of the inner experience of one's neighbour, or of bats or rocks - might be sidestepped too easily on the grounds that it is hopeless to probe such issues if there can be no hope for scientific-like, nononsense clarity. For instance, panpsychism is an area of reflection which asks after the mental being of the universe and all its entities, including the bat and the rock, in order to account for the emergence of higher levels of consciousness. But in the academic world as much as outside it, to say that a rock has a mind, comes across as sciencefiction, or as McGinn puts it, 'a complete myth, a comforting piece of utter balderdash.'³⁴ After all, 'isn't there something vaguely hippyish, i.e., stoned, about the doctrine?'³⁵ From the prickly perspective, questions on the inner lives of rocks are counterfactual and merely speculative, 'breathtakingly implausible' and 'metaphysically and scientifically outrageous'.³⁶ These objections are made precisely on the strength of the conflation between metaphysics and science. Even if it were the case that the mentality of rocks was so counterfactual that it was a scientific non-starter, why should the philosophical community dismiss them out of hand? Does the culture of 'clarity fetishism' really serve the philosopher so well that it ought to dictate which questions it is respectable to pursue and which it is more prudent to toss aside?³⁷ It is not that

³³ Thomas Nagel, *The View from Nowhere* (New York: Oxford University Press, 1986) p. 11.

³⁴ Colin McGinn, 'Hard Questions' in *Consciousness and Its Place in Nature*, ed. A. Freeman (Exeter: Imprint Academic, 2006) pp. 90-9 (p. 93).

³⁵ Ibid.

³⁶ Colin McGinn, *The Character of Mind: An Introduction to the Philosophy of Mind* (Oxford: Oxford University Press) p. 34.

³⁷ Gayatri Spivak's remark at the congress 'Double trouble' held at the University of Utrecht in May 1990 is quoted in Rosi Braidotti, 'Body-images and the Pornography of Representation' in *Knowing the*

lucidity in thought and in writing style is not an admirable quality. But like Judith Butler, we might defend bizarre and counter-intuitive positions on the grounds that they they, perhaps more than their counterparts, 'provoke new ways of looking at a familiar world'.³⁸ The conceptual outlandishness of panpsychism for instance, is more than made up for by the unexpected ways in which such a position challenges the ways we think about mentality, which entities have it and how we therefore interact with various entities with or without that attribute.

With no small amount of trepidation, I make my decisive commitment to the fuzzy approach which welcomes perplexity and vagueness as a legitimate feature, not a bug, of philosophical enquiry. After all, 'certain forms of perplexity – for example, about freedom, knowledge, and the meaning of life – seem to be to embody more insight than any of the supposed solutions of these problems.'³⁹ My aim is not to produce a candidate theory for the truth so that 'whatever the true theory of the mind turns out to be, it will overturn some of our prior convictions.'⁴⁰ I make no claims as to 'an increasing theoretical mastery of reality,' and I certainly make no pretence that I am attempting to detangle stubborn knots in the understanding of reality.⁴¹ When it comes to the question of what could it possibly be like to be a pilot or a bat or a rock (and why it matters to ask the question even if there is no hope for a clear answer), the writers and philosophers I admire are those who proceed in full view of intractability; who employ artistry and nerve in equal measure when conveying the exhilarating fact of fuzzy perplexity. The following are windows on three such philosophers.

Kierkegaard: The Wound of Negativity

³⁸ This remark is a response to a 'bad writing prize' bestowed upon her by analytic philosopher Denis Dutton. Judith Butler, 'A "Bad Writer" Bites Back', *The New York Times*, 20 Mar 1999

https://archive.nytimes.com/query.nytimes.com/gst/fullpage-

Difference: Feminist Perspectives in Epistemology, eds. Kathleen Lennon, Margaret Whitford (London and New York: Routledge, 1994) pp.17-30 (p. 26).

⁹⁵⁰CE5D61531F933A15750C0A96F958260.html> [accessed 25 November 2020].

³⁹ Nagel, The *View from Nowhere*, p.4.

⁴⁰ Daniel Dennett, *The Intentional Stance*, pp. 5-6. See also Franz Brentano, *The Four Phases of Philosophy and Its Current State*, eds. Barry Smith and Balázs Mezei (Amsterdam & Atlanta, GA: Rodopi B. V., 1998) p. 5 where Brentano covers philosophy's first phase of ascending development fuelled by lively interest and the application of the scientific method.

⁴¹ Max Weber, *From Max Weber*, p. 293.

One such philosopher is Søren Kierkegaard. Unlike Nagel, whose unreachable object is the modest bat, Kierkegaard's lust is for God, the unreachable object *par excellance*. Perhaps comparing God to a bat verges slightly on the blasphemous.⁴² Yet the bat's private experience bears some similarity to the divine insofar as incommensurability is integral to both their natures. As we have seen, the problem of 'what-is-it-likeness' is intractable because we always seem to come up short when measuring the experience of another. Having to settle for 'what is it like *for me* to be bat', we end up defaulting to indulging our own mental resources. Similarly, the irreducible qualitative difference between God and humanity pronounces itself at every turn in what Kierkegaard considers a sacrilegious, pagan attempt to understand God through intellectual rationalisations which reduce God to man or make him in our image. He makes this point through Climacus, with a typically acerbic remark:

If, for example, God took on the form of a rare, enormously large green bird with a red beak, perched on a tree on the city wall, and perhaps even whistling in a hitherto unheard-of way, then the party-goer would doubtless have his eyes opened; for the first time in his life he would have been able to be the first. All paganism consists in this, that God relates to man directly, as the striking to the struck.⁴³

The break between God and human is clear: thou art on earth, as He is heaven. Kierkegaard bluntly strikes out the option of worshipping at the altar of rational order so as to render God conspicuous to our human senses. Those who pursue this route are sadly deceived. Like any intimate facet of experience which we long to be connected to, God is invisible and shrouded in secrecy. He eludes the intellect of the human and if the believer insists on the direct and positive communication of divinity, they will find to their dismay, that it remains ever detached from them. And indeed, this is the frustration of many a Christian whose hopes for knowing God are dashed as they become all too keenly aware of the unbridgeable chasm between themselves and the divine.

⁴² To be clear, the comparison of incommensurability is not between the bat and God, but between the bat's *experience* and God. The bat is unlike its 'what-is-it-like-ness' in that it is a non-I external object which exists on the spatiotemporal plane. It has concrete manifestations (like echolocation) which allows them to be knowable by reason.

⁴³ Søren Kierkegaard, *Concluding Unscientific Postscript*, ed. and trans. Alastair Hannay (Cambridge: Cambridge University Press, 2009) p. 205.

But for Kierkegaard, the fact that God's incommensurability is not to be tamed is the fundamental starting point of the human's genuine relationship with God:

He is cognizant of the negativity of the infinite in life, and he constantly keeps open that wound of the negative that is indeed at times the saving factor (the others let the wound heal and become positive – deceived); in communication he expresses the same. For that reason he is never a teacher but a learner; and since he is constantly just as negative as positive, he is constantly striving.⁴⁴

The Christian suffers at the lack of a direct relationship with God as if that lack was an open wound. Yet the wound of negativity is not meant to be negotiated into positivity, and spiritual success is not measured by the deceptive healing of the negativity. On the contrary, the God-relationship will always be characterised by the negative. God is not conspicuous and striking (that would be idolatry) – he is invisible and unremarkable. And so as counterintuitive as it sounds, the genuine subjective thinker must suffer the loss of (deceptive) security that a healed wound would afford. For it is comforting to know that what is unknowable is either teachable or not-*yet*-deduced. It gives one a reassuring sense that one's striving will yield results, if not today, then tomorrow. Kierkegaard's contradictory proposal is that one ought to give up such hopes for continuous and endless striving.

The relationship with God is distinguishable by the negative, and selfannihilation is the essential form for the relationship with God [...] Religiously, the task is to grasp that one is nothing at all before God, or to be nothing at all and be thereby before God.⁴⁵

Those who actively strive to keep the wound of negativity open, that is, those who remain cognizant of their nothingness are understandably anxious and 'deriv[e] none of that positive hearty joy from life' that comes from the invulnerable illusion of the healed wound.⁴⁶ Against Aristotle's claim that all men by their nature desire to know, the open-wounded Christian must deny themselves the satisfaction of their basic epistemological desires. But why would anyone opt for an open wound where there can be healing? This

⁴⁴ Ibid., p. 72.

⁴⁵ Ibid., p. 386.

⁴⁶ Ibid., p. 72.

is nothing short of counterintuitive. What possible spiritual advantage can there be to put aside one's instinct to close the gaps around one's natural desire to know?

Kierkegaard proposes that we keep the wound of negativity open because for him, it is that gap which motivates the continual striving for communion between one and the other. The negation that takes place when one denies oneself the pleasure of direct communication is re-formulated as affirmation of the striving self-in-relationship-with-God. For the Christian, to know that they cannot know forms the foundational basis of respect and humility in front of God. The turbulent and emotional suffering of negativity, then, *is* the getting closer to God. This is how I interpret Jesus' apparently paradoxical invocation:

Most assuredly, I say to you, unless a grain of wheat falls into the ground and dies, it remains alone; but if it dies, it produces much grain. He who loves his life will lose it, and he who hates his life in this world will keep it for eternal life.⁴⁷

One must actively decide – and this is the crux of Christian faith for Kierkegaard – to live a life of modest acknowledgement of the vitality of the Other, particularly if such vitality eludes the self. And furthermore, one ought to continue to strive toward the Other, even if it means the negation of the self. If one hates one's life in this world, that is, if one loses the crisp and clean edges which one uses to define one's mortal self, the way is at least paved for subsequent reconstitution of the self in a more emotionally intense, communal relationship with God.

Even if we who read Kierkegaard today are secularists whose goal is not communion with God, the lesson for us is that the conceptual work of philosophy starts from the point of negativity. Philosophy starts with wonder, as the Ancient Greek idea goes.⁴⁸ And in that state of awe and wonder, there is always the tacit admission of gaps in our interpretative abilities, of the inadequacy of our understanding, of some wound of negativity, to put it in the Kierkegaardian phrase. Fascination stems from our curious

⁴⁷ *The Holy Bible Containing the Old and New Testaments*, New King James Version (Nashville, Tennessee: Thomas Nelson, Inc., 1982) John 12, 24-5.

⁴⁸ 'Philosophy begins in wonder. And, at the end, when philosophic thought has done its best, the wonder remains' (MT, 168).

ignorance. Thus, the very springboard of conceptual work is this passionate wonder *qua* negativity. And yet, the resolution of philosophy does not represent the resolution of this wonder. There is a role in philosophic understanding for the grasping of the immensity of things. Yet there is the danger of letting the guiding motivation of establishing results cloud the other task of undertaking emotional engagement.⁴⁹ Thus, Kierkegaard's suggestion to 'keep the wound of negativity open' resonates with the process philosopher's vision of a discipline which seeks, first and foremost, to establish and amplify emotionally intense connections with whatever it is that causes us to feel so enchanted – be that God, the humble bat, or as Jean-Paul Sartre advances, a sexual partner.

Sartre and de Beauvoir: Sadism and Masochism

Sartre devotes large parts of *Being and Nothingness* to an exploration of our relations with others, talking about shame, pride and love. One aspect of his account of relationality is his discussion of sexual encounters and attitudes of sadism and masochism, where one literally feels the Other from the inside with the utmost direct intensity.⁵⁰ As he understands it, it is the freedom of the other prevents one conscious subject from possessing another conscious subject. He argues that is why our relations with others are always uneasy, because they are based on the primordial conflict between two free consciousnesses. And the conflict is precisely this: the desire to connect the other's most intimate, private, subjective experience against the freedom of the other. Sexuality is a paradigmatic case study. The sexual desire for connection is a desire for 'double reciprocal incarnation' – a double-sided, mutual regard represented by a sense of total re-creation.⁵¹

⁴⁹ A sentiment echoed in Weber's striking, cautionary vision of impersonal forces ruling over captive humanity in an iron cage. Max Weber, *Political Writings*, ed. Peter Lassman, trans. Ronald Speirs (Cambridge: Cambridge University Press, 1994) p. xvi.

⁵⁰ The term Other is used by Sartre to refer to 'another person, particularly one who looks at me, sees me and judges me.' The problematic in question is that of the relationality between two consciousnesses, understood as a bi-reflexive look-see-judge. Gary Cox, *The Sartre Dictionary* (New York and London: Continuum, 2008) p. 157.

⁵¹ Carnal excitement, alongside several other manifestations of erotic love, allows the lover to seek validation of one's own self through the other in a Cartesian twist resembling 'I desire/ am desired, therefore I am'. Jean-Luc Marion, *The Erotic Phenomenon*, trans. Stephen E. Lewis (Chicago: University of Chicago Press, 2006).

[...] I make myself flesh in order to impel the Other to realize for herself and for me her own flesh. My caress causes my flesh to be born for me insofar as it is for the Other flesh causing her to be born as flesh.⁵²

The reciprocal and reflexive action here is nothing short of creativity. Nothing is made out of nothing. Energy cannot be created or destroyed but it can be transformed from one form to another. Thus, a creative advance into novelty is made through the body and as Whitehead says it, 'the process continues till all prehensions are components in the one determinate integral satisfaction' (PR, 39). What satisfaction entails for these two philosophers seems to converge at the point of complex unity.⁵³ In Sartre's conception of conjunction, 'I make myself flesh', that is, I become body. At this moment, I cease to be the subject that entered the relation and become remade in the other's image. And I become a canvas on which the other can enter into a similar process and realise themselves anew. This is relationality on a profound sense, made epic by the theme of sexual wholeness and Sartre's biblical diction. God makes himself flesh and incarnates as flesh. Sartre's suggestion then, is that incarnation, re-incarnation and reciprocal incarnation can be conceived as mortal matters.

Finally, there seems to be always implied a permutation of one incarnation to another. From God to man. From one form to another. This sense of transformation is essential to 'reciprocal incarnation', in that there is necessarily involved the loss of previous incarnations in the making of new ones. My desire for the Other makes it so that I lose my current iteration of my self in him. In a theological sense, He takes me over, permeates my sense of self such that, as per Kierkegaard's reflections, my sense of self is negated and subsequently permeated with a sensationally intense connection with the Other. In the negation and abandon of my self, I give my self to the Other. The bleeding of one's metaphysical boundaries into the Other fuels both the profound 'revelation of the Other's body' and the very mortal revelation of one's own liquid and contingent body.⁵⁴ Underlying Sartre's analysis of sexual desire is a general observation about

⁵² Jean-Paul Sartre, *Being and Nothingness*, trans. Hazel E. Barnes (London: Methuen Press, 1957) p. 391. Original emphasis.

⁵³ The unity happens between what Sartre would call subject-object and Whitehead would call subjectsuperject. Where they differ is what qualifies an entity to have such unifying interactions with other entities.

⁵⁴ Sartre, p. 388.

intersubjective relations, precisely because for him, 'the sexual attitude is a primary behaviour towards the Other.'⁵⁵ We are curious, and we crave connections. We have a libidinal desire for kinship with the world around us. Consciousness is radically relational, so radical that conscious beings are not merely disposed to conjunctive unions but desire them and has a libido for them and actively seek them out.⁵⁶

It is worth noting that Sartre did not subscribe to the Freudian tradition of the unconscious. As per the Freudian tradition, the force behind the libido is a psychic drive or energy associated with sexual instinct. Sartre departs drastically from Freud. He rejects the Unconscious and denies the existence of drives, which he takes to be deterministic. But as Geraldine Coster notes, the term libido 'has taken on a wider significance, and is now very commonly, though not invariably, used to mean the total *life-energy* or *vital impetus* of the individual – the current in which his thoughts, desires, and tendencies inevitably flow.'57 Insofar as it is understood as pure energy, then, libidinal desire for conjunctive unity exceeds its usual sexual connotations. The libidinal impetus is to position ourselves in 'meticulous relatio' to our environment and its constituents, to 'connect, conjugate, continue' with what surrounds us.⁵⁸ And why ought there be such a desire for relationality? What could be the motivating factor? One explanation is the productive potential for aesthetic satisfaction. That is to say, the desire for connection with the Other is about a sensual, (not necessarily sexual) enjoyment of the 'the nuptial celebration of a new alliance, a new birth, a radiant ecstasy' which 'liberate[s] other unlimited forces.'59 It is in this almost primordial libidinal orientation towards new connections (and therefore new forces and forms of production) that desire *qua* energy comes through at its strongest; a desire so strong in

⁵⁵ Ibid., p. 406.

⁵⁶This is contrary to some Sartrean scholars' interpretations of consciousness as overly individualistic. See Luna Dolezal, 'Shame, Vulnerability and Belonging: Reconsidering Sartre's Account of Shame', Human Studies, 40(2017) 421-438. On the other hand, Zahavi and Guenther argue that shame gets its power because we are radically relational to others. Dan Zahavi, *Self and Other: Exploring Subjectivity, Empathy and Shame* (Oxford: Oxford University Press, 2014) and Lisa Guenther, 'Shame and the Temporality of Social Life', *Continental Philosophy Review*, 44.1 (2011) 23–39.

⁵⁷ Geraldine Coster, *Psychoanalysis for Normal People* (Oxford: Oxford University Press, 1926) p. 37. My emphasis.

⁵⁸ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (London & New York: Continuum, 1987) p. 178.

⁵⁹ Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem and Helen R. Lane (London & New York: Continuum, 2004) p. 19.

fact, that we would be inclined even to annihilate, *pace* Kierkegaard, the stability of our own self.

And yet, Sartre makes the case that the project of desire is doomed to failure because it founders on the reefs of sadism and masochism.⁶⁰ The charge of sadism runs as follows: in the desire to lure the other's subjective character to the surface, there is the aggressive violence of conquest and possession. The sadist's desire to establish a connection with the Other is reduced to nothing more than the selfish ensnaring of the Other's free subjectivity into the sadist's own subjectivity:

Since I can grasp the Other only in his objective facticity, the problem is to ensnare his freedom within this facticity. It is necessary that he be "caught" in it as the cream is caught up by a person skimming milk. So the Other's For-itself must come to play on the surface of his body, and be extended all through his body; and by touching this body I should finally touch the Other's free subjectivity.⁶¹

So, Sartre thinks about an intimate relationship with the Other as an example of bad faith ensnaring or entrapping. The cream metaphor is perhaps too benign; the image that comes to my mind is of the sadist-desiring person cornering the Other in some dark cobwebby enclosure where the Other's free subjectivity will slowly and painfully perish in the sadist's selfish grasp. It seems to me that the teleological enclosure in which the sadist ends up trapping the Other serves in a sense to protect the sadist's superior hierarchal position. Thus, the sadist's oppression is not only aggressive but also preservative of his own status. Sartre's discussion of sadism gives us an opportunity to return to the unease one feels when negotiating one's own desire for conjunctive unity with the freedom of the other. For one thing, there is the fear that the freedom of the other represents the 'death of my possibilities', a fear well-justified in so far as the relation with the other reciprocally incarnates the participants. The impulse might be to annihilate the threat through sadistic possession, though Sartre also discusses hatred and indifference as methods of annihilation. In these cases, the interaction with the other or

⁶⁰ Sartre, Being and Nothingness, p. 404.

⁶¹ Ibid., p. 394.

about reciprocal incarnation, but about the aggression of enclosing. ⁶² Rather than acknowledge the intensity of the Other as a potential new avenue of *feeling with*, the sadist launches at the opportunity to exchange his superior regard toward the Other by possessing and 'appropriat[ing] the Other's flesh'.⁶³ In relation to the Other, the sadist is after the *consumption* of the other's subjectivity rather than *contamination by* it.

As for masochism, Simone De Beauvoir suggests that 'when one works all day, struggles, takes responsibilities and risks, it is a welcome relaxation to abandon oneself at night to vigorous caprices.'⁶⁴ The young girl will be prone to masochism not in the sense that she will believe in the unconditional supremacy of the man but in desiring blissful submission. She allows that the woman can maintain the affirmation of her subjectivity by achieving her own pleasure and seeking union with the lover. Yet taking into consideration that the nature of the woman's sexual role is largely submissive, she states that:

The young girl is susceptible to it [true masochism] since she is easily narcissistic and narcissism consists in alienating one's self in one's ego [...] The young girl considers herself guilty of delivering her self to another, and she punishes herself for it by willingly increasing humiliation and subjugation.⁶⁵

Here there is masochism understood as the alienation of oneself in the name of beingfor-the-other).⁶⁶ The 'vicious circle' of female masochism, as Beauvoir sees it, goes something like: affirmation of the thinking self (narcissism) – frigidity (creating barriers that keep her from pleasure) – self-negation (alienation of one's self from oneself) – guilt – and finally, more self-punishment by actively willing the sadistic conquering that becomes her own self-alienation. The recurring cycle is especially damning as there must first be an affirmation of the self for that self to be later given away as a gratuitous object or a *thing-other-than-herself* to be constituted through the other. Clearly, for the masochist female this sexual encounter is far from an authentic experience. In fact, it is

⁶² Deleuze and Guattari, *Anti-Oedipus*, p. 20.

⁶³ Sartre, *Being and Nothingness*, p. 506.

⁶⁴ Simone De Beauvoir, *The Second Sex*, trans. and ed. H. M. Parshley (London: Vintage, 1997) p. 700.

⁶⁵ Simone De Beauvoir, *The Second Sex*, trans. C. Borde and S. Malovany Chevallier (London: Jonathan Cape, 2009) p. 425.

⁶⁶ Equally, for De Beauvoir, in an intimate heterosexual relationship, sadism (understood as the aggressive will-to-conquer-the-Other) is more frequently demonstrated by man.
practically a textbook example of bad faith since it involves recognising one's self while at the same time refusing to live it sincerely. Sartre's ultimate takeaway is that 'this inconstancy on the part of desire and its perpetual oscillation between these two perils [sadism and masochism]' jeopardises the possibility of authentic interaction with the Other.⁶⁷ Therefore desire is fundamentally corrupt and inevitably devolves into violence either unto the other or unto oneself. On this view, neither aggressive sadism, much less bad faith masochism can be the proper locus of authentic connection.

I'd like to suggest that masochism *qua* self-annihilation is not quite the dead end that is presented as in Sartre and De Beauvoir. In fact, the conceptual framework of the masochist can be particularly useful when it comes to our desired coherence with the mysterious being of other entities which are in some way or other not like us. In *losing yourself* – be it in a sexual encounter (losing yourself in your lover), in prayer (losing yourself in God), in workflow (losing yourself in a philosophical text or a surgical procedure or whatever it might be), in dance (losing yourself to music) – you are trading a set of limiting circumstances, those being your strict ego or your rational being, for another set of circumstances, this time, those of another entity. Thus 'losing oneself' is in some sense the tacit acknowledgement that boundaries which are functional for self-identity are blurry and moveable according to various interactions. Masochistic pleasure arises precisely in *becoming otherwise* – this being a direct result of the modest dissolution of the egoic boundaries which repress us from that goal.

This sympathetic reading of masochistic pleasure draws on the intimation that in the negation of one thing, there is always implied the creative affirmation of another. 'Now, once negation is formulated, it presents an aspect symmetrical with that of affirmation [...] the negation of a thing implies the latent affirmation of its replacement by something else'.⁶⁸ In leaving aside my ego for a moment, I am leaving open the possibility of creatively forming a new circuit of associations and patterns in its stead, a substitution which, even if temporary, may well go a long way towards closing the aesthetic distance between me and the now-paradigmatic bat. It might even be possible

⁶⁷ Sartre, *Being and Nothingness*, p. 524.

⁶⁸ Henri Bergson, *Creative Evolution, Creative Evolution,* trans. Arthur Mitchell, (New York: Henry Holt and Company, 1911) pp. 295-6.

to make a case for bad faith; blurring the boundaries of the self into the subjectivity of others may be read as insincere or inauthentic by some, but to me, masochism speaks to a visceral empathy with which we could approach the inner, private experience of the other if we were that way inclined.

Throughout this thesis, I will frequently argue that such empathy, coloured by the humility that supports the dislodging of one's old circuit patterns in favour of alien ones, is in fact the proper ethical way to approach the world and its inhabitants. This thesis ends with a reflection on what kind of personal/ relational politics this ontological empathy necessitates, that is to say, if we re-align ourselves with the world in the manner of being sensitive to the subjectivities of other entities, how then, should we act and respond when confronted with the world?⁶⁹ I owe part of this line of argumentation firstly to a classroom experience which I will relate in a brief anecdotal digression. A few months ago, I was tasked with leading a seminar about the central doctrine of the mean in Aristotle's *Nichomachean Ethics*. As one of the classes tiptoed into discussing the human passions and their relationship to virtue, one contentious issue in the text arose: ought one rationally control one's natural appetites (e.g. for food or sex) in order to approach the elusive golden mean, or are our 'dirty passions' actually the precious, raw material which we have to work with to achieve Aristotle's balance?⁷⁰ One of my students quipped with: 'well, it all depends on which part of man we want to focus on, the rational or the animal.'

Which part indeed? Philosophy of mind or philosophy of body? Should my attention be devoted to the specificity of *umano rationale* – on man's capacity for judgement and mastery of nature – or to the human's equiprimordiality with her environment which figures her as a receptive participant rather than as secure master? What could focus on the latter yield that the former could not? Here was the tension I had been grappling

⁶⁹ The concept of onto-empathy comes from Leon Niemoczynski's blog *After Nature* where he understands the neologism as 'sociality of feeling'. In his view, onto-empathy necessitates the thinking of 'how affectivity fits into the realm of ethics'. Leon Niemoczynski, 'Phenomenology and Onto-Empathy', *After Nature*, 29 Jun 2017, <http://afterxnature.blogspot.com/2017/06/> and 'Reality as Social Process and Onto-Empathy', *After Nature*, 16 Mar 2017, <http://afterxnature.blogspot.com/2017/03/reality-associal-process-and-onto.html> [accessed 2 October 2019]

⁷⁰ Rosalind Hursthouse, 'The Central Doctrine of the Mean' in *The Blackwell Guide to Aristotle's Nicomachean. Ethics*, ed. Richard Kraut (Malden, Mass: Blackwell Publishing, 2006) pp. 96-115 (p. 110).

with throughout my fledgling philosophical apprenticeship, echoing in Room 1.49 of the John Percival Building. The very strange thing about the metaphysics of dualism is that the quasi-personification of the two characters is both part of the problem and an interesting aspect of the development of philosophy. In the move of mobilising reason to overcome the passions, we have created for ourselves the circumstances which make us less attentive, if not less sensitive towards our own feelings, as well as others'.

Deleuze and Guattari: Suffering and Immanent Desire

Another reading of the masochist comes from Deleuze and Guattari. On their reading, the masochist who puts on a bridle and saddle and submits to whipping and humiliation is voluntarily submitting to a reordering of the existing flow of forces, using the master as a force of conversion. At first, the masochist appears to be imitating a horse, but what is happening is an active decentring, or even a dislodging, of the masochist's existing self to make way for a whole new assemblage, a reorganisation of forces into a new circuit of intensities. For Deleuze and Guattari, masochism is an antithesis to stasis because in eschewing their fixed boundaries and rerouting their instinctive self, the subject shows themselves to be mobile in their becoming-animal:

Something entirely different is going on: a becoming animal essential to masochism. It is a question of forces. The masochist presents it this way: *Training axiom – destroy the instinctive forces in order to replace them with transmitted forces*. In fact, it is less a destruction than an exchange and circulation.⁷¹

There are resonances between this passage and De Beauvoir's account of the masochist, who also sees masochism as an affront to the subject in that one denies her (true) self by allowing herself to become constituted as something else in the eyes of her lover. But whereas for De Beauvoir 'losing oneself' is an ultimate expression of bad faith, for Deleuze and Guattari the rerouting of forces is the moment that one becomes a gap or an opening through which the other can transmit its own forces with all intensity. This is not a question of mirroring the other in an exact one-to-one imitation. It is a question

⁷¹ Deleuze and Guattari, *A Thousand Plateaus*, p. 155 ff. Original emphasis.

of identifying yourself with the other, 'mak[ing] your organism enter into composition with *something else*,' thereby developing creative ways of being affected.⁷² The output that you emit in turn is no longer yours and yours alone (as if it ever was!) but a sympoeitic aggregate of your and the other's force together. It is this embodied experience that allows for creative novelty in the plastic self - not drastic novelty (i.e. not transformation), but cumulative minimal rerouting (i.e. becoming), or gradual deviation where there is evolution from the current principles one embodies to a relational and dynamic coherence with other entities. Where De Beauvoir sees inauthenticity in masochistically negating one's previously affirmed self, Deleuze and Guattari see the possibility of *feeling what it feels like* to be *something else*. To those ends, one indulges their *desire* for the other, escalating the *intensity* of that *libidinal* force to the extent that it penetrates the limiting conditions of the ego.⁷³ Thus, we can – even if temporarily, in a moment of enjoyment – let our distinctive rational *individuality* dissipate in the basic *commonality* that we share with other sensual organisms like horses (or bats or even cliffs). Ultimately, this is ontological empathy: a *sensual* 'molecular proximity' to the *being* of other entities.⁷⁴

Here we can see an affinity between the Kierkegaardian approach to desiring God and the conception of desire as immanent.⁷⁵ For Kierkegaard, the fact that the Christian does not sublate in God (not even in the figure of Christ, god-man) is the lynchpin of her relationship with Him. Those who live the "wound of negativity" never have the satisfactory climax of closing the gap between themselves and God. 'It is [...] a suffering [...] to have the eternal happiness of one's soul related to something [the absolute

⁷² Ibid., p. 274. This could be a stand-in definition for 'feeling' in the Whiteheadian sense.

⁷³ Nidesh Lawtoo is right to group this kind of sensual escalation under the rubric of 'mimetic pathos' symptoms of which include 'enthusiastic outbreaks, affective contagion, ritual sacrifices, shared sympathy, communal frenzy, and reciprocal violence—not to speak of previously unstudied mimetic affects and effects such as panic, possession trance, depersonalization, hypnotic suggestion (or rapport), psychic dissolution (or psychasthenia), mirroring reflexes (or mirror neurons), and brain plasticity (or neuroplasticity).' Nidesh Lawtoo, *Conrad's Shadow: Catastrophe, Mimesis, Theory* (East Lansing, MI: Michigan State University Press, 2016) p. xviii.

⁷⁴ Deleuze and Guattari, A Thousand Plateaus, pp. 274-5.

⁷⁵ An insight also reflected in scholarly discussion of Kierkegaard's account of divine realisation with respect to the humanly possible: 'The reality of the impossible, which for Kierkegaard is what *Works of Love* is all about, is in this way reduced to immanent desire [...] and the paradoxical reality of unknowable love made manifest by its fruits is reduced to the possibility of borderless experiences.' Knut Alfsvåg, 'The Commandment of Love in Kierkegaard and Caputo', *Neue Zeitschrift für Systematische Theologie und Religionsphilosophie*, 56.4 (2014), 473-488 (p. 486).

paradox of God] over which the understanding despairs.'⁷⁶ Keeping that in mind, it is the 'striving-towards' or the sustenance of desire that characterises the good Christian. The divine is transcendent, but it is immanence, which Kierkegaard construes as subjective suffering, that guides our relationship with Him. Therefore, in the Christianly embrace of the wound of non-sublation there is the unremitting enjoyment of existential pathos which is, in fact, the only way to form a relational ontology with (rather than a grasping of) the divine.

Likewise, the Deleuzian masochist suffers as he lies tied up, waiting and in suspense, with gratification in a perpetual state of delay. Why go through all this? Why choose pain and suffering? Again, the answer is that the masochist's desire is not tied to the pleasure of fulfilment but finds fulfilment in itself; 'the masochist's suffering is the price he must pay, not to achieve pleasure, but to untie the pseudobond between desire and pleasure as an extrinsic measure.'⁷⁷ The masochistic state of being in eternal postponed gratification crystallises an account of desire which does not follow the psychoanalytic law of lack. As background, Deleuze and Guattari reject the idea that desire equals lack, so that the movement of desire would be the same as the work of negation. In that worldview,

the world acquires as its double some other sort of world, in accordance with the following line of argument: there is an object that desire feels the lack of; hence the world does not contain each and every object that exists; there is at least one object missing, the one that desire feels the lack of; hence there exists some other place that can cure desire (not in this world).⁷⁸

Under this rubric of desire as lack, if the masochist is finally allowed to have the pleasure they seek, there is the ultimate triumph that comes with unification. But desire defined in this way, as always *lacking unification* with the object of desire cannot support the aspirational potential to expand and connect with new and possible worlds because the discourse which figures desire as 'missing something' directs one's attention to their missing sense of coherent ego and thinks of oneself as *not-yet* whole, always with a fantasy castrated object. If one conceives of desire in this way, one is

⁷⁶ Kierkegaard, *Concluding Unscientific Postscript*, pp. 291-2.

⁷⁷ Deleuze and Guattari, *A Thousand Plateaus*, p. 171.

⁷⁸ Deleuze and Guattari, *Anti-Oedipus*, p. 26.

committed to a sense of scarcity and unfulfillment that comes part and parcel with a desiring entity.

Conversely, in Deleuze's view, desire does not project fantastical missing objects, it is not lack, but an active and positive reality, an affirmative vital force. Through immanent desire Deleuze and Guattari want to promote a symbiotic form of relating where proper, coherent egos are lost to a stretching-toward, 'liberating the prepersonal singularities they [egos] enclose and repress; mobilising the flows they would be capable of transmitting, receiving, or intercepting'.⁷⁹ When the masochist puts on his saddle and bridle and receives a whipping, he destroys his ego to set up exchange and circulation with other forces, namely those transmitted by a horse. The process of consumption of horse-force allows the masochist subject to project his libidinal force in the world, to symbiotically recreate himself with other forces and to thereby penetrate into novelty and affect the world anew. 'Even suffering,' Deleuze and Guattari note, citing Marx, 'is a form of self-enjoyment.'⁸⁰ In summary, suffering is the price the Kierkegaardian Christian or the Deleuzian masochist (happily) pays for the tentacular reach into new intensive channels of possible worlds and the opportunity to creatively appropriate such possibilities into their own stream of experience. This is desire conceived as a productive élan vital, with no acquisition or lack, but rather a productive and constructive driving force of the process of becoming. In short, the Deleuzian characterisation of libidinal desire characterises the entity's immersive experience into affective relations, intimate rapport or 'molecular proximity' with the experience of other entities.

What is it like?

What can we gain from all this with respect to our guiding question 'What is it like to a bat?' I propose that any successful treatment of Nagel's question must proceed with the humility implicit in immanent desire. Effectively, this means keeping at bay the self-ish (selfish) construal of desire from *lack*, for instance from lack of understanding what it is

⁷⁹ Deleuze and Guattari, *Anti-Oedipus*, p. 362.

⁸⁰ Ibid., 16. There are resonances with Whitehead's philosophy here, which sees the subject as a product of its becoming with others (subject-as-superject). In the most general terms, affective forces (of suffering) create / produce the self.

like to be a bat. Two mechanisms are at issue with that model. The first is that such a desire proceeds by identifying the stark contours of the individual desirer, thereby rendering subjectivity as a primordially fixed unity. It is by the power of the well-defined 'I' that the self can identify her lack and say that she desires some absent object. The second issue is that in desire-as-lack, the object is represented as a commodity in terms of the desirer who wishes to grasp it. That attitude, as Marx notes, spawns the crude, imprudent expectation that other (nonhuman) subjectivities 'will give up [their] natural character in order to comply with [our] desires' and would lead to the questionable success (or fruit, as we have called it before) the general characterisation of the bat's experience as intelligible, coherent and verifiable.⁸¹

These two moves are fundamentally incompatible with the project of emphasising one's experiential continuity with the bat. The desire to experience the experience of something else as *it experiences it* cannot be anything but immanent because what is at issue here is *connective experiential flow* and not an epistemological grasping or assertive determination of the object by forcefully bringing it forth.⁸² It is in the spirit of letting experiential harmonies/discords affirm themselves that I have been interested in self-annihilation in this chapter.⁸³ Just as Kierkegaard suggests, self-annihilation involves the insight that understanding and critical reflexivity are not sufficient and letting aesthetic passion and intensity take over instead.⁸⁴ As I have argued, there is none of the destructiveness usually associated with self-annihilation here, but rather an *affirmative* attunement to the affective tone with which (non)human subjective experience vaguely – fuzzily – 'penetrates visceral dimensions of being.'⁸⁵

Cultivating lines of flight into others' experience will entail pursuing new modes of ethical-political responsiveness to the world and the subjectivities which inhabit it. As I have hinted at already, it is a matter of *feeling from the inside*, rather than grasping from

⁸¹ Karl Marx, 'The Leading Article in No. 179 of the *Kolnische Zeitung*' in Karl Marx and Frederick Engels, *Collected Works*, vol. 1 (London: Lawrence and Wishart, 1975) pp. 184-202 (p. 189).

 ⁸² Following Alfred North Whitehead, I shall henceforth call this connective experiential flow *process*.
 ⁸³ The word 'harmony' often appears in Whitehead's work. By 'harmony' we should understand an aesthetic synthesis amongst individual entities. In itself it is devoid of any moral, positive or negative value judgement.

 ⁸⁴ Søren Kierkegaard, *The Present Age*, trans. Alexander Dru (New York: Harper Torchbooks, 1962) p. 33.
 ⁸⁵ William E. Connolly, *Climate Machines: Fascist Drives and Truth* (Durham and London: Duke University Press, 2019) p. 79.

the outside, others' personal subjectivity. The difference can be gleaned from an anecdote from William James' Pragmatism. A graduate student, James narrates, begin his thesis by noting that it had seemed to him that the philosophy class existed in some kind of different plane entirely than from the one the student leaves behind on the street. 'The world of concrete personal experiences to which the street belongs is multitudinous beyond imagination, tangled, muddy, painful and perplexed. The world to which your philosophy professor introduces you is simple, clean and noble.'86 From my point of view, the purity and dignity of the rationalising classroom represents the relational position of grasping from the outside. From that standpoint, the principles of reason can perhaps trace the outlines of the subjectivity of others or give explanations for it. But it is the *flaneur* character who walks the 'tangled, muddy' streets who is more well-placed to philosophise about the world from within. The closer to one's empirical sources, the more resonant the imaginative ascent related to those sources. For Jane Bennett, it is enchantment and wonder with the world that generates the 'stance of presumptive generosity' which renders 'oneself more open to the surprise of other selves and bodies and more willing and able to enter into productive assemblages with them.'⁸⁷ I would add that experiential proximity to the other is perhaps an underrated yet crucial component to the kind of philosophy that blends the edges of experience of two entities, such that one may feel empathy and compassion for the other. It is the closeness that one feels to the other - our fellow humans, animals, the earth itself - that renders into heightened plasticity of feeling whereby where one *feels with* alien subjectivities. As Bennett writes, the Deleuze and Guattari masochist model suggests that alien subjectivities which have long fallen into our blind spots can in fact be peered into provided that this peering is a matter of realignment of emotional attention. To her question 'Does it [the masochist's program] demonstrate the possibility of *magnetic realignments* between a subject usually organised as an organism and the animals, gear, regimens, edibles, and other particles in its "field of immanence"?'88 I answer, as she does, with a resounding yes.

⁸⁶ William James, *Pragmatism* (Indianapolis: Hackett Publishing, 1981) p. 14.

⁸⁷ Bennett, *The Enchantment of Modern Life*, p. 131.

⁸⁸ Ibid., 27. My emphasis.

I end this first chapter with another anecdote, this time from Bertrand Russell's autobiographical *Portraits from Memory*. In one passage, he relates how his mathematical temperament was pleased by the absolute truths of Plato and the hard, precise boundaries of Pythagoras. In the way that well-meaning, self-assured academics are wont to do, he categorically rejected the vague metaphysical notions of blurred and fungible edges. But then...

It was Whitehead who was the serpent in this paradise of Mediterranean clarity. He said to me once: 'You think the world is what it looks like in fine weather at noon day; I think it is what it seems like in the early morning when one first wakes from deep sleep.' I thought his remark horrid but could not see how to prove that my bias was any better than his. At last he showed me how to apply the technique of mathematical logic to his vague and higgledy-piggledy world and dress it up in Sunday clothes that the mathematician could view without being shocked. This technique which I learned from him delighted me, and I no longer demanded that the naked truth should be as good as the truth in its mathematical Sunday best.⁸⁹

The two contrasting biases stand out. Russell outs himself as one who aligns himself with the Platonic Heavens, who prizes guidance or scrutiny by conscious intellect above all else. Whitehead the Serpent opposes him by representing the vague stirrings of the pre-conscious. One can just imagine the fuzzy formations of ideas slithering subtly, striking just as the opportunity is right, perhaps in the liminal state between sleep and alertness that he refers to. Whitehead was interested in sensual ideation, that is, in influence on an aesthetic level. The next chapters deal precisely with the method of Whitehead's speculative philosophy, for whom the basic fact of existence is a web of inter-relational non-cognitive processes which are capable of their own constructive immanent power and affect. Philosophical thought that deals with basic relationality must deal with the ways in which entities' experiences coalesce and consider a myriad of atmospheric infusions. This is precisely the task of speculation.

⁸⁹ Bertrand Russell, *Portraits from Memory and Other Essays* (London: George Allen & Unwin, 1956) pp. 39-40.

Chapter 2 – Speculative Philosophy and Process Metaphysics

Not like my taking the veil – no solemn abjuration of the world. I only went out for a walk and finally concluded to stay out till sundown, for going out, I found, was really going in.

John Muir, *John of the Mountains*¹⁰⁷

For Whitehead, the speculative method of philosophy is founded in a grounded approach - it is our bare sensory perception and our 'immediate experience' which provide us with a stable ground from which we can start to formulate an alternative view of existence (PR, 4). For this reason, Whitehead's analogy of speculation to the flight of an aeroplane is not simply an uncontextualized snapshot of a plane in mid-air. Rather, the imaginative flight of speculation is crucially flanked by stable ground on either side: 'the ground of particular observation' upon take off and 'renewed observation rendered acute' upon landing. For Whitehead the starting point for any thought is the elucidation of concrete objects and situations given in our immediate experience. 'Our datum is the actual world, including ourselves, and this actual world spreads itself for observation in the guise of the topic of our immediate experience' (PR, 4). It is these empirical features of reality that account for our response to the world and orient the imaginative flight that is to follow.¹⁰⁸ What is more, this worldly orientation is true for all entities, whether they are conscious or not. Entities with cognitive capacities interpret a multitude of interacting and purposeful empirical components and act accordingly in such a way which influences other entities' experience. Likewise, inanimate entities are forged in the teeth of their surrounding material context and have their immediate empirical experience as a fundamental platform for their interactions with their environment. Following the chronology of the analogy then, our first order of business is to discuss the relevance of the fact that Whitehead emphasises that the starting point of this particular philosophical methodology is based on direct, empirical observation of context.

¹⁰⁷ John Muir, *John of the Mountains: The Unpublished Journals of John Muir*, ed. Linnie Marsh Wolfe (Wisconsin & London: The University of Wisconsin Press, 1979) p. 427.

¹⁰⁸The question of orientation and mutual responsiveness to the surrounding world is treated brilliantly by Sara Ahmed with respect to queer bodies and their dwelling places. Sarah Ahmed, *Queer Phenomenology: Orientations, Objects, Others* (Durham: Duke University Press) pp. 8-9.

The grounded starting point is presented by Whitehead as a more or less stable springboard. That is to say, empirical reality has the air of tangibility granted to it either by means of testing or by the uniform confirmation afforded to us by our senseperceptions (there is a cat on the mat). Our habitual immediate experience appears to be dependable enough that it warrants further assumptions on its basis: 'Sometimes we see an elephant, and sometimes we do not. The result is that an elephant when present, is noticed' (PR, 4). If the point appears trite it's because of the overwhelming efficacy of the ordered principles of nature. 'We can never catch the actual world taking a holiday from their sway' (PR, 4). The systematic consistency of the word is the cornerstone of any descriptive metaphysical system. There is entailed here a limitation to the (still minimal potential of) creativity – if the cat is on the mat, the empirical observation of this fact seems to be undeniable. Likewise, if the cat is not on the mat, this can be stated and relied upon. We should note that for Whitehead, even when physical feelings repeat themselves there is still an element of minimal novelty, if only for instance, a change in the entity's temporal coordinates. So, though the ground of particular observation may seem as stable as it can get, there is always a process of concrescence that renders the entity vulnerable to change (PR, 17). With this caveat, Whitehead avoids making dogmatic statements of reality while still having his metaphysical system start from a sound and dependable empirical base (PR, 8). Nevertheless, the point stands that empirical groundwork is stable enough that it allows us to elucidate a certain set of heterogeneous qualities or consistently observed patterns to the extent that the (speculative) thought provoked by them is justified. The empirical facet of experience is so routinely dependable that it has enough weight to make an impression and to provoke response from individual entities. It is due to this solid quality of immediate experience that speculative thought finds it an apt platform from which to unfold outwards: speculation always arises out of the stable, empirical conditions delimited by the world in which we live.

It is possible to say that Whitehead's speculative method is empiricist in that it depends on and emerges from that which is directly experienced. However, Whitehead views speculative philosophy as a fruitful integration of empirical observations with imaginative constructions. For instance, with respect to William James' radical

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empiricist assertion that '[t]o be radical, empiricism must not admit in its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced', Whitehead would agree that philosophy is necessarily inspired by and embedded in the world from which it emerges.¹⁰⁹ In particular, speculative thought cannot be isolated or purified of its concrete origins. In order to be coherent, that is, in order to withstand the charge that speculation is nothing but fanciful imaginings unrelated to reality, speculative thought cannot exist in pure abstraction:

It is the ideal of speculative philosophy that its fundamental notions shall not seem capable of abstraction from each other. In other words, it is presupposed that no entity can be conceived in complete abstraction from the system of the universe, and that it is the business of speculative philosophy to exhibit this truth (PR, 3).

Yet on the other hand, the trajectory of the speculative method is such that it also imaginatively veers away from the directly experienced. 'When the method of difference [i.e., direct empirical observation] fails, factors which are constantly present may yet be observed under the influence of imaginative thought. Such thought supplies the difference which direct observation lacks' (PR, 5). For Whitehead, who is an empiricist but not a radical one, not only are objects of the imagination are no less relevant than those directly observed in the pursuit of knowledge, but they are actually necessary elements of that pursuit. In other words, the empirical world is not merely a companion to the imaginative flights of speculation but its natural partner. The question 'what is' prescribes the conditions from which we can speculate on 'what could be'. Following Whitehead, the speculative method which I shall mobilise in this thesis is both constrained by its situatedness in the conditions from which it arises and free to examine possibilities beyond those conditions in imaginative thought. The amalgamation of the two may seem like a contradiction, especially to radical empiricists who claim that nothing, certainly no object of the imagination, can be warranted into consideration if it is not directly observed and experienced. Yet in Whitehead's system, the two form a functional unity whereby the former provides the conditions from which the latter can take off.

¹⁰⁹ William James, *Essays in Radical Empiricism* (Mineola, New York: Dover Publications, 2003) pp. 127-8.

An analogy with a technical term used in the natural sciences will help illuminate things here. In physics, 'potential energy' is unrealised energy that an object has stored up in itself. A ball perched at the top of a steep hill or a runner poised at the starting point of a race, for instance, has potential energy which is as yet untransformed into kinetic energy. A similar process occurs in speculation. The concrete world around us is glimmering full of possible outcomes, as yet unrealised but ripe for the examination by speculation. By focusing on the workings of things and situations directly observed, the speculative method focuses on the minute qualities of concrete experience. Only in this way can the concrete be scrutinised by an imagination which creatively asks 'what if?' and in doing so insists on 'giving rise to possibles'.¹¹⁰ It is worth remembering that the word 'speculator' derives from the Indo-European root 'spek-', meaning to look, observe and carefully consider. Therefore when one speculates one is watching one's surroundings closely, staying particularly attentive to the possibilities that may arise out of a given situation and contemplating their consequences.¹¹¹ In symbiotic fashion, the final phase of such grounded speculation is that having elucidated creative possibilities and potential upshots of a given situation, it is able to impart new insights or 'renewed observation' related to the empirical ground from which it took off in the first place.

What is at stake here is the role of speculation in the narrative of progress from observed and consistent reality to renewed observation and creative novelty. It is all the more necessary to highlight the symbiotic nature of the relationship between empirical grounds and speculation to clarify that a commitment to speculative philosophy is not related to the disparaging sense of speculation as indulgence in abstract thinking or idle conjecture, which is entirely unfounded in the landscape of experience, but an active

¹¹⁰ Isabelle Stengers and Didier Debaise, 'The Insistence of Possibles: Towards a Speculative Pragmatism', *Parse Journal*, 7(2017), 12–19 (p. 14).

¹¹¹Whitehead is often referred to as belonging to the school of American Pragmatism precisely because of this strong belief in applicability in the concrete world. In this respect (and in many important others, most notably the affiliation with pluralism) his philosophy resembles that of pragmatist William James. For James, as for Whitehead, we cannot live as if objects were shadows of ideal Platonic forms, or conversely, as if the world is populated by either secondary qualities to the scientific materialist truths or by phenomena projected by the corridors of our social/ cultural situatedness. The assumption that the world is complex is the import of pragmatism on new realism; the world in essence is neither the world with spectators nor the world without them. This project follows these assumptions in that it is neither interested in a metaphysics of a world without spectators, nor in constructivism which frames everything as based on our fantasies. The world really is absolutely everything and philosophy should follow suit. William James, *Writings, 1902-1910* (New York, Library of America, 1987) p. 495.

tool facilitating an upward spiral of increasing complexity.¹¹² Whereas in popular usage speculation is 'wild' and unruly, often dealing with unfounded claims which are unrelated to reality, nothing could be further from the empirically constrained speculation advanced here. Indeed, the exact reverse is true: engaging in speculation requires that the speculator is particularly sensitive to the workings of a surrounding situation such that he is perfectly positioned to extract and extrapolate from it.

To summarise: Having spelled out the role of the 'direct ground of observation' in the speculative method, it is already possible to glean a number of important characteristics of speculation which we can take forward into our next section. Speculative thought directly depends on the empirical surroundings which orient it and spring it into action. As such, speculation is always embedded – one cannot speculate out of nowhere. This collaboration between the stable ground of direct observation and imaginative speculation is crucial to solidify speculation and to ensure that it can be pragmatically defended against charges of idle opining or fanciful thought.

The Thin Air of Imagination

On the reading I am pursuing here, imagination is understood as the cognitive power to conceive of scenarios which contrast with observable givens. Whitehead conceives of the imagination as a form of 'negative perception', that is to say, in the imagination we perceive what is *not* the case. For instance, one can imagine a stone with a yellow tinge as grey. The grey stone is a result of the act of imagining and presents us with 'conceptual novelty', an alternative to what is actually datively exemplified in our perception (PR, 161). But what is the point in imagining a stone that is not grey as grey? The answer to this question is contained precisely in the comparative contrast between reality and illustrative potential alternatives. Consider the following examples: dreams, the genre of science-fiction, a counterfactual thought experiment which posits an alternative WW2 outcome and utopian and dystopian fiction. Like the grey stone, all of these imaginative endeavours, though very broad in scope, have the same thing in common: they postulate imaginatively differentiated realities to that which is already

¹¹² Mikhail Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper Collins, 1990).

empirically perceived. The power of the speculative flight lies in the capacity for highlighting differences between 'what is' and 'what could be' and letting audacious and innovative conceptual possibilities play out to their natural conclusions. The qualitative shift from the 'finitude of actual entities' (the boundaries set by empirical order) to the 'infinitude of possibilities' found in the full sweep of imagination makes it so that we can entertain theoretical possibilities. What if the Allies had not secured a victory seventy years ago? What would a society in the grips of a totalitarian political regime forty years in the future look like? In the 'thin air' of imagination these questions become serious matters of consideration and 'an infinite variety of specific instances which rest unrealized in the womb of nature' can now become thinkable, perhaps even actionable (PR, 26). There is something further to be said about the contrasting densities of the solid 'ground' of the first phase and the 'thin air' of the second. On one hand, the faculty of the imagination, metaphorised by the element of air, encompasses wide-ranging expanses and is able to produce novel and complex ideas without the restraints that 'the brain within its groove' puts on us.¹¹³ On the other hand, however, something that arises out of 'thin air' is something that appears suddenly and out of nowhere.¹¹⁴ The air lacks the earthy substance that the 'ground' has.

Yet thin air as it is conceived here has little to do with eschewing empirical constraints. On the contrary, empirical constraints remain crucial to the success of the speculative method. A speculator does not create things *ex nihilo* but pieces together its imaginings using the gathering-faculty of empirical observation from the first phase. In point of fact, Whitehead's consideration of such constraints leads him to the quite cautious claim that 'imagination is never very free' (PR, 201). Though lived experience is always pervasive in the entire process of speculation, we ought to remember that as Stengers and Debaise put it, the flight stage of speculation 'aims at maximising friction with experience' in

¹¹³ Emily Dickinson, 'The Brain, within its Groove'

<http://www.writing.upenn.edu/~afilreis/88v/ed556.html> [accessed 6 February 2020]. Whitehead's comment in *Science and the Modern World* that 'professionalised knowledge [...] produces minds in a groove' could easily be a reference to Dickinson's poem considering his sustained poetic references in that book and the concordant message regarding the lack of imagination and 'celibacy of the intellect' in both of their works (SMW, 197).

¹¹⁴ The expression 'thin air' appears to have been coined by Shakespeare in *The Tempest* with metafictional reference to the insubstantial and 'baseless fabric' of play and its characters: 'These our actors, / As I foretold you, were all Spirits and / Are melted into Ayre, into thin Ayre'. William Shakespeare, *The Tempest* < https://www.sacred-texts.com/sks/ff/tem.htm> IV. 1.179-182 [accessed 16 September 2019].

order to ponder possible alternatives. Their reference is to Kant's metaphor of the light dove in flight, where the light dove cleaving in free flight in thin air, might imagine that her movements would be far more free and rapid in airless space. Kant conveys the error of such an assumption:

It was thus that Plato, left the world of the senses, a setting too narrow limits to the understanding, and ventured out beyond it on the wings of the ideas, in the empty space of the pure understanding. He did not observe that with all his efforts he made no advance – meeting no resistance that might, as it were, serve as a support upon which he could take a stand, to which he could apply his powers call mom and so set his understanding in motion.¹¹⁵

Kant's observation that in the absence of air resistance, nor even the dove (the moral symbol of absoluteness) could fly. This is Kant's primary reason for rejecting speculative imaginative thinking - he believes that speculation cannot be the basis for judgement as anything which transcends perceptual givens ought to be taken less seriously than thinking which is firmly rooted in a rational one-to-one correspondence with experience. The charge levelled is that speculative thought is untested, fanciful 'pie-in-the-sky' thinking, just as the dove imagines that she might fly better without the friction in the air, is left over from Immanuel Kant's accusation that speculation leaves 'the world of the senses since this world opposes too many various obstacles and ventured out beyond, on the wings of ideas, in the vacuum of pure ideas.^{'116} At its best, speculation is about stretching towards the new: new possibilities, new aspects of importance about a given situation, new limits, new directions. Yet it is clear that for all this newness speculation aims at 'maximising friction with experience', that is to say it never starts from a blank slate.¹¹⁷ It must understand and address the 'ground of particular observation' and in doing so it remains ever situated in reality.¹¹⁸ Yet 'fullblown speculation', to borrow a phrase form Michael Halewood, does not understand embeddedness as urgency of cohesion and application as scientific speculation does.¹¹⁹

¹¹⁵ Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Palgrave Macmillan, 2007) p. 47.

¹¹⁶ Ibid.

¹¹⁷ Stengers and Debaise, 'The Insistence of Possibles', p. 16.

¹¹⁸ Here again arises the question of the relationship between of the old and the known to the current to the new and the to-come.

¹¹⁹ Michael Halewood, 'Situated Speculation as a Constraint on Thought' in *Speculative Research: The Lure of Possible Futures*, eds. Alex Wilkie, Martin Savransky and Marsha Rosengarten (London and New York:

Unlike its scientific counterpart, it is not beholden to empirical discovery and not committed to match imaginative forays to an actual state of affairs. Instead, it focuses its attention on exploring and potentially enacting possible and plural alternatives to what is already given.

Though we shall delve into propositional thinking later on in the thesis, it is worth noting now that particular observed actualities are taken as *lures*. They provoke or bait speculative propositions, in the sense that they instigate the speculator to envision possibilities of differences from what is actual. Speculative responses to the actual entails both a sensitivity to the actual entity's qualities and a creative disposition to what could potentially be different about them. Being attentive to both sensibilities means that the speculative aim is not the discovery of already-there facts (as in the scientific understanding of speculation) for that does not tolerate the gratuitous veering away from the actual facts. Instead, the modus operandi of speculative philosophy as we seek to inherit it from Whitehead asks a series of 'what if' questions, entertains 'a hypothetical future beyond that actual entity' (PR, 188) and presents us with alternative 'tales that might perhaps be told about particular actualities' (PR, 256).

We can further visualise imaginative speculation with relation to particular actualities by referring to Whitehead's guiding metaphor once again. When it is in full swing, speculation is in 'thin air' – still very much relative to the ground it took off from, yet creatively differentiated from it. In Whitehead's words, 'propositions [...] are neither pure potentials, nor pure actualities; they are a manner of potential nexus involving pure potentials and pure actualities' (PR, 188). In other words, propositions that are made from speculative thought are neither cut off from reality nor actually real. The word 'nexus' is thus particularly appropriate given this indeterminate status of speculative propositions. An act of speculation is never stable, neither real nor unreal, neither true nor false.¹²⁰ As such it is perfectly positioned – in thin air – to imagine possible realities and let their logical consequences percolate in the conceptual

Routledge, 2017) pp. 52-64 (p. 62).

¹²⁰ Speculations cannot be true or false since judgements are always grounded upon some observable fact, and though speculation is based on such facts, its distinguishing characteristic is that it purposefully deviates from them. See PR, 256.

sphere.¹²¹ What are the implications of this indeterminate quality of speculative thought? In the massive indeterminate expanse that is thin air, one is able to move not only upwards but also outwards in a myriad of different directions. As Whitehead imagines it, speculative thinking calls on us to take advantage of this capacity for free movement. It requires that the thinker refuses to passively oblige dogmatic and habitual patterns of thinking, or what Whitehead, echoing Dickinson, calls 'thought within grooves' (SMW, 197).

As an example of speculative imagination in thin air, we might look towards the artistic campaign New Unions (2016) which identified the grooves of thought as the state of the union. The installation was conceived with Brexit in the foreground and asked about the 'groove of thought' of political unions – one such observable instance being the union between European countries.¹²² What the political artwork did in this case was encourage wild speculation about other kinds of unions, feminist unions, stateless unions and asymmetric unions among them. Here we find a presentation of what we might call 'speculative *boldness' which of course, always remains 'balanced* by complete humility before logic, and before fact' (PR, 17), in the sense that the campaign creates the space to think about old problems and familiar concepts in creative and unexpected ways, perhaps even in ways that defy common sense. In practice, what the speculative drive engenders in this particular example is a series of 'what if' questions. What it does not do is culminate in any specific ideological manifesto. It does not propose anything or push directives for future action or make any attempt to guarantee an outcome. With respect to the metaphysical system that Whitehead will go on to propose out of this speculative foundation, we might liken the imaginative stage conceptual feeling, noting its difference from propositional feeling in its pure undecidability.¹²³ The campaign, like the flight in thin air, does not invite answers to the questions it asks. It is enough to leave possibilities hanging in the air. In other words, speculative imaginative philosophy does not come about with a teleological warrant for prescriptive worldviews, but instead represents freedom:

¹²¹ This reminds us of Kurt Gödel's incompleteness theorems, which stated that mathematical propositions are undecidable.

¹²² More on the installation here: http://www.jonasstaal.nl/projects/new-unions-installation/. In 2020, the relevance of speculation on political unions remains high as questions about the potential of Scottish Independence persist around Brexit negotiations.

¹²³ This will become clearer in the next sections where the focus on propositional feeling.

a freedom to address concepts, to make concepts, to transform existing concepts by exploring their limits of toleration, so that we may invent new ways of addressing and opening up the real, new types of subjectivity, and new relations between subjects and objects.¹²⁴

Elizabeth Grosz is talking about the way that theory has to be always obsessed with the creation of the new. It seems to be stitched into the job description of 'critique', and especially of specific kinds of critique like feminist theories the prescience of which is tied up in inventing new ways of 'addressing and opening up the real.'¹²⁵ We need that freedom of the imagination to 'keep the doors and windows open'.¹²⁶ The importance of philosophical projects which focus on the primacy of widening the sphere of concern is precisely that in doing so they bring new possibilities into consideration. Philosophy can, after all, exclude nothing' (MT, 2). Perhaps there also lies some source of frustration with the discipline, that it seems to relish this array of possible scenarios but seems slow at committing or deciding. The flight of speculation urgently needs to land again if there is to be any efficacy. But of course, this is not to lessen the integral role of the possible scenarios themselves, which appreciate and speak to the old, and simultaneously show that it could be otherwise, that it is contingent and, most urgently, transformable. The unlimited field of possibility, as Bergson maintains, open the gates of the future (even if they do not push us through).

If we put the possible back into its proper place, evolution becomes something quite different from the realisation of a program: the gates of the future open wide; freedom is offered an unlimited field. The fault of those doctrines, - rare indeed in the history of philosophy, - which have succeeded in leaving room for indetermination and freedom in the world, is to have failed to see what their affirmation implied. When they spoke of indetermination, of freedom, they meant by indetermination a competition between possibles, by freedom a choice between possibles, - as if possibility was not created by freedom itself!¹²⁷

¹²⁴ Elizabeth Grosz, *Becoming Undone: Darwinian Reflections on Life, Politics, and Art* (Durham and London: Duke University Press, 2011) p. 83.

¹²⁵ Ibid.

 $^{^{\}rm 126}$ Isabelle Stengers, 'William James: An Ethics of Thought'

<https://www.radicalphilosophy.com/article/william-james-an-ethics-of-thought > quoted in Ash Amin and Nigel Thrift, *Arts of the Political: New Openings for the Left* (Durham and London: Duke University Press, 2013) p. xii. Donna Haraway, *Staying with the Trouble: Making Kin in the Cthulucene* (Durham and London: Duke University Press, 2016).

¹²⁷ Henri Bergson, The Creative Mind: An Introduction to Metaphysics, trans. Mabelle L. Andison (Minneola,

With this remark, Bergson brings the imperative for closure, limits and responsibility to the forefront. Possibility is created by freedom itself and indeed it is an affirmative force. It is the necessary foundation for creativity. This openness places in speculation a tie to the real. But this is not the tie to the real imagined by Plato, where 'Being was given was given once and for all, complete and perfect, in the immutable system of Ideas'.¹²⁸ Instead it is a socio-political tie in the sense that it brings to bear with it the ways in which the real is malleable. Along with the empirical constraint in the previous stage, and the eruption of possible ways (by definition plural) of thinking or acting in the thin air of imagination, we must also add that speculation can only be envisaged in a form of undermining the present as regards the definition of the future. Imagination endeavours to dwell on difference to 'stay with the trouble' as Haraway proposed to call such an endeavour. Though the impulse may be to detangle the tangled possibles, imagination requires pause and reflection, and 'learning to be truly present [...] as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings.^{'129} The world is always in the making, it is not fixed. Thinking in possibilities sets the stage for creativity novelty, for all kinds of real transformation that we can effect.

Renewed Observation

If speculation stopped at the second stage of imaginative generalisation, we could be forgiven for thinking that speculation is merely a hypothetical exercise which populates and enriches our sense of possibles, but which nevertheless lacks a pragmatic edge. But there is yet the third part of Whitehead's guiding metaphor which indicates that after the phase of imaginative speculation, the aeroplane lands again for 'renewed observation'. This third stage saves speculation from being an inoffensive collection of potential modes of existence and brings its power of transformative reinvention to light.

New York: Dover Publications Inc, 2007) p. 85.

¹²⁸ Ibid. It's all footnotes to Plato folks.

¹²⁹ Haraway, *Staying with the Trouble*, p. 1.

What does it mean to say that a speculative proposition 'lands'? What exactly is entailed by this last stretch of our speculative flight? The first thing that we should note is that in the context of the Whitehead's speculative method, 'landing' is partially – but not exclusively –about the implementation or application of abstract thought into concrete reality. His case for speculation, if we recall his analogy, is that it is a 'true method of discovery' (PR, 5). The image of the plane in mid-air frames imagination as the initial hypothesis-formation stage in the process of finding that the possible may correspond to the real. Becoming, concrescence, seems for him to be bookended by actual entities – by subjects and by data. There are then, real individuals and real effects which follow conceptual pluriverses.

This is the sense in which Whitehead identifies 'free imaginative speculation' in Giordano Bruno's work. (SMW, 1). Bruno was a Neapolitan thinker who was executed in 1600 for his conjecture that the newly opened-up Copernican model could be imaginatively expanded to an infinite vision of the universe. He envisioned the cosmos as consisting of a plurality of inhabited worlds such as ours, each surrounding their respective sun/star. Bruno's speculative innovations follow Whitehead's plane trajectory perfectly. They were controlled by the logical coherence which Copernicus' empirical observations provided, but ultimately it was a 'leap of the imagination' (PR, 15) - or as historian Hilary Gatti describes it, a 'marked bias toward visualization through images and symbols, rather than through experiment or methodical observation' – that produced his speculations.¹³⁰ As we know, Bruno's cosmological claims are now corroborated by the absolute majority of astronomers. His vindication serves as exemplar testament to the productiveness of the free play of imagination involved in speculation. There is more to discovery, and indeed to the world, than proofs and observation of given primary qualities. The discovering prowess of speculation clearly depends heavily on creative imagination which prompts active investigation and stretches the remit of descriptive observation.¹³¹

¹³⁰ Hillary Gatti, *Giordano Bruno and Renaissance Science: Broken Lives and Organizational Power* (Ithaca & London: Cornell University Press, 1999) p. 3.

¹³¹ If a Baconian method of rigid induction was 'consistently pursued', it would lead only to a sophisticated inventory of the furniture of the world and ultimately 'would have left science where it found it' (PR, 5).

But the success of the 'leap of the imagination' (PR, 13) involved in speculation is not only that it serves as a pathway to scientific consensus reached by corroboration of the initial speculative thought. If that were the case, then we should be content with the explanatory function already ascribed to material objects and never ask anything more about them. Just as importantly as discovery triggered by speculation, what is at stake is the high-order ability of speculative thought to provoke and destabilise conventions and open up new modes of thinking. Giordano Bruno's proposition of a radically decentred universe, for instance, is an example of speculative thought not merely because he was proven right "on the other side" as it were. Most of Whitehead's readers interpret him as saying that once a speculative idea comes onto the horizon, the adventure of that idea is just beginning.¹³² For one thing, once a proposition comes into focus in the public sphere, the speculator is no longer the master of his thought. Though a speculative proposition may have been caused by the empirical ground it left from and further proliferates in the speculator's imagination, 'no cause, even God as a cause, has the power to define how it will cause. Nothing has the power to determine how it will matter for others.'133 Speculation creates fresh entanglements and urges its receptors to see 'what it does to thought, what it obliges one to do, what it renders important, and what it makes remain silent.'134

The way that the speculative concept becomes (lands) is thus related to the previous process of becoming in a direct and causal way. But what a possibility becomes is still not a streamlined product but can be expected to be disseminated – anyone can grapple and interpret the new possibilities that speculation makes evident. These multi-directional interpretations constitute the 'becoming' or the actualisation of that idea – 'how an actual entity becomes constitutes what that actual entity is; so that the two descriptions of an actual entity are not independent. Its 'being' is constituted by its 'becoming' (PR, 23). Successful philosophic speculation has a self-generative character,

¹³² Incidentally, *Adventures of Ideas* is the title of Whitehead's next published book (1933) after *Process and Reality* (1929).

 ¹³³ Isabelle Stengers, 'Thinking with Deleuze and Whitehead: A Double Test' in *Deleuze, Whitehead, Bergson: Rhizomatic Connections,* ed. Keith Robinson (New York: Palgrave Macmillan, 2009) pp. 28-44 (p. 40).

¹³⁴ Isabelle Stengers, *Thinking with Whitehead: A Free and Wild Creation of Concepts*, trans. Michael Chase (Cambridge, MA and London: Harvard University Press, 2011) p. 11.

with dispersed effects beyond the speculations of the first speculator. For this reason, it includes in its scope the direct application or prediction of effect in reality as one does with scientific hypotheses but cannot be reduced only to that. The history of thought itself serves as a prime example. In the light of a proposition, one is forced to reevaluate the previously given elements and to revisit old ground with 'renewed observation'. Haraway's landmark essay 'A Cyborg Manifesto', for instance, departs from a world with two established genders, and in its place, she speculates about genderless cyborgs and negates gender as a category for identity.¹³⁵ This kind of speculative thinking, is *symptomatic* in that it provides complex rearticulations of the world. And it is also *productive* in the sense that it acts as an affective tool, it participates in the world by luring further interpretation and creating new avenues of thought within feminist posthumanist theory.¹³⁶ Speculative ideas foist themselves upon whoever engages with them – and then, they the receptors of possibilities, 'will have to raise the pragmatic question par excellence: does the possible whose insistence I sense add or detract from the situation?'¹³⁷ This is a question I leave for the pages below about propositional thinking, where we shall see that if in its previous stage speculation was indeterminate, it is now determined to be productive.

Propositions

So far, we have looked at the speculative philosophy which serves as a method, culminating in 'renewed observation' by means of engaging fully potential alternatives by considering possible implications and consequences. In this chapter I want to examine more fully how this method operates in the most basic form of Whitehead's metaphysical structure by looking at the narrowing-down mechanism from which the expanses of infinite possibility are curated into propositions by 'choosing, adding, subtracting, relating, juxtaposing, tweaking, and recombining.'¹³⁸ My

¹³⁵ See Halewood's thesis as speculative thought as profoundly social. Halewood, 'Situated Speculation As a Constraint on Thought', p. 61.

¹³⁶ Steven Shaviro, *Post Cinematic Affect* (Winchester and Washington: John Hunt Publishing Ltd, 2009) p.
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¹³⁷ Stengers and Debaise, 'The Insistence of Possibles', p. 17.

¹³⁸ Steven Shaviro, *The Universe of Things: On Speculative Realism* (Minneapolis and London: University of Minnesota Press, 2014) p. 39. Shaviro illuminates that for Whitehead, such limitations are the price of becoming. More specifically, becoming is enabled by exclusion and inclusion. 'By this term "aim" is meant the exclusion of the boundless wealth of alternative potentiality, and the inclusion of that definite factor

argument is that the method detailed above for speculative ideas finds itself replicated in the metaphysical integration of the physical and the mental poles. The question that will be guiding us here will be how it is that when physical actualities meet pure possibilities, an avenue opens up for them to conjoin. How is it that 'pure potentials for the specific determination of fact' ingress into actual entitles and become bounded and grounded (PR, 22)? For Whitehead, the meeting-place of the physical and the possible is the *proposition*.

What is a proposition? The most basic meaning of proposition in modern logic is a statement proposing or asserting a claim that is either true or false. In his entry in *The* Oxford Dictionary of Philosophy, Colwyn Williamson points us to medieval logicians who interested themselves with the judgement entailed in the proposition - the specific act of affirming or denying a predicate of a subject. Williamson also notes that some contemporary logicians argue that the proposition itself is an abstract entity – it is not 'concrete in itself' although it does refer to concrete entities.¹³⁹ Not concrete. Not yet. But not pure possibility either. It is much narrower than pure and unmitigated possibility (the eternal object), but it is still fundamentally indeterminate.¹⁴⁰ Neither true nor false, something not yet either, in-between. When a proposition is made, no truth-value is yet arrived to. There is still openness in propositional statements, though it is more directed. We can think of propositions as framing devices, the probability of the possibility. Ready at the action, a proposition asks which, out of all the imaginative conceptions can actually be in reality. In a proposition, pure potential is boiled down to slim potential. Still, it remains potential. There is an anticipation of the future from the present and a calling for satisfaction, for the coin to land one way or the other. The landing represents the last phase of novelty.

Bertram Morris explains Whitehead's process of concrescence as a set with a [beginning, middle, and an *end*]. While he stresses that we should not understand the

of novelty which constitutes the selected way of entertaining those data in that process of unification' (MT, 152).

¹³⁹ Colwyn Williamson, 'Proposition' in *The Oxford Dictionary of Philosophy*, ed. Ted Honderich (Oxford and New York: Oxford University Press, 1995) p. 724.

¹⁴⁰ 'Eternal objects tell no tales of actual occasions.' (PR, xxvi).

beginnings and the ends to be absolute, he also clarifies that propositional feeling corresponds to the end phase.

The end has a more or less determinate status, which Whitehead calls satisfaction, actual entity, concrescent, unity, individuality, etc. But *its essence is determinacy as the real stubborn fact*. For aesthetic purposes, it is wise to distinguish as clearly as possible the process from the end at which it is aimed the achievement resulting in 'satisfaction.' There is some warrant for distinguishing between the process as art, conceived fundamentally as an activity, and the end as beauty, the satisfaction aimed at.¹⁴¹

In this passage, Morris eloquently captures the insistency, the stubborn and almost infuriating nature of a question that demands to be answered. A proposition is determined to be resolved; it is called on by physical reality to achieve satisfaction. And while it is grounded in the empirical reality of physical prehensions, it also draws on the abstract flight of conceptual possibility and is looking for fresh solid ground on which to finally land. The end-satisfaction comes after the beginning phase of status quo, and after the middle phase of imagining what-could-be. Once the proposition is resolved some change, big or small, has occurred. 'Its essence is determinacy as the real stubborn fact' – a proposition is stubborn for determinacy, that is to say, it cannot go by unresolved. ¹⁴² One way or another, its unyielding nature demands landing, resolution, satisfaction and sometimes, novel change. A proposition is poised towards resolution, yet it is unresolved. It is pointed towards the end, but it is not the end itself. It is still in the process of resolution. 'Apart from this background, the separate entities which go to form the proposition, and the proposition as a whole, are *without determinate character*' (PR, 11).

The propositional part of the process is fascinating to study even though the endsatisfaction that follows is more dramatic. Sometimes the end result is so intense that it looms over and overshadows the process by which it occurred. If a storm destroyed my house (of cards), the meteorological process by which the destruction came to be might not be as relevant to me as what is tangible to me in reality, which is that I need to

¹⁴¹ Bertram Morris, 'The Art-process and the Aesthetic Fact in Whitehead's Philosophy' in *The Philosophy of Alfred North Whitehead*, ed. Paul Arthur Schilpp (Evanston and Chicago: Northwestern University Press, 1941) pp. 461-486 (p. 465).

gather what things I can and get out of here. Process is fascinating to study yes, but 'the "satisfaction" of the completed subject' can and will sometimes overshadow the indefinite number of ways in which it can be analysed. (PR, 19). The end-product can make the process by which it was created vaguer. There is a darker side to this as well: an end-product like a t-shirt made in Bangladesh does not actively pronounce its process. Not knowing where things came from makes things seem inexplicable. Tim Marshall's *Prisoners of Geography* clarifies how the choices of world leaders are shaped by geography, whereas Anne Leonard's *The Story of Stuff* connects the lifecycle of material goods, from extraction to disposal to environmental and societal concerns.¹⁴³ The final stage of resolution always comes at the cost of a process, no matter how much that process is ultimately obscured in our awareness. How things came to be the way they are is the proto-metaphysical question, and perhaps we ought to ask it of our end-products more often.

The end is sharper and clearer in our mind than the process by which it was engendered. But by taking care to distinguish between the process and its 'satisfaction', we can start to point to some crumbs of an ethos of relationality. All entities in the world are in the throes of some process. In every entity's story there are lifecycles, beginnings, middles, ends and variations of intensity therein. There are propositions at every juncture, things could always be otherwise. Whether by any human's standards this would be better or worse is a different line of inquiry, here the point of emphasis is that tracking the process by which things become the way they become is an exercise that develops the relational muscle. It is likelier that someone sympathetically relates to things when one has a picture of its process up till that point. A good origin story can make despicable villains redeemable because it exposes them as also creatively becoming. A lesson in national politics can make inexplicable social sores feel intimately understood. And perhaps this is one way to get closer to a kind of empathy where one can answer, 'what does it *feel like* to be a bat'. William Connolly calls becoming attuned to a process that is not one's own 'critical responsiveness.' I want to keep this notion in mind as a seedling of what a cultivated disposition of presumptive generosity towards difference. The realisation that others are also creatively becoming may provoke a

¹⁴³ Tim Marshall, *Prisoners of Geography: Our World Explained in 12 Simple Maps* (London: Elliott & Thompson, 2019); Anne Leonard, *The Story of Stuff* (London: Constable & Robinson Ltd, 2010).

receptive generosity in our stance towards them, 'that is, a disposition that neither automatically scripts the emergence or becoming of the other as alien and hostile, nor flees from an encounter with it'.¹⁴⁴

Narrowing It Down

So far, we have seen that the proposition is undetermined, there is no truth-value in a proposition yet. The propositional feeling is thus the process of determination or *valuation* which leads to the final satisfaction. When a subject feels a proposition, it is feeling the spectrum of the 'eternal objects' possibilities in stark contrast to the physical, actual facts. There is a pointedness to this endeavour, a directedness in which the undetermined fades as it blends into a logical conclusion. The role of propositional feeling is to evaluate potentialities, one or the other, to either rule them out or follow them up. Once this process of valuation has been completed, the propositional feeling integrates with the occasion's original physical prehensions and the concrescence may terminate. But what exactly constitutes this process of valuation? The easiest way to explain is to say that while eternal objects - and, to a lesser extent, propositions - are indeterminate, propositional feeling closes the gap until we are at ingression. Pure potential is as pure potential does. I recall a scientific-type friend who asked me 'What use is philosophy if it only hypothesises and never says anything *real*?' What I take this kind of comment to mean in the context of this discussion is that amongst imaginative speculative engagements which deal with infinite potential and eternal objects (real but not actual because as yet unmerged with the physical pole) there is a danger of remaining suspended in mid-air and neglecting the closure of the prehensive process. This avoidance, perhaps especially on the part of those who are enchanted by infinite undecidable possibility, might be on account of the tension that is inevitably felt between potentiality and actuality. Yet Whitehead's system of thought, despite prioritising continuous processes, shows how concrescences, no matter how basic on the ontological scheme, insist on some narrower form of realisation and concretisation into experience. We can glean the same concern with passing into actuality in the

¹⁴⁴ Stephen K. White, 'Uncertain Constellations: Dignity, Equality, Respect And...?' in *The New Pluralism: William Connolly and the Contemporary Global Conditions,* eds. David Campbell and Morton Schoolman (Durham and London: Duke University Press, 2008) pp. 143-166 (p. 159).

'Mary's room' thought experiment. There, Mary is in her black and white room, never having seen red but also having considered the manifold possibilities of red in an abstract way. Mary has to leave the room one day and when that happens, she will experience the colour red.¹⁴⁵ But there is only an experiential change to speak of if she indeed leaves the room and goes out into the concrete world.¹⁴⁶ Potential and indeterminacy are all very well, crucial even, but it is the exit from that room that constitutes the ingression of the colour red in Mary's experience. 'Intensity is the reward of narrowness' (PR, 112). Ultimately, it's 'adventuring amid physical experiences in this actual world' that matters, mattering here in its verb formulation 'to matter,' to create an event which may be a physical object of consideration (PR, 256). Propositional feeling does all this by the *modus operandi* (the subjective form) of valuation, which is the process by which the gap between pure potentials and physical actualities decreases until there is a value – an ingression in the physical sphere. To be the most specific I can be, the action of feeling a proposition is the action of valuing, of assigning value, of weighing up the options, of appraising and, finally and most crucially, of acting in the actual world accordingly.



Narrowing down propositional feeling

It will be remembered that conceptual feelings also feel the objects of pure potential through *valuation*. It makes sense that valuation would be the modus operandi (the

¹⁴⁵ Frank Jackson, 'What Mary Didn't Know', *Journal of Philosophy*, 83.5 (1982) 127-136.

¹⁴⁶ In the same way that for the pragmatist William James, philosophy is a perspective from *within* the 'tangled, muddy, painful and perplexed' world, rather than simply a perspective *about* the world. William James, *Pragmatism* (Indianapolis: Hackett Publishing, [1907] 1981) p. 14.

subjective form) of both conceptual feeling and propositional feeling since both deal with indeterminacy. Whitehead takes detailed care to sketch the correlative nature of conceptual and propositional feelings. Conceptual objects are pure, indeterminant potentialities, abstracting from determinate actual entities. Their role is to instil in any actual entity the widest possible selection that may be relevant for that entity's creative advance in the world. The proposition's consequent role is to narrow down the abstract eternal objects and then to lure propositional feeling, which is determinant. The vast potentialities presented by eternal objects do not feature in the final actual product. Only determinate propositions, as felt by propositional feeling, are actualised in the world. Propositional feeling thus proceeds by valuation, specifically the valuation of the status quo as juxtaposed against the pure potentiality of eternal objects. Some propositional feelings negate the value of the contrast and reject novelty (negative prehension). Others affirm the value of the contrast and embrace novelty; thus, some change occurs (positive prehension). Either way, when the propositional feeling reaches its climax, the possibilities are encompassed into a unity, and the process of prehension is completed (PR, 258).

An example can further illustrate how the physical and mental pole integrate in a proposition, and how propositional feelings are the catalyst for final concrescence and potential novelty. Imagine that there is a *sandstone* (the physical pole) on the seabed. Nearby, mollusc shell *debris* (which represents potential for sandstone's evolution) floats around. The catalyst of the drama is *mineral cement* (the proposition). Aided by underwater currents, the mineral cement works its way into the fissures of the existing sandstone. The mineral cement attracts the debris, *cementing* its affective qualities into the sandstone (positive prehension). This is the 'passing from the objectivity of the data to the subjectivity of the actual entity in question' (PR, 40). In other words, the sandstone receives and absorbs data which comes in from the outside (which itself 'includes its own interconnections') into its own internal subjective constitution (PR, 113). And as much as this positive process creates the subject, so too is negative prehension involved in the concrescence. In the sandstone's case, most of the debris do not get integrated and the exclusions from the prehensive process are as much a part of the concrescence as the integrations. The subject prehends the datum, selectively absorbs some elements and eliminates others in negative prehension). Something will

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always be missing or left out and the status quo largely respected or overturned accordingly.

Before we go on, I must point out that the analogy between mineral cement and propositions is not perfect, because cement-formation happens independently (insofar as that can be possible) from the sandstone.¹⁴⁷ Not so for the proposition, which is synthetic, but its constituent integral parts (conceptual feeling and physical feeling) are generated by the entity in question, in the example case, by the sandstone. But the flaw in the comparison may be fortuitous because it draws our attention to the fact that the proposition does not form independently of the entity, but it is constituted by its physical, empirical foundations. This is important because the proposition shows itself to be (at least partly) derived from physical feeling, unlike conceptual feeling which is independent from physical feeling and only comes to be joined with the actual in propositional feeling. In the case of our example, the proposition flows from the sandstone's immanent genetic process and is not created independently of the sandstone. Geologically speaking, it is not proper to say that the mineral cement is the sandstone's expression of immanent progress since the cement is *not*, in fact, precipitated by the sandstone. But since process onto-geologists are in short supply, I venture to take liberties in the hope that the explanatory gain justifies the improper means.

The example of geological cementation can clarify a couple more aspects of prepositional feeling. There is an emphasis on unification as determinate ending. Things come together and the concrescence is done, and satisfaction is achieved. The immense potential of creative novelty when what was distinct coheres firmly. Cementation is the process whereby a sandstone increases in size, changes in texture and over the course of millennia, becomes the sedimentary bedrock of a small island nation. This *creative synthesis* has once again this kinetic force of movement, things progressing and changing alongside. But there is also the narrowing technique repeated as the many conflate into one. This is precisely the end (in the terminal sense, but also the aim sense) of propositional feeling. Things cohere and come together as a matter of course

¹⁴⁷ The mineral cement is created by precipitating ions and instigates the chemical process of sedimentation.

so that the newly created come to be because of the things that came before. 'For the fundamental fact is the creativity in virtue of which there can be no "many things" which are not subordinated in a concrete unity' (PR, 211). 'Many things' become united in any given entity. There is movement but there are also durations of unity. Sedimentary rocks are a concrete unity because they are the 28-million-year-old result of an accumulation of diverse smaller rocks and various organisms. And on the other end of the spectrum, the ultimate unity is the cosmic unity which includes all the participant creative entities within it.¹⁴⁸ The process of creativity by which things come to be is thus distilled in a pointed aphorism – many become one. The diminutive action is the point here. From the vast swathes of potentiality there is the proposition - "real" potentiality' – which insistently pulls the vague abstraction into focused action (PR, 65).¹⁴⁹

A Tale of Two

In cyclical routine there is process and progress. The world moves forward in progressive micro-increments. Every morning you pour yourself a coffee or go to the same bus stop you make incremental progress towards habit-formation. 'Water, in flowing, hollows out for itself a channel, which grows broader and deeper; and, after having ceased to flow, it resumes, when it flows again, the path traced by itself before.'¹⁵⁰ James' fluid dynamic metaphor is borrowed from an essay on the psychology of habit and applies it to the physical basis of what Whitehead might call the cyclical rhythm of progress and process.¹⁵¹ The fluid metaphor is ubiquitous in descriptions of process –

the advancement of time, the passing of seasons and the progression of skills are all commonly described as happening in cumulative increments, repetitive rehearsing and consequent advancing into novelty. In pedagogy, it is common practice to work within a

¹⁴⁸ I have in mind something like the cosmic city envisaged in Cynic philosophy. See Katja Maria Vogt, *Law, Reason, and the Cosmic City: Political Philosophy in the Early Stoa* (Oxford: Oxford University Press, 2008) p. 72.

¹⁴⁹ 'Real individuals their actions and their material conditions of life' will affect the capacity of the creation of their history. Karl Marx, 'Postface to the Second Edition,' in *Capital*, vol. 1, trans. Ben Fowkes (New York: Random House/ Vintage Books, 1977) p. 102.

¹⁵⁰ William James, *Habit* (New York: Henry Hold and Company, 1890) p. 8.

¹⁵¹ One high-profile non-human example is periodical cicadas which remain in their larval state for thirteen or seventeen years according to their geographical area. It appears that cicadas have evolved sensitivity to cycles of prime number length to minimise intersection with other periodical creatures. Alan Baker, 'Are There Genuine Mathematical Explanations of Physical Phenomena?', *Mind*, 114 (2005), 223-238 <http://dx.doi.org/10.1093/mind/fzi223>.

cycle of practice which produces observed performance, which in turn allows for targeted feedback, which then guides further practice.¹⁵² The discipline of mathematics turns Heraclitus' aphoristic saying, 'All things flow' into 'all things continuously vary by infinitesimal quantities.' Freud uses the push and pull of hydraulics as metaphor to talk about the flow and osmosis of mental pressures like libido in the brain.¹⁵³ Yet in all these varied instantiations, the general principle of cyclical rhythm remains always the same: 'The displacement of the notion of static stuff by the notion of fluent energy' – a.k.a. process – *is* metaphysical foundation (PR, 309). *Process and Reality*? Process IS Reality.

Fluid as it is, Whitehead cannot be clearer that the cyclical flow of energy by increments is *not* random or haphazard: 'such energy has its structure of action and flow and is inconceivable apart from such structure' (PR, 309). The specific structure that Whitehead champions is one he inherits from proto-process philosopher Georg W. F. Hegel: the triadic structure of *Thesis – Antithesis – Synthesis*.¹⁵⁴ In the section that follows we will review the machination of this basic scheme and its employment in Whitehead's own dialectic triad: *Physical feeling – Conceptual feeling – Propositional feeling.* I proceed with the caveat that time and space are woefully against what would ideally be sharp and original synoptic scholarship on Hegel's influence on Whitehead. However, George R. Lucas's edited collection of essays *Hegel and Whitehead: Contemporary Perspectives on Systematic Philosophy* is an invaluable resource to those interested in the subject and was infallibly my reference point as I wrote the next few paragraphs.

 ¹⁵² Susan A. Ambrose, Michael W. Bridges, Michele DiPietro et. al., *How Learning Works: Seven Research-Based Principles for Smart Teaching* (San Francisco: John Wiley & Sons, Inc: 2010) pp. 126-127.
 ¹⁵³ Robert C. Solomon, *The Passions: Emotions and the Meaning of Life* (Indianapolis, Indiana: Hackett Publishing Company Inc., 1993) p. 86.

¹⁵⁴ The triad Thesis, Antithesis and Synthesis is often used to explain Hegel's dialectical method, but these are actually Fichte's concepts and Hegel never used these terms to characterise his position, preferring the largely corresponding Concrete, Abstract and Absolute. It was Marx who used this jargon, and only once for the purpose of ridicule. Yet it did catch on and many who are sympathetic to dialectical thinking, including Whitehead, have since made this mistake (see epigraph). Still, Whitehead's dialectical metaphysics based on progressive change is not undermined by this terminological blunder, and indeed, Whitehead himself often changes the names of the dialectic stages to make them more happily suggestive to the topic at hand.

When I think of Hegel, the first word that comes to mind is *dialectics*. This word has (unfortunate) acoustic similarity with dualism which resulted in much confusion in my undergraduate years and beyond. But it turns out that the half-rhyme is in fact indicative of a common etymological root: *dia*- and *dua*- are both Proto-Indo-European roots meaning 'two'. Dialectic comes from Greek dialektike (techne) and means 'the art of philosophical discussion or discourse'. The connection to 'two' comes from the notion of turn-taking in said discussion or discourse. Discussion/dialectic happens as a sort of game of ping-pong, going from one to the other, *dia*-, across, between two. Dialectic refers to a 'method,' then. One could say Plato's dialogues are dialectic (and indeed, looking at 'dialogue' and 'dialectic' side by side one suspects their etymologies are related also) in the sense that in the *Symposium*, participants in the dialogue like Socrates and Alcibiades often stand on opposing sides to each other as if they were representative archetypes of their views. In this sense, even the Disney's 1942 animated short 'Donald's Decision' was dialectic. Donald is visited by an angelic and a demonic version of himself as he wrestles with his conscience about doing the right thing and buying war bonds in WW2. Good and Evil battle it out. Donald Duck buys the war bonds.¹⁵⁵ That short would be anachronistic now for more than one reason, one of which being the turn away from blatant war ads in popular children's content and another being the less blatant alignment (at least in public) between 'the good' and national imperialism.¹⁵⁶ Yet the devil and the angel remain known for their archetypal dialectic roles. All this to say that while we are talking about dialectical representatives of either pole, whether they are like the characters in a dialogue or animated representations of Good and Evil, what the polarities stand for is liable to evolution over the coloured panes of history.

Back to Hegel's dialectic. Hegel's relationship to the dialectic refers to his preferred method of philosophising: 'the process of thought by which apparent contradictions are seen to be part of a higher truth.'¹⁵⁷ Contradictions; the dualist element resurfaces. The

¹⁵⁵ 'Donald's Decision (1941)', YouTube, 26 Mar 2014

<a>https://www.youtube.com/watch?v=9gwaON1hJd4> [accessed 14 October 2020].

¹⁵⁶ It might be interesting to consider the same thwarted angel / demon dynamic in Terry Pratchett and Neil Gaiman's *Good Omens* (TV series) where the dynamic is no longer so archetypal and the contrast only stark to an extent.

 $^{^{157}}$ 'Dialectics', The Oxford English Dictionary, Second Edition, 2009 <

 $https://www.oed.com/view/Entry/51883?rskey=z2mrax&result=1&isAdvanced=false#eid>[accessed]{accessed}{acc$

issue with conflicting ideas is that they defy propositional logic, specifically, the Law of Non-Contradiction which states that 'nothing can both be and not be at the same time'. To Be or Not to Be. These two have such distinctly determinate identities that it is literally not possible 'to be *and* not to be' at the same time. Shakespeare chose his conjunctions carefully. In the world of logic, this translates to: If $(p \land \neg p)$ is impossible then its inverse $\neg (p \land \neg p)$ must always hold true. The Law of Non-Contradiction, as the principle came to be known in shorthand, echoes in philosophical history. This is Plato's formulation of the Law in *The Republic*:

Clearly one and the same thing cannot act or be affected in opposite ways at the same time in the same part of it and in relation to the same object; so if we find these contradictions, we shall know we are dealing with more than one faculty.¹⁵⁸

Hegel then, is fighting a culturally/philosophically uphill battle when he proposes that things *are*- and simultaneously *are-not*. Whatever the thing, the object, the concept is, it is a unity of opposites, always a combination of 'what it is' and 'what it is not'. The contradiction of being and not-being is not resolved in the unified thing, but rather synthesised (or sublated) in a kind of harmonious balance of the internal contradiction. Two dramatically opposed ideas become one, but, crucially, they still manage to preserve (*aufheben*) their idiosyncratic features.¹⁵⁹ So, the initial character of each of the initial dialectical phases is not lost but rewritten into a qualitative progressive development. And by tracing back that qualitative progressive development, we can peer into the synthetic nature of things, objects and concepts.

Affirmation and negation are inseparable. Instead of 'to be or not to be', the sum of the matter for Hegel is to be *and* not to be, for to be is not to be, and not to be is to be.¹⁶⁰

¹⁴ October 2020].

¹⁵⁸ Plato, *The Republic*, trans. Desmond Lee, 2nd ed. (Middlesex: Penguin Books ltd, 1974) IV 436b8-c1. ¹⁵⁹ *Aufhebung* is a complex German verb which has the simultaneous meanings of 'to raise something to a higher level', 'to preserve' and 'to negate' (negation in the Hegelian sense of the negated concept prior to sublation).

¹⁶⁰ Mark C. Taylor, *Journeys to Selfhood: Hegel & Kierkegaard* (London: University of California Press, 1980) p. 149.

The analysis of an actual entity into 'prehensions' is that mode of analysis which exhibits the most concrete elements in the nature of actual entities (PR, 19).

The Hegelian point is that there is always not-being in being. If I am here, I am not there; if I have chosen this path, I have automatically forfeited the other paths. Whatever the affirmation is, the negation has made all the difference.¹⁶¹ Whitehead is constantly attracted to this same dialectic structure though he takes liberties to make it fit his needs. For instance, in his lectures on the aims of education he appropriates the same structure for the rhythms of education: from romance, which is contrasted in precision, to the affirmative progress of generalisation.

I think that Hegel was right when he analysed progress into three stages: Thesis, Antithesis, Synthesis; though for the purpose of the application of his idea to educational theory I do not think that the names he gave are very happily suggestive. In relation to intellectual progress I would term them, the stage of romance, the stage of precision and the stage of generalisation (AE 27-28).

A similar structure can be observed in the speculative method which we saw above: from the direct ground of observation, on a different polarity to the divergent possibilities in the imaginative flights, which merge and resolve into renewed observation in actual experience. We might notice that Whitehead's structural 'opposition of the two,' mirrors Hegel's very closely indeed in structure. Hegel's system depends on the function of negation. One dialectic phase negates the other, just as in Whitehead's dialectics the pluri-possible conceptual pole negates the actual physical pole in the sense that could-be stands in contrast to what-is. Hegel's *Logic* applies this to the philosophy of organisms:

[I]t is equally true that they are not undistinguished from each other, that, on the contrary, they are not the same, that they are absolutely distinct, and yet that they are 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 both are distinguished, but by a difference which has equally immediately resolved itself.¹⁶²

¹⁶¹ Robert Frost, 'The Road Not Taken', *Poetry Foundation* <

https://www.poetryfoundation.org/poems/44272/the-road-not-taken >[accessed 14 October 2020]. ¹⁶² Georg Wilhelm Friedrich Hegel, *The Science of Logic*, trans. and ed. George Do Giovanni (New York:

Whitehead is as much at pains as Hegel to emphasise that the one dialectical phase is incorrigibly diverse and irreducible to the other. The physical and the mental poles are the bedrock of existence, but they are so because there are two distinct poles. They have independent origins. Conceptual feeling, the ingressor of pure eternal objects, is timeless and *uncreated*, whereas physical feeling (and indeed, the concrescence itself) is fastened tightly to the actual and is (partially) self-creating. Hegel refers us to his proof that there is a concrete positive (*causa sui*) and an abstract negative (*nihilo*) and the two metaphysically contradict each other with the summary phrase 'abstract negative aspect of the dialectic'. Incidentally, Hegel's account of speculative thought is precisely that it is 'in the grasping of opposites in their unity or of the positive in the negative, that speculative thought consists' - a train of thought Whitehead endorses wholeheartedly.¹⁶³ Hegel and Whitehead agree on this point: there must be an advance beyond this negative aspect. Indeed, Hegel puts it even stronger than that: that there would be no advance is objectionable. He cannot abide 'that reason is incapable of knowing the infinite; a strange result for – since the infinite is the Reasonable – it asserts that reason is incapable of knowing the Reasonable.'¹⁶⁴ This is complex reasoning, which I am summarising and undoubtedly over-simplifying in the following few sentences. Hegel praised Kant for elevating the dialectic (the 'antinomies of reason') to the status of "a necessary function of reason", but criticised Kant's exposition of it which limited human powers of rationality to the *finite* world. On the other hand, Hegel claims that human reason *could* extend even to the knowledge of the *infinite*.¹⁶⁵ Of course, Kant accepts this limitation of the reason, Hegel scoffs, because he does not see a creative novel advance after the phenomenon contradicts the noumenon, but if he did, he would see that it's possible to go a step further.

Hegel's next move is simplicity itself: -1 * -1 = 1. A negative (the concrete/abstract contrast) multiplied by a negative makes a positive. All movement proceeds through the negation of the negation or 'absolute negativity', as Hegel calls it, where the power of

Cambridge University Press, 2010) pp.59-60.

¹⁶³ Ibid.

¹⁶⁴ Ibid., p. 56.

¹⁶⁵ Kierkegaard disagrees and wants to accept the negation. It must have seemed arrogant for him that Hegel claimed that reason can understand the Absolute.
the first negative is turned back upon itself. But it is crucial that we do not confuse the first negation with the second. Indeed, as Stephen Houlgate advises the novice reader of Hegel, 'care must be taken to distinguish between the *first* negation as negation *in general*, and the second negation, the negation of the negation: the latter is concrete, *absolute* negativity, just as the former on the contrary is only *abstract* negativity.'¹⁶⁶ While the contrast between the concrete and the abstract is suspended in the realm of potential (the thin air of imagination, one might say), the contrast of that contrast results in concrete, forward movement – *progress*. Note that the first negation is not cancelled out in the second. Rather its tensions are preserved, and most crucially, transcended (sublated) into a novel, positive and synthetic *unity* – the place where reason meets the absolute.



Hegel's dialectic

Like Hegel, Whitehead insists that there is the potential for novel advance beyond the initial contrast between the physical pole and the mental pole though he does not share Hegel's motivation (which is the intuition that reason could be mobilised to grasp the infinite). Hegel's dialectic structure is fit for its purpose of laying out and sublating opposing logical concepts. But as readers of this thesis will very well know by now, Whitehead would not dream of proposing a cosmology does not include the microcosmos as much as the macro. It is Reality that Whitehead is interested in, which includes, but is certainly not limited to logic. For instance, I don't know whether Hegel

Whitehead's dialectic

¹⁶⁶ Stephen Houlgate, *The Opening of Hegel's Logic: From Being to Infinity* (West Lafayette, Indiana: Purdie University Press, 2006) p. 209.

would extend the dialectical method to processes of novelty engendered by nonconscious habit or instinct.

Let us see the dialectic structure from Whitehead's point of view. As in Hegel's model, there is the integration of physical and conceptual feelings resulting in a unified subjective experience. This is the entity's physical purpose – its urge to realise a particular form of concreteness. Now for Whitehead, it is possible that the subject grasps the eternal objects and yet is disinclined (aversion) to integrate those possibilities with its physical prehensions. In that case, we have a maintenance of physical structure and order and minimal degree of novelty. Thus, the resulting concrescence (the passing of the first negation into the second, in Hegelian terms) maintains its original physical structures. As Thomas E. Hosinski elucidates, 'Consider what the world would be like if we could not depend on the continuing physical structures of our bodies, of the chairs we sit in, of the rocks below our feet, or of the atomic and molecular structures of all physical things.^{'167} Thus, while novelty is an inevitable and stubborn fact, it is entirely possible for there to be minimal degree of novelty in the concrescing occasion, and this accounts for why things appear as if the stay the same. One hydrogen atom is unique in its subjective character, it is indistinguishable from other hydrogen atoms. Even in the stability of a monogamous long-term relationship where one leans towards the option of sameness, there is no stagnant endurance. Confronted with the proposition of infidelity for instance, one evaluates certain divergent possibilities, but (consciously or not) opts to depreciate the value of novelty and appreciate instead the value of renewed re-enactment.

Yet novelty is not always so minimal, for if that were the case, we would never advance beyond the familiar. We know that things pass, and that things come to be, and we must account for this. And here Whitehead continues to follow Hegel's dialectical structure. We have the first contrast of physical feeling against conceptual feeling, and the ensuing negation of that contrast by propositional feeling which sees stark novelty come into the

¹⁶⁷ Thomas E. Hosinski, *Stubborn Fact and Creative Advance: An Introduction to the Metaphysics of Alfred North Whitehead* (Lanham, Maryland: Rowman and Littlefield Publishers, Inc., 1993) p. 88. In *Phenomenology of Spirit*, Hegel uses his dialectic method to talk through different types of consciousnesses as they meet the 'opposing side' of different objects. See Herner Max, *Hegel's Phenomenology of Spirit: A Commentary Based on the Preface and Introduction*, trans. Peter Heath (Chicago and London: University of Chicago Press, 1975) p. 65.

concrete. When this happens, the subject feels the contrast between eternal objects and physical fact and using its subjective form of valuation integrates one of the alternatives with its existing physical prehensions (adversion). This is Whitehead's rendition of Hegel's 'negation of the negation', which consists of a modification of the subject's subjective aim so that the result is a *positive* contrast with the immediate past (positive prehension).¹⁶⁸ Subjects are not just what the past allows them to be, there is always the possibility that the third phase of propositional feeling ingresses into novelty, even if sometimes that means a reaffirmation of the status quo.

In sum, the Hegelian structure is retained in process philosophy but broadened from the Hegelian concern with logic and reason to any entity's subjective grasping of and reaction to possibilities and potentials. It is one of this thesis's overarching ambitions to argue that Whitehead's expansion is not only justified, but it might actually be a fertile source of ethical theory. And of course, it is not only here that Whitehead expands already-existing concepts and structures. We will address Whitehead's tendency to broaden not only inherited dialectic structures, but also long-standing philosophical concepts like 'feeling' and 'mentality' in the next chapter when we discuss a certain discomfort with taking concepts and dialectic methods design for the human and applying them to reality at large.

Valuation

The last task in this section on propositional feeling is to have a closer look at the subjective form of propositional feeling. The subjective form is the 'how' of feeling and that the subjective form of physical feeling is emotion and that the subjective form of both conceptual and propositional feeling is valuation. In this section on propositional feeling, we have reviewed how propositions and propositional feeling narrow down the eternal possibilities presented in the conceptual stage. And we have further noted that the subjective form of these two stages is the same – valuation – since both have to do with gathering and assessing potentials. If prehension was the digestive system, conceptual feelings would be like small intestine, digesting possibilities, taking in the bigger picture. Propositional feelings would be like the large intestine, absorbing and

¹⁶⁸ With respect to human entities, Whitehead connects the modification of the subjective aim to the foundation of our experience of responsibility which governs the tone of our actions. PR, 47.

compacting abstract general possibilities into sharpened relevance. One remembers that digestion is after all, a process also with a beginning, a middle and an end. The process of propositional valuation refers to *how it is* that the subject feels propositions, that is, how the method by which the subject performs either an aversion or an adversion on the way towards novelty. Conceptual valuation is the mechanism by which general creative purpose is introduced to the prehending subject. At that stage, valuation refers to the method of the entity's feeling of immense potentiality. The subject feels the immense contrast between fact and conceptual suppositions but there is no determinate shape to the ingression yet; it is still all up for grabs and the final concrescence can go either way. Enter the proposition, which goes over the forms of definiteness available and curates the conceptual potentials into a sharper contrast. Still no ingression has actually happened yet. The entity now feels the proposition by propositional valuation. At this stage, the valuation refers to the the contrasts that conceptual feeling had put forward and which are either affirmed or denied. On the basis of that final propositional valuation, the subject finally selects and integrates the propositional potentials into its physical prehensions. So, when we refer to propositional valuation, we refer to the process by which the final decision towards concrete concrescence is made.

One may well ask on what grounds a subject ingresses one way and not the other. A proposition engenders itself out of pure possibility, affirming one possibility and denying the other. Propositional feeling selects one out of the propositional options. On what grounds is this particular selection actually made? What accounts for the particular, synthetic form before us if it could have been 'satisfied' in a myriad of ways? The answer for Whitehead is the subjective aim: 'This subjective form is determined by the subjective aim at further integration, so as to obtain the 'satisfaction' of the completed subject' (PR, 19). To find out what he means by this, we should ask ourselves why it is that the proposition forms to begin with. Whitehead, who is taking the utmost care to lay out a thorough and comprehensive cosmology, splits valuation in two stages. We have the broad valuation of concepts and the narrow valuation of propositions. What makes these two distinct is that they are at the tail end of either side of potential. In conjunction they cover all the 'could have been-s' and all the 'actually is'. Somewhere in that blend however, the general starts to focus itself on the entity, things fall into and

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out of relevance and a proposition is formed which leads to a new, consequent actual occasion.

In the context of our Hegelian discussion, conceptual objects are distinct from physical ones. The primary function of an eternal object is to bare (even if just for a glimpse) multiverses of possibility. The primary function of a proposition is to answer to the subject's specific need. There is an absolute contradiction there. But propositional objects (i.e., the consequent of the propositions) are not at all distinct from the physical. In fact, propositions are reducible to the physical since they are targeted exactly at it. So, there must be something that subjectivizes the eternal form, something that tailors broad possibility to the specific subject and its peculiar form. This something is the subjective aim, which serves as catalyst for narrowing until completion. 'The valuations of conceptual feelings are determined by the mutual adaption of those feelings to be contrasted elements with the subjective aim' (PR, 27). The subjective aim of the entity reviews the proposition with the express purpose of satisfaction in unity.¹⁶⁹ The subjective aim is the bar that propositional valuations must reach to clear concrescencelevel. There is only one position and it is filled by the possibility that most fits the subject's aim. Ultimately, it is '[t]he "subjective aim" which controls the becoming of the subject' (PR, 25).

But this does not seem to quite answer what a subjective aim is. We know what it *does* – which is to narrow conceptual valuation and direct the *rapprochement* between pure possibility and physical feelings. I like to refer to the subjective aim as the popcorn kernel of the entity, the thing that explodes out and determines the contours of the popcorn. Even Whitehead seems quite at a loss for words when defining 'subjective aim' so that, unless I am missing something obvious, there are only scatterings of definitions. At one point in the categorial scheme he writes that the phrase 'real internal constitution', which he had been using interchangeably with 'subjective aim', is to be found in Locke's *Essay Concerning Human Understanding*, whom he (Whitehead) then quotes: 'And thus the real internal (but generally in substances unknown) constitution

¹⁶⁹ Whitehead also calls this end satisfaction in unity, 'harmony' in so far as there is a maximisation of 'depth of satisfaction,' aka intensity of feeling. William J. Garland, 'What is Whitehead's Highest Good?' (Third International Whitehead Conference Claremont University, Claremont, CA., 1998) <http://www.ppquimby.com/alan/hgstgood.htm> [accessed 14 October 2020].

of things whereon their discoverable qualities depend, may be called their essence' (PR 25). Other instances of description include 'this self-functioning is the real internal constitution of an actual entity' (PR 25), or that we ought to take it for granted that any subject has a subjective aim (PR 29). At another point it becomes related to 'the doctrine of the emergent unity of the superjects', or in English, the moment an entity becomes a 'being'. There the real internal constitution of an actual entity is the reason that the status quo is respected, and why amidst all this process we don't wake up one day and find that the sky is yellow (PR, 45). It also the reason why one path is taken instead of another. 'The real internal constitution of an actual entity progressively constitutes a decision conditioning the creativity which transcends that actuality' (PR, 43). So, it appears to me that the best way to translate the meaning of the subjective aim is really by what it does and what it makes possible, rather than what it is, because there is no *is* about it. That's the thing about drive, it itself is nihilo; its entire point is the origination of conceptual feeling, the subjective aim is the fastest Rolodex, whizzing through eternal possibilities, calculating hypotheticals and responsible for the intensity of feeling in the immediate subject and in the *relevant* future (PR 29). There is certainly vectorial movement here. The subjective aim doesn't plan ahead but it's a fast processor and it acts quickly, grabbing every opportunity for intensity. This is why the future at issue is not distant, but immediately relevant. Erin Manning helpfully reminds us that:

On one hand, the subjective aim can be understood as the act of 'aiming', in the event, that orients how it comes to express itself as such (subjective form). "The subjective aim is 'the lure for feeling", the concern, in the event, for how it comes to be. This gets more complicated when Whitehead delves into what he calls 'the category of subjective intensity'. Now, aim operates not only as orientation, but also as force for the (conceptual) future. [...] In Bergsonian terms, it might be aligned to the concept of *sympathy*.¹⁷⁰

The subjective aim is the mechanism for sympathy, its role being to anticipate the future and act (creatively) accordingly. One might also remember that after narrowing down immense possibility, the subjective aim enjoys its *immediate* reward – intensity of feeling in the immediate subject. But it also gets rewards of intensity from the *relevant* future. This is an interesting one, because Whitehead brings up the *modification* of the

¹⁷⁰ Erin Manning, *The Minor Gesture* (Durham; Duke University Press, 2016) p. 247, fn2.

subjective aim often, that is the desire for a specific kind of intensity might change over time. This makes sense; tastes are acquired, habits are made and broken. A body is made of cells. Some die, new ones incorporate the old in their makeup and take their place, the body lives on. But for Whitehead that exact fact 'is the foundation of our experience of responsibility, of approbation or disapprobation, of self-approval and selfreproach, of freedom, of emphasis' (PR, 73). If the subjective aim can be modified, there is potential for novel behaviour to trigger new intensities, but only if there is reflexivity involved (self-approval, self-reproach etc).¹⁷¹ 'Thus, a single occasion is alive when the subjective aim which determines its process of concrescence has introduced a novelty of definiteness not to be found in the inherited data of its primary phase' (PR, 104). To be alive is to have the capacity for novelty, to be autotelic.¹⁷² And with the (great) power of creativity comes foundational responsibility. The point is that reflexivity and novelty are the key ingredients of life and of ethical disposition. Matthew D. Segall sums it up by saying that the subjective aim is 'this feeling of the effective relevance of the present for the future is the basis of morality.'¹⁷³ This is one of the moments that Whitehead draws on Spinoza's philosophy for support.

The attraction of Spinoza's philosophy lies in its modification of Descartes' position into greater coherence. He starts with one substance, *causa sui*, and considers its essential attributes and its individualized modes, i.e., the *'affectiones substantiae*.' The gap in the system is the arbitrary introduction of the 'modes.' And yet, a multiplicity of modes is a fixed requisite, if the scheme is to retain any direct relevance to the many occasions in the experienced world (PR, 70).

Causa sui. Efficient and final cause. Metaphysicians have a long history with the consideration of being as being. Aristotle, Aquinas and Kant count among participants in the philosophical tradition of attempting to stretch the causality of things ever

¹⁷¹ This anticipates the 'intellectual feeling', a term that has been absent in this project, but which involves specificity of attention to the contrasts between propositions and physical fact (PR 261).

¹⁷² A sentiment echoed in Evan Thompson's *Mind in Life* where Thompson refers to the constitutive teleonomy of an autopoietic entity as 'immanent purposiveness'. Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of the Mind* (Cambridge, MA: Harvard University Press, 2010) pp. 144-149.

¹⁷³ Matthew D. Segall, 'Lecture and notes on Part I of Whitehead's *Process and Reality', Footnotes2Plato,* 22 Jul 2019 <https://footnotes2plato.com/2019/07/22/lecture-and-notes-on-part-i-of-whiteheads-process-reality/> [accessed 14 October 2020].

backwards. The slightly alchemical goal was to get to some origin that no longer presupposes anything not even the physical, that is, *ex nihilo*. Nihilo of physical attributes perhaps, but that doesn't disqualify it from (universal) causal agency. Some perversion of the origin of things is basically the metaphysical holy grail. And here is Whitehead's apologia on the subject. He throws his hat in the ring with Spinoza's monism – one substance. But if there is one substance why is there *this* thing instead of *that*? Whitehead knows that this can seem arbitrary, that modes of being can be so divergent that it stretches the imagination to be a monist. But a 'multiplicity of modes is a fixed requisite' because he insists on the attraction of 'one substance' – causa sui, the thing that makes it all happen. Honestly, it really is staggering to think that all this is happening before the conscious mind was even a glint in anyone's eye.

Chapter 3 – Generalisation

By starting with the simplest, non-cognitive cases and moving cumulatively upwards towards more complex cases, Whitehead's philosophy of organism points to a metaphysical continuity between non-human and human instances of experience. It is not the case, then, that as the lapsed Descartes argued, the mind and the body are two separate and distinct substances which can be conceived apart from each other. On the contrary, as we saw in the last chapter, the description of reality that Whitehead advances shows how physical feeling, evident even in the simplest case, gives birth to propositional feeling and therefore, to the conditions where consciousness might (but not necessarily) come into play. In this chapter we shall first delve deeper into the antidualist claim that it is a mistake to bifurcate the mind from the body and I will show that there is a need to account for a vast and capacious generalisation of mentality (which includes the propositional feeling from last chapter) to cases of non-conscious transference from datum to concrescence. I will address the metaphoric, perhaps even anthropomorphic, excesses involved in radical generalisation of mentality and I make the case that generalising has the advantage of highlighting aesthetic resonances and thereby heightening sympathy across entities with varying degrees of mental capacity.

Whitehead maintains that each entity is dipolar, that is, has a physical pole, with which the entity causally experiences other entities, and a mental pole, with which the entity entertains the incoming datum and the novel possibilities it offers. To say that an entity has a mental pole is not to say that it is or can be conscious (PR, 85). More often than not, a rock's mental pole consists only of its physical experience of other entities, making no selection toward one possibility or away from the other. In that case we find the reproduction of the physical feeling, the persistent re-enactment of what has come before. This explains why in the case of a rock, novelty is almost always negligible and why even in a world saturated with process we find plentiful instances of stability. The rocky cliff consistently reperforms its physical feelings, and thus the order of its physical structure is maintained even over millennia.

Yet since each actual entity is dipolar, even the rock has a mental pole as well as a physical pole. The (admittedly, excruciatingly slow) process of sedimentary rock-

formation shows the mental pole of a rock in action. Twenty-four million years ago, two underwater sand particles bound together, creating what a geologist would call sandstone. The concrescing sandstone was then confronted by other particles of sand or the remains of various animals and plants or deposits of residual sediments or all of them at once. These external data represent possibilities for the sandstone's concrescence or becoming. The sandstone exhibits its mental pole insofar as it feels those possibilities and reacts to them in some way. And we know that over tens of millennia, the minuscule sandstone did indeed integrate the novel possibilities offered to it by the cuttlefish bones and skeletal coral reefs, becoming the formidable cliff it is today. Thus, what is meant by saying that each actual entity has a mental pole is that even the most stable entities are not just what the past allows them to be – there is always some chance of contrast with the past, and thereby some creative advance in the cosmos (PR, 47).

In summary, Whitehead shows that the mental and physical poles of each entity are distinguishable without being separate. Physical bodies are always accompanied by some degree of mentality by means of which they experience possibilities. Mental operations (even if non-conscious) are always inexorably intertwined with physical operations. On one hand, mentality cannot exist *ex nihilo*, it always emerges in relation to physical prehensions. On the other hand, there is no physical entity that exists without a mental pole. If that were the case it would never feel diverse abstract potentials in contrast to its specific physical facts, it would never creatively advance and therefore, it would perish in stasis.

Using Words Idiosyncratically

It is clear that Whitehead is using the word mentality in rather an idiosyncratic way. After all, properly speaking, mentality is the attribute of having a mind. The *Oxford Companion to Philosophy* has it thus:

As many use the word, the mind is the *apparatus* or *mechanism* or *inner works* which explains how humans are capable of such things as action, rationality,

emotion, perception and imagination. [...] Others use the word a shorthand way of talking of *those capacities and features which qualify us as distinctively human*.¹

While 'many' and 'others' connect mentality specifically to a feature of human cognition, Whitehead generalises the concept so that consciousness is no longer necessarily related to it. But how can he be justified in such a perversion of a word already laden with much philosophical baggage?

This is not the first occasion where Whitehead connects the inorganic realm with attributes that we typically reserve for higher grade forms of life. Whoever heard of a rock having the freedom to be self-creative? And if the sandstone is mentally feeling the possibilities open to it by its data, then its process of concrescence must involve some choice or decision (PR 47) – qualities which most would be extremely reticent to attribute to a stone. One reason that process philosophy is sometimes seen as less-than-credible is that it generalises many metaphysical notions beyond the scope of their common usage. A process ontologist following Whitehead's schema of reality must convincingly argue that a specific concept, be it feeling, mentality or any of the others, is so elastic and capacious that it can serve physical *and* biological entities. Any of these concepts has to be shown to be so elastic that the default setting is 'infinite' and so capacious that it can withstand all this elasticity. And that is a task unto itself, before the work of playing with these abstracted concepts ever really begins.

In that sense, perhaps Whitehead would have been better off sticking to neologisms to avoid confusion. For instance, he could have easily reserved the term 'prehension' for generalised experience in its most primary stages and retained 'feeling' for experience on the level of higher animals. The fact that he insists on 'feeling' or 'mentality' shows us that this is a tactical choice of diction on his part. Whitehead specifically opted to conflate the fundamental distinction between the primary stages and the human level of experience. We can think of it as doubling-down on his part – the essence of the human does not consist in the fact that they are a thinking thing (mind). Nor are the physical machinations of the unthinking thing (matter) so distinct from those of the thinking human's. Steven Shaviro explains this neatly:

¹ Roger Squires, 'Mentality,' in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995) pp. 552-3. Original emphasis.

Whitehead wants us to expand our idea of what feelings are beyond the human context; but at the same time, he does not want to *completely* separate it from human experience. The feelings of a tree are quite different from the feelings of human beings, but there is nonetheless a certain degree of *affinity* between them.²

The same affinity goes for 'mentality' which, in its most elastic and capacious form, speaks of the primitive feeling of 'possibility of something that is not actual at that moment'.³ When the sandstone is in the vicinity of a cuttlefish bone particle, it mentally feels the possibility of binding with it, when in actuality they are not yet bound. By its more advanced capacities for comparative feeling and conceptual reversion (both faithful to the subjective aim of the concrescing entity) the sandstone is then directed by its subjective aim to weld itself to the alien sediment.⁴ In more complex organisms like humans, mentality appropriately takes on more complex tasks, yet the fundamental structure remains the same: the mental pole synthesises with the physical pole to form a proposition (itself also a possibility of a kind), and it is the feeling of proposition *qua* possibility which sees us to the emergence of consciousness. Shaviro hits the nail on the head by describing the feeling of trees as having some generalised 'affinity' with the feeling of humans – the affinity points to a relational connection, as if one degree of feeling ontologically rhymes with the other even if they do not have exactly the same properties or capacities.

Therefore, when Whitehead generalises the notion of mentality or of feeling, he is not making a reductive move which takes away from the complex capacities of biological or conscious organisms. Whitehead, like the speculative realists of the last decade, takes issue with the bifurcation of nature. Philosophers such as Graham Harman find in *Process and Reality* a schema of reality that dares venture beyond the human sphere, which devotes its attention to the physical prehensions and conceptual feelings that describe a mode of capture-and-appropriation relation between beings, be they

² Steven Shaviro, 'Whitehead on Feelings,' *The Pinocchio Theory*, 08 Jun 2015,

<a>https://www.shaviro.com/Blog/?p=1309> [accessed 18 October 2019].

³ Thomas E. Hosinski, Stubborn Fact and Creative Advance: An Introduction to the Metaphysics of Alfred North Whitehead (Lanham, Maryland: Rowman and Littlefield Publishers, Inc., 1993) p. 94.
⁴ In geology this process is called 'cementation'. For details see Gary Nichols, Sedimentology and

Stratigraphy, ed. 2 (West Sussex: Blackwell Publishing, 2007), pp. 281ff.

conscious or not. Such aesthetic modes of relation, writes Harman echoing Whitehead, belong 'to ontology as a whole, not to the special metaphysics of animal perception.'⁵ And indeed, the most recognisable feature of Whitehead's description of reality is the identification of a common thread that runs through from the most trivial puff of existence to consciousness to God himself.⁶ The fact that all entities prehend or are dipolar is the underlying basis of this flat ontological structure. No one category of entity (ontologically) overdetermines the others by situating itself at the heart of all being. In identifying the lowest common denominators of experience, Whitehead 'make[s] a mess out of categories in the making of kin and kind', as Donna Haraway puts it.⁷

The generalisation of mentality or feeling is not meant to diminish the particular capacities of biological/cognitive entities to their physical/non-cognitive capacities. This is why I contend that Harman's phrasing is off here. He writes: 'for Whitehead [...] humans have no privilege at all; we can speak in the same way of the relation between humans and what they see and that between hailstones and tar.'⁸ Consciousness (and by extension, those entities who have it as a subjective form) has no ontological privilege. By virtue of them both being prehending entities, the inanimate rock and the conscious human are fundamentally the same kind of being, i.e., they have the same manner of being-in-the-world. That much is true. And yet, the bulk of *Process and Reality* is devoted to cumulatively categorising the different attributes of prehension, showing that we can (and perhaps, properly, should) speak about them in different ways. Particular instantiations of prehension take different characters according to the subjective form of the entity doing the prehending. The flat ontology makes sense because the *kind* of activity is the same (prehension) but the specific way in which it is done varies according to whether the actual entity in question is a human, a hailstone or tar. Generalisation, then, as far as process philosophy is concerned, should not be confused with painting with broad brushstrokes. The prehensive idiosyncrasies of each

⁵ Graham Harman, 'On Vicarious Causation,' *Collapse II: Speculative Realism* (Falmouth: Urbanomic, 2012) pp. 171-205 (p. 205).

⁶ See Leo A. Foley, *A Critique of the Philosophy of Being of Alfred North Whitehead in the Light of Thomistic Philosophy: A Dissertation* (Washington, D.C.: Catholic University of America Press, 1946) pp. 111-114.

⁷ Donna Haraway, When Species Meet (Minneapolis: University of Minnesota Press, 2008) p. 19.

⁸ Graham Harman, Prince of Networks: Bruno Latour and Metaphysics (Melbourne, re.press, 2009) p. 124.

entity are more than retained; they are painstakingly detailed across the three hundred odd pages that make up *Process and Reality*.⁹

Let's Generalise

The generalisation of huge concepts like 'mentality' or 'feeling' is not meant to undermine the advanced and complex forms that such concepts can take. It is clear that active consciousness is dramatically different from causal efficacy. Indeed, consciousness and causality are so different they seem like different *kinds* of things, not separated by degrees but by separate stuffs. Mind and Matter. This is a dualism as old as time, perhaps coming from the intuition that between reason, the queen of feeling, and causality, the primal mode of feeling, there must be a significant break. They cannot be the same kind of thing.

Cartesianism is mainly responsible for bringing modern philosophy's attention to dualism by conceptualising consciousness as something reflective and internal, and physicality (or extension, as he would say) as an external, mechanical structure. But before Descartes, Aristotle was also keenly thinking about the same issue, and coming to an altogether different conclusion. He imagined that the soul – what would later be called the mind or consciousness – is *inherently* lodged in matter not separated from it.¹⁰ Aristotle proposed a metaphysics of hylomorphism: literally, the always-present combination of *hylo*-, matter; and *morphe*-, form. The form is what the thing *is*, and that must logically bear a necessary connection with its hyletic attributes. The kind of matter Aristotle studied was body, more precisely, organic body – a body with organs, with functions. Different bodies have different forms, different *hyle* have different souls. The grey matter that we call the mind of a human has a rational soul, the function of a mouth of an animal is related to the form of a sensitive soul (related to sensation) and the function of the roots of a tree are related to the form of a vegetative soul. It is unclear if Aristotle would have gone further and described the functions of a rock (like porosity)

⁹ Whitehead hardly shies away from describing the different prehensive characters: from the primary feelings – physical, conceptual, comparative; to the supplementary ones – propositional and intellectual, and all of their various possible permutations and combinations, syntheses and integrations.

¹⁰ The terminological shift between matter to body might suggest a shifting of the overton window. Body is more suggestive of a kind of matter with higher capacities. Calling matter body elevates it somehow and brings it closer to its dramatic opposite.

as related to the form of a a material soul. What seems clear is that Aristotle's metaphysics presents a soul that is 1) as omni-present as material itself; and 2) takes different forms according to the variety of matter.

If I could define 'new materialism', this would be at the crux of it: the desire to return to a hylomorphic metaphysics, or something like it as found in its various iterations over the years (in Spinoza, Deleuze, Bergson and Whitehead). It is not new at all, as nothing in the world ever is, but it does mark a shift in the tone of description, away from bifurcation and towards basic ontological principles of matter and form. This is why Peter Gratton misses the mark in his review of the 2014 Derrida Today Conference:

The stuff on new materialism–I noted this at several times during the conference–has run its course. Liz Grosz talked about the pain of rocks, Barad discussed the unconscious of protons... we have moved to the stage where there's no method for the use of these terms, except anthropomorphism. [...] it doesn't multiply the differences in the world but in fact says to the world, you're great, you're like *us*.¹¹

But the tendency to speak of the pain of rocks, the unconscious of protons, the thought of forests, the agency of matter etc. does not obfuscate the differences in the world. Quite the opposite, it pronounces them in a far more radical way than dualism ever can because there are more notches on a continuous scale of degrees than there are on a scale of discrete kinds. My suspicion is that Gratton's objection is directly responding to approaches to non-human centred metaphysics such as Harman's, who says that 'humans have no privilege at all' and that '*we can speak in the same way* of the relation between humans and what they see and that between hailstones and tar.'¹² But it is not the case that a flat ontology necessarily leads to the conflation of all difference. When Barad talks about the agency of protons, she points precisely to the vast span of the concept 'agency'. However, by doing so she does not undermine the specific agency as it occurs when coupled with the capacity for reason. Haraway makes the same generalising move with gender, imagining a dismantling of the boundaries that separate

¹¹ I am referring to Peter Gratton, 'Quick Thoughts on Derrida Today Conference 2014,' *Philosophy in a Time of Error*, 3 Jul 2014 https://philosophyinatimeoferror.com/2014/06/03/quick-thoughts-on-derrida-today-conference/ [accessed 14 March 2019].

¹² Harman, *Prince of Networks*, p. 124.

men from women, humans from animals and animals from machines. Generalisation is key for these two thinkers because they are following the type of metaphysics which sees continuity in gradations (read: process) as the stuff of reality.

The Anthropomorphic Charge

Gratton's comment is interesting because it encapsulates a lot of misgivings about process ontology and where it can lead and therefore opens up the chance for clarity and reification. His caution about anthropomorphisation is well-taken also. It is true that there is the risk that anthropomorphic language falsely attributes characteristics that exist only in conscious entities to objects which manifestly do not display those traits.¹³ The express danger, as Gratton hints at, is the attributing of ontological privilege based on the similarities that other entities have with us ('you're great, you're like us'). This position reveals how anthropomorphism can feed into the anthropocentric bias of the speaker. Anthropomorphism gratifies the perhaps unconscious tendency to assume that things are only worthy of attention, or even ethical regard, if they are in some way related to us either by form (does the object in question look like us?) or by function (is the object in question useful to us?). The problem with this kind of insidious bias of course, is that in centralising one's own interests and desires, one often acts at the expense of others who are deemed either too dissimilar to be of note and/or plain irrelevant to one's cause.¹⁴ If this is Gratton's true worry, it is one to be taken very seriously, particularly given that we are currently trying to weed out systematic and structural injustices from our societies, as well as trying to prevent our the irreversible alienation from our earthly home.

The tension in 'you're great, you're like us' comes out of an unspoken 'if/then' structure: IF (and only if) you're like us, THEN you're great.¹⁵ It reveals, almost too easily, the traces of self-centredness and self-assuredness still radiating from the half-forgotten

¹³ Cabot also advises care that we do not adopt a posthuman stance too easily without acknowledging the limitations imposed by the ontology itself. Zayin Cabot, *Ecologies of Participation: Agents, Shamans, Mystics and Diviners* (Lanham, Maryland: Lexington Books, 2018) p. 180.

 ¹⁴ For the self-interested methods of self-preservation of the egoist who chooses his own happiness over the net happiness, see Henry Sidgwick, *The Methods of Ethics*, (London: Palgrave Macmillan, 1962).
 ¹⁵ 'Great' potentially being a stand-in for having the same ontological status, intrinsic value, or worthy of ethical regard as a human would be just by virtue of being human.

geocentric Ptolemaic model of the heavens. Although it has been five centuries since Ptolemy's geocentric cosmology (positing that the universe's stable centre was the Earth) was finally shown to be erroneous, its cultural tentacles still reach us.¹⁶ The new cosmological model threw our sixteenth century ancestors, ready or not, into a universe where the earth and its human occupants were de-centralised, in orbit like any of the other planets. Furthermore, the earth was suddenly revealed to be in motion. As a result, it was no longer strictly speaking exact to use terms like 'sunrise' or 'sunset' since these were now revealed to be more in the register of metaphor or linguistic flourish. Truth be told, the sun does not rise nor set. It is the earth's orbit around the sun and rotation on its own axis that explains that sensory phenomenon. Almost 500 years later, we the inheritors of this dramatic cosmological upset and we are still dealing with its linguistic and psychological ramifications. It does not seem controversial to say that in the twenty-first century, the popular consensus accepts the scientific explanation of 'the interaction between electromagnetic radiation and the suspended molecules that inhabit the atmosphere, linking the red glow [of the sunset] to atmospheric pollution' without much contention.¹⁷ Yet the linguistic traces persist - we still metaphorise with words like sunset and sunrise - indicating that beneath the metaphorical flourishes, the psyche of self-centred geocentricism is still lodged in some popular unconscious. One does not want to reduce nature to one's own terms, and yet the geocentric hangover proves difficult to shake off.

So, what are we to do? One might prod the commonplace use of metaphor further, particularly since it is this linguistic structure and its anthropomorphic excesses that are uncomfortably apparent when we talk about the 'feeling' or the 'mentality' of rocks as we have been doing throughout this chapter. Coincidentally, as a former literature student, one of my earliest entry points into writing this thesis was the work of Alain Robbe-Grillet, a prolific *Nouveau Roman* writer and filmmaker who published a number of theoretical essays concerning the novel as focused on objects. On metaphor, he writes:

¹⁶ In the spirit of metaphorizing, the zeitgeist of the geocentricism/heliocentrism tension could be construed as an invisible gas with persistent radiating half-life. Exposure is not necessarily noticeable but certainly active on some invisible level.

¹⁷ Isabelle Stengers, *Thinking with Whitehead: A Free and Wild Creation of Concepts*, trans. Michael Chase (Cambridge, MA: Harvard University Press, 2011) p. 33.

Metaphor, which is supposed to express only a comparison, without any particular motive, actually introduces a subterranean communication, a movement of sympathy (or of antipathy) which is its true *raison d'etre*. For, as comparison, metaphor is almost always a useless comparison which contributes nothing new to the description. What would the village lose by being merely 'situated' in the valley? The word 'huddled' gives us no complementary information. On the other hand it transports the reader (in the author's wake) into the imagined soul of the village; if I accept the word 'huddled,' I am no longer entirely a spectator; I myself become the village, for the duration of a sentence, and the valley functions as a cavity into which I aspire to disappear.¹⁸

Robbe-Grillet's adjudication on metaphoricity is that is self-indulgent. To speak of the 'majestic mountain' or the 'huddled village' is to capriciously taint the mountain or village with one's own illicit values and sentiments. Metaphor for him is not merely descriptive, it is intrinsically dishonest, for the author presents their own view of the object as if to reassure (themselves? their readers?) that the world conforms to their own designs of it. The price one pays for taking such liberties is the further obfuscation of the object, a price that users of metaphor are happy to pay, writes Robbe-Grillet, for the poem or novel was never about the 'majestic mountain' to begin with, but rather about the author and their cavalier, artificial intrusion upon it. Like Gratton, Robbe-Grillet is worried that the humanist position of anthropomorphism slips too easily into anthropocentricism. Without the word 'majestic', that is, without establishing the object's connection to the human, he doubts that the lover of metaphor would have even noticed the mountain.

There lies the crux of the issue. Robbe-Grillet's question is 'Would the author have noticed the mountain had they not been so inclined to anthropomorphise it?' or 'Would the reader have looked up from their poem or novel and appreciated the mountain as it lies distinct from its metaphorical, humanist context?' Robbe-Grillet correctly diagnoses the inflexibility inherent in anthropocentricism: enthralled by metaphor, the author is either unwilling, or more likely, so highly accustomed to the position of their own particular subjectivity that no attention is spared to all the ways the generalised

¹⁸ Alain Robbe-Grillet, *For a New Novel: Essays on Fiction*, trans. Richard Howard (New York; Grove Press, Inc., 1965) p. 54.

impersonal forces of the mountain infect the author and the rest of the objects it comes into contact with. There is no solidarity with the object here, the writer's analogical vocabulary about the other merely serves to commentate on one's own condition. Such oversights 'are repeated too insistently, too coherently not to reveal an entire metaphysical system', one such being the dualist metaphysical system leftover from Descartes in which the 'what-is-it-like-ness' of the objects that surrounds us is answered by the constructivist powers of the human mind.¹⁹ In such a worldview, the dynamic relational structure of the metaphor only goes one way, from 'in here' to 'out there'. But it does not allow for the reverse dynamic, where the general cosmological and ecological setting is the creative force at play and the human is no longer construed as 'a constitutional pole to be opposed at that of the nonhuman'.²⁰ The reader is also complicit in this inflexibility with regards to the object, for in taking in the particularised metaphor, the generalised forces of the mountain are looked over – it is only the reader's own subjective sensitivities, as compared with those of the author's, that come into view.

Particularisation / Universalisation

It seems then, that in order to be faithful to the generalised object, we need a type of discourse that is able to deal in some *reversibility* between one's own particular experience and the general conditions it fits into. And this reversibility must extend also the other way around, so that the constant flux of abstract conditions is represented in some way in material inorganic objects (e.g., concrete or buildings or an advertisement) and in some other way in flora and fauna, differently again in lizards, panthers and chimps, and differently again in humans. Different, but not all too different. And metaphor may well be up to the task, despite Robbe-Grillet's misgivings.

In his 1940 lecture *in memoriam* of W.B. Yeats, T.S. Eliot pays tribute by endorsing the process by which Yeats created impersonal art out of the privacy of his own subjectivity. Through his metaphors, Yeats could express a generalised, relatable truth out of what was subjectively felt as his own unique values and sentiments.

¹⁹ Ibid.

²⁰ Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1992) p. 137.

There are two forms of impersonality: that which is natural to the mere skilful craftsman, and that which is more and more achieved by the maturing artist [...] The second impersonality is that of the poet who, out of intense and personal experience, is able to express a general truth; retaining all the particularity of his experience, to make of it a general symbol. And the strange thing is that Yeats, having been a great craftsman in the first kind, became a great poet in the second.²¹

In Yeats' poetry, the personal is writ large and the vehicle for this transition is his skill with metaphor. Generalisation does not come from nowhere, Eliot stresses, its germ is found in the subjective state. And this is an important point, not only because it acknowledges that impersonality doesn't appear *ex nihilo* (there is no 'great outdoors') but also because it draws attention to how impersonality without its central links to intense personal experience rings hollow, its universal foundation seeming cheap and undeserved.²² The subjectivity of the poet is to be construed as fundamentally 'in reference to the publicity of things' (PR, 289).²³ The dishonesty, it can be said in response to Robbe-Grillet, is to metaphorise with reference to the wory possibility of publicity or generalisation.

If one stops at one's own subjectivity the cracks of self-absorption and anthropocentrism begin to show. But abstraction is in fact a transitional process: a precise and careful expression of the personal in terms of impersonal conditions. It takes a master poet to feel personally and extract from it a few degrees more generality. The poet who can convey this vital transmission is the superior wielder of metaphor.²⁴ One must assume that most feel some personal poignancy in front of a towering mountain. The anthropomorphising, metaphorizing poet is one who takes pains to take things personally, sharpen the personal, to pierce through to putative idealisation. Eliot and Whitehead have this in common, they both respect the process of abstraction.²⁵

²¹ T. S. Eliot, 'Yeats' in *On Poetry and Poets* (New York: The Noonday Press, 1957) pp. 295-208 (p. 299).

²² Quentin Meillassoux, After Finitude, trans. Ray Brassier (London: Continuum, 2009) p. 7.

²³ For Whitehead, 'an actual entity considered in reference to the publicity of things is a "superject" while "an actual entity considered in reference to the privacy of things is a "subject" (PR, 289).

²⁴ Examples include John Keats' letters, *The Book of Disquiet* by Fernando Pessoa and Walt Whitman's 'Song of Myself'.

²⁵ Provided that it adheres to empirical constraints just so it remains plausible.

Eliot can think of no better praise for Yeats than to say that his use of metaphor reflects his particular experiences (of political turmoil) into generalised images (of a widening gyre). The artist is the person who attunes to some vague impersonality implicit in the personal. When the reader of metaphor comes into contact with the generalisation a hundred, two hundred years later, the generalisation still resonates so that they can still relate to the poet's personal and unique experience.

Similarly, when Whitehead speaks of the mental pole of feeling he is speaking in the impersonalised, general register.²⁶ It is human feeling and mentality – belief, conscious perception, judgement, agency –which are the particularised forms of those ancestral forms of experience. Andrew Goodman provides a beautifully descriptive characterisation of mental feeling at a generalised state with respect to rocks. It is worth reading the passage below with the idea in mind that rock-feeling and our own species' very particular (and rare) mode of feeling are separated by degrees:

[W]hat does a rock in a stream feel? To which forces are its sensitivities tuned: rain, salts, acids, wind, tides, heat? How does the becoming form of the rock instigate new force – shape the wind, give new direction to the current, absorb or dissolve salt solutions? We begin to see the rock-world relation anew: the rock's continued fielding in the world – its continued effect on or transduction of the ecology's forces – and the field's continuous expression through the force of the rock, becomes an ecology of operations.²⁷

In this passage, Goodman points to the dramatic sweep of rain, acids, winds etc involved in the commonplace occurrence of a rock in a stream. He emphasises the agency (another impersonalisation!) of the rock insofar as it is an instigator of new force – this humble stone gives shape to the wind, it directs currents, it dissolves salt solutions. Here we have a non-human, non-organic customisation of the general mode of feeling, another form of particularisation of the universal that stands alongside the other instantiations of it. I cannot see how this form of metaphor is either self-indulgent or anthropocentric.

²⁶ It will be remembered that entities are dipolar and process feeling through the physical and the mental pole.

²⁷ Andrew Goodman, *Gathering Ecologies: Thinking Beyond Interactivity* (London: Open Humanities Press, 2018) p. 84.

The most that can be said of it is that it is anthropomorphic but even that does not work against it. The distinction between 'centric' and 'morphic' in this case is informative because on one hand we have a 'centric' focal point around which every other point revolves and with reference to which others slide in and out of frame. On the other hand, we have a 'morphic' view, which concerns itself more with the processes which bring the particular experiences in touch with their larger contexts. I am inclined to read a revolutionary shift between the chiasmic view of self/other and the vital materialistic view. The latter view accords a vibrance to objects which had always been there, as if lurking in the shadows, felt but unseen. It comes as a realisation of the continuation on the scale of feeling which lurks in the shadows, 'outwardly cool like the tranquil surface of an ocean, but [...] is raging, turbulent beneath the surface'.²⁸ The abstract crystallises in an individual instance and become stuck in it, taking the form of that particular instantiation as if it were a liquid taking the shape of any receptacle it fell into. The general vitality of the stones that built and re-built the places which we are familiar with have been primordially active all this time.²⁹ What we are grasping now is the impersonal, anonymous yet inextinguishable 'consummation of being' in oneself. This kind of anthropomorphising, according to Jane Bennett, signals a movement of sympathy, where a resonant chord is struck between human and non-human:

If a green materialism requires of us a more refined sensitivity to the outsidethat-is-inside-too, then maybe a hit of anthropomorphizing will prove valuable. Maybe it is worth running the risks associated with anthropomorphizing (superstition, the divinization of nature, romanticism) because it, oddly enough, works against anthropocentrism: a chord is struck between person and thing, and I am no longer above or outside a nonhuman environment.³⁰

²⁸ Mahammad Hanief, *The Theory and Practice of Criticism in T.S. Eliot* (Calcutta: Writers Workshop Publication, 1988) p. 91. In *The Thing*, Dylan Trigg pinpoints the unease involved in realising the vitality benath the surfaces, that is, when one becomes aware of one's own particular participation in something more general than oneself. Dylan Trigg, *The Thing: A Phenomenology of Horror* (Winchester: Zero Books, 2014) pp. 48-9.

²⁹ This is the impetus behind the 'Onomatopoeia' creative research project which enquires after human and non-human co-creation in geography, architecture and urban design. See

<a>http://onomatopoeia.com.au/o-a> [accessed 6 January 2020].

³⁰ Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham and London: Duke University Press, 2010) p. 120.

The importance of such a chord is that it shifts the view of what is alien, separate and distinct and sees an experiential kinship between person, other and cosmos. Bennett calls for a receptivity to patterns of interrelation and an ethical task to be open to what Whitehead might have called 'propositions', and what is in this case referred by the tonal analogy of chords and 'morphic resonances' that exist in material relations but are as-yet-unstruck.³¹ When we think with Whitehead about the feeling and mentality of rocks, we call to our attention a myriad of material objects which daily flicker unnoticed across our daily paths. As we shall see in the next chapter, this insight is particularly useful to theorise a way out of a modern disparity or mismatch between humanity and its larger cosmological context. In the pages that follow I shall argue that this deep alienation as being a direct contradiction to the underlying metaphysical evolutionary process that we have detailed in the previous two chapters. On the contrary, when as Bennett puts it, a chord is struck between person and thing, we come into our intuition of our embeddedness and co-existence with these objects and with the aesthetic conditions of feeling we have in common. Amidst such sympathy (pathos, feeling, syn with) with the world are the rumblings of an ethics. Whitehead is not a moral philosopher, but it is not hard to see how process ontology leads to a form of ethics based on extending awareness to how we project our own subjectivity onto more impersonal forms and how we are constantly metabolising the general into our personal subjectivities. In short, deeply felt alienation stands as an obstacle to a process-based ethics which involves attentiveness to the flows of process: what general forces are acting upon us at any given moment, how and why and where we come to become, what we are leaving behind as we slip into new co-creations with the universe.

³¹ In biologist Rupert Sheldrake's account, morphic field theory might serve as a 'biological analogue of magnetic fields, which defines a "region of influence". There might also be analogues with the cosmogenetic vitalism advanced here. Rupert Sheldrake, *Morphic Resonance: The Nature of Formative Causation* (Rochester, Vt: Park Street Press, 2009) p. 202.

Chapter 4 – Feeling with Others

A philosophic outlook is the very foundation of thought and of life. The sort of ideas we attend to, and the sort of ideas which we push into the negligible background, govern our hopes, our fears, our control of behaviour. As we think, we live. This is why the assemblage of philosophic ideas is more than a specialist study. It moulds our type of civilization.

Alfred North Whitehead, Modes of Thought¹

As we begin to realize that we are in a new planetary era, the project of re-situating human engagements with others has taken on a renewed sense of urgency. As we see many of our fellow creatures falling into (permanent) decay and our habitat slowly depleting, it has never been more pressing to think in a cosmopolitan way, as Diogenes of Sinope understood it. In the political context of Ancient Greece, Diogenes radically refused any social identity based on a city-state or nationality. Instead, 'asked where he came from, he answered: 'I am a citizen of the world (*kosmopolitês*)'.² In this conception of citizenry, the independent life of members is acknowledged alongside their membership in the larger social body. A cosmopolitan, then, is a citizen whose philosophical outlook, cultural orientations and ethical systems pledge allegiance not to oneself, nor (heretically, at least to the Ancient Greeks) to one's city-state, but to the cosmos and *all* its inhabitants.

In her essay 'The Cosmopolitical Proposal', Stengers explains that she was unaware of the Kantian renewal of the ancient cosmopolitanism which aimed at a political project 'in which everyone might envisage themselves as members in their own right of the worldwide civil society'.³ Yet she takes pains to distance herself from that vision of cosmopolis where 'citizens of antiquity asserted themselves everywhere on their home ground or to an Earth finally united, in which everyone is a citizen'.⁴ For her, this vision of a 'good common world' is too hasty in its embrace of homogeneity, whereas her

¹ MT, 87.

² Diogenes Laertius, *Lives of the Eminent Philosophers: Diogenes Laertius*, trans. R.D. Hick (Harvard: Harvard University Press, 1925) pp. 3–109.

 ³ Isabelle Stengers, 'The Cosmopolitical Proposal' in *Making Things Public: Atmospheres of Democracy*, eds. Bruno Latour and Peter Weibel (Cambridge: MIT Press, 2005) pp. 994-1003 (p. 995).
 ⁴ Ibid., p. 994.

particular cosmopolitical proposal aims at 'slow[ing] down the construction of this common world, to create a space for hesitation regarding what it means to say "good".'⁵ Stengers' cosmopolitical does not rush towards the universal or the common on the grounds that this setup encourages the political actor to skim over the multiple differences in the name of the good. Instead, the cosmopolitical citizenry she espouses 'refers to the unknown constituted by these multiple, divergent worlds, and to the articulations of which they could eventually be capable'.⁶ Cosmopolitics, then, is about the wide complexity of current and potential shared relations rather than their unification under the wide banner of 'cosmos'.

Yet slowing the construction of the common world runs the risk of 'political irrelevance', as Catherine Keller reportedly puts it.⁷ In the face of climate urgency that demands novel ways of thinking and living in the world, Stengers' conceptual framework of slow and patient forces of productive difference is an ally to the project of cosmopolitan ethical universalism, particularly if the result is radical, revolutionary and advances into much-needed novelty of thinking and acting which benefits the ecological citizenship. This much is evident in Keller's version of emergent, energised cosmopolis, where there is work to be done, work that registers - in time - the multiplicity of divergent worlds, 'down-to-earth work with local communities and piecemeal assemblages, involving translation across a wider-than-comfortable political spectrum.'8 Like Stengers' idea of cosmos, Keller's cosmopolis is concerned with a 'wider-than-comfortable' plurality, a plurality that goes beyond nationhood but is like nationhood in the sense that it concerns individual entities' relational interactions and their membership in a larger social body. But Keller differs from Stengers in one important way. Rather than focusing on slowness, she underlines the urgent need for the unfolding of a planetary cosmopolitics:

⁵ Ibid., p. 995.

⁶ Ibid.

⁷ A.J. Nocek, 'On Symbols, Propositions and Idiocies: Towards a Slow Technoscience' in *Rethinking Whitehead's Symbolism: Thought, Language and Culture*, eds. Roland Faber, Jeffrey A. Bell and Joseph Petek (Edinburgh: Edinburgh University Press, 2017) pp. 186-207 (p.201 fn.15).

⁸ Catherine Keller, 'Of Symbolism: Climate Concreteness, Causal Efficacy and the Whiteheadian Cosmopolis' in *Rethinking Whitehead's Symbolism: Thought, Language and Culture*, eds. Roland Faber, Jeffrey A. Bell and Joseph Patek (Edinburgh: Edinburgh University Press, 2017) pp. 208-226 (p. 221).

This is to say that a viable planetary cosmopolitics will wreck the civilisation – and much of the undeniable good it yields – of the neoliberal capitalism that has since 1980 taken control of the economic globe. And such a cosmopolis cannot come about now – not on time – through democratic meandering. If it does happen it will happen only by way of the impatient fires of the new – a revolt whose way process thought is labouring to prepare, but that can be pulled off only by a generation furious at what we have done to its future.⁹

Just as the transitions from the hunting-gathering life to the agricultural society to the urban society brought new modulations of behaviours and a broadening to the group to which ethical allegiance was owed, so too does the environmental crisis bring with it a necessary and furious call for revision of social habits and more universalised, cosmological extensions of ethical concern.¹⁰

But what can trigger such novelty that there is a revision of social habits, those behaviours that occur unthinkingly across dozens or hundreds or thousands of people, which are so hard to see as they emerge, but which contain a power to change the community? To answer that question, it might help to keep Whitehead's writing on 'society' at the back of our mind, particularly because of the ubiquity of the social in Whitehead's work: 'For Whitehead, it is always societies that we study. Everything is sociology, and human sociology, with all its difficulties, merely exhibits the questions, taken to their full exacerbation'.¹¹ Even 'feeling', arguably Whitehead's most quintessential contribution to metaphysics, is ultimately a principle describing social intercourse amongst entities. In view of the fact that Whitehead subtitled his chief work *Process and Reality: An Essay in Cosmology*, we might agree with Stengers that the overarching claim in that work is that the whole of the cosmos is a social system where 'everything that may be told to exist will be concerned'.¹² The sociality of feeling

⁹ Ibid., p. 215.

¹⁰ Aldo Leopold also notes that ethical systems do not appear in a vacuum but are responses to changed situations which cry out for new community responses. Invariably, it seems to him, these responses involve a generalisation in terms of the entities included in an ethical system – 'The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.' Aldo Leopold, *A Sand County Almanac and Sketches Here and There* (New York: Oxford University Press, 1949) p. 204.

¹¹ Isabelle Stengers, *Thinking with Whitehead: A Free and Wild Creation of Concepts*, trans. Michael Chase (Cambridge, MA: Harvard University Press, 2011) p. 325.

¹² Isabelle Stengers, Whitehead and Science: From Philosophy of nature to speculative cosmology' (2005), <http://www.mcgill.ca/files/hpsc/Whitmontreal.pdf.> [accessed 13 November 2019].

essentially refers to the broad relational participation of the widest possible multiplicity of entities in the same universal community. And the membership of all existing entities in the cosmological society holds if there is a self-sustainable social order that maintains itself even on this large scale.

What is a society? In the briefest terms possible a society is a nexus with a social order (PR, 34). In more detail, a nexus is 'a group of entities which manages to cohere and endure and thus to constitute some kind of unity'.¹³ And how does the unity cling together? By societal order. When we speak of societal order, we are referring to the relations that occur within any 'limited portion of the universe' (PR, 34). For instance, a school, a household, an online forum. Within those very specific and limited pockets of the universe we can observe particular structures of societal relations. Societal order can take the shape of peculiar values relevant for each society. Entities that form part of that society comply with the norms by which that society is ordered (PR, 89). Whitehead takes us through the meaning of social order here:

In reference to any given society the world of actual entities is to be conceived as forming a background in layers of social order, the defining characteristics becoming wider and more general as we widen the background. Of course, the remote actualities of the background have their own specific characteristics of various types of social order. But such specific characteristics have become irrelevant for the society in question by reason of the inhibitions and attenuations introduced by discordance, that is to say, by disorder (PR, 90).

Order here is figured as a kind of constructivist concept. There is no One True Social Order, but particular arrangements and patterns which function as orders are produced or negatively reinforce within social experience, through a variety of processes and practices. This much is argued in various extrinsic relational philosophies of the self where the particular arrangement of what one considers to be one's self arises through multiple dynamic processes of reciprocal relationships.¹⁴ The same logic that many influences become a visible or invisible order of behaviour is evident in the physical

¹³ Michael Halewood, *A.N. Whitehead and Social Theory: Tracing a Culture of Thought* (London & New York: Anthem Press, 2011) p. 85.

¹⁴ John Barresi and Raymond Martin, 'History of Prologue: Western Theories of the Self' in *The Oxford Handbook of the Self*, ed. Shaun Gallagher (Oxford: Oxford University Press, 2011) pp. 33-58 (pp. 44-46).

training and cultural formation. Military training, for instance, relies on the positive reinforcement of individual behaviour to the extent that its members can be relied upon to shoot, think and communicate as if automated or programmed by the ethos of the larger body. It is the individual's encounter with the patterned forces of the organisation at large which enables that particular entity's order to maintain and repetitively assert itself. This example shows that the military organisation creates the individuals which compose it so that the characteristic kind of individual will be intrinsically tied to the order which begot them. Any the 'dominant ideal' or cultural patterning sustains itself by reproducing the conditions of its own continuation. It is this powerful and emotional glue that accounts for how a group of individual entities relate to each other, manage to cohere and endure together over time and constitute some kind of unity which we might call a society.¹⁵ A number of entities that broadly follow the same social order are thus classed as societal members, and it is their common adherence to the same order that accounts for the relative degree of similarity that we will find between one member and the other members of the same social group. Often this similarity emerges by genetic derivation, that is, one typically has more coherent inter-relational characteristics with members of the community who are similar (e.g. speak the same language) because those same members tend to elicit common emotions and instinctively echo the organisational habits that lead to similarity and the given social order (PR, 89; S, 68).

Furthermore, societies preserve themselves by 'the blind force of instinctive actions, and of instinctive emotions clustered around habits and prejudices' (S, 68-9). Members may, but crucially do not have to, analyse or consciously consent to the societal system to which they belong. Societal orders are 'blindly felt' so that any given member feels an instinctive and emotional impulse to participate in that social order in order to sustain and maintain their access to the community in question. It is by compliance – be it self-aware or automated – to that standard order that we mark the relational similarity of societal members and their belonging to that group in particular. 'Thus, a set of entities is a society (i) in virtue of a 'defining characteristic' shared by its members, and (ii) in virtue of the presence of the defining characteristic being due to the environment

¹⁵ Halewood, p. 85.

provided by the society itself.' (PR, 89). As long as the social order produces a 'defining characteristic' that is shared between individual entities over time, the society endures. We may look to our political, professional and cultural societies: geographical alliances of land masses like NATO, the US and the EU; comrades in arms; members of the same religious institution; fandoms related to a television or book series; supporters of a sports team. In all of these societies, the idiosyncratic component-individuals may or may not be aware that they act in such a way that contributes to the preservation of their societies. But the crucial point is that a set of entities can only be called a society if they collectively uphold enduring (typically genetically transmitted) defining characteristics which serve as the binding societal force.

Thus, the community as an environment is responsible for the survival of the separate individuals which compose it; and these separate individuals are responsible for their contributions to the environment. Electrons and molecules survive because they satisfy this primary law for a stable order of nature in connection with given societies of organisms (S, 79)

Whitehead's thesis is that though societies of cognitive beings may well constitute exempla of unified relations, relationality is not founded on the specific and limited examples of cognitive interrelation. For him, electrons, a collection of books in a library or the molecular assemblage which makes up the substance we call rock are all social systems. The idea that inanimate things like electrons and molecules have social lives may strike us as absurd. It is perhaps more intuitive to say that ants, whales or dogs have a social life because they exhibit forms of social behaviour, we are familiar with: they form colonies, cliques or packs, have intelligible communication methods and thrive in settings of companionship. Social behaviour is not as obvious in cases of plants or bacteria, which may strike us as alive but not social, let alone electrons and molecules, which appear neither alive nor social.

Yet for Whitehead, 'a rock is nothing else than a society of molecules, indulging in every species of activity open to molecules' (S, 64). Indeed, a rock is formed precisely in the (blind) social manner described above: a molecule – itself a group of two or more atoms – forms or breaks chemical bonds with other molecules, displaying a habitual and partial preference for that activity (bonding or not, as the case may be) rather than any

other type of activity. The unity of the rock as a society is dependent on a shared defining order, on the coherence of the relational bonds between its entities. In Whitehead's words:

I draw attention to this lowly form of society in order to dispel the notion that *social life* is a peculiarity of the higher organisms. The contrary is the case. So far as survival value is concerned, a piece of rock, with its past history of some eight hundred million years, far outstrips the short span attained by any nation (S, 64-5).

As we have said, the endurance of any society, be it human, animal, plant or rock, depends on the relative stability of the coherence of its constituent parts.¹⁶ But this coherence does not always happen consciously. Indeed, in the large majority of cases, even in human societies, reason plays only a minor part in the establishment and sustainability of social order. It is the self-perpetuating blind forces of instinct, habit and prejudice that make any society exist and sustain, 'persisting by reason of the genetic relations between its own members' (PR, 90). Thus a society of molecules called 'rock' can be read as a circuit of molecules-as-social-actors, each with their own partial identity of form yet each complying with some element of genetic societal order imposed by the other molecules which together dictate the coherent behaviour we can reliably observe in a rock. Though it is impossible to deny that human experience is emotionally more complex than that of a molecule – and we shall see exactly how in the next chapter – the socio-relational mechanism of the two is shockingly similar.

Social Life

It transpires from this exegesis that Whitehead's claim about the pervasive universality of 'social life' is really quite radical. It goes beyond Evan Thompson's already quite radical supposition that, by strictest definition, life can be ascribed right down to singlecelled organisms but not further than that. Thompson uses the example of the

¹⁶ An external force may destabilise such coherence. For instance, a molecular chemist may plausibly dominate and override the molecules' 'blind force of instinctive actions' to create new molecular bonds or prevent certain bonds from happening. Non-organic social entities like molecules may be manipulated to act in accordance to the larger environmental order. Similarly, organic social entities like dogs or humans can be trained to behave a certain way and not another.

microscopic prokaryotic bacterium (the simplest possible biological organism). It warrants the status of 'life', he claims, because it passes his litmus test. It routinely engages in *autopoiesis*: a 'self-affirming process' which 'brings forth or enacts its own identity and makes sense of the world from the perspective of that identity.'¹⁷ Notice how the characterisation of the prokaryotic bacterium as living hinges upon its social position. These simplest of bacteria assert their individuality in the 'global and organisational context in which they are embedded', even if their self-assertion is not rationally but biologically motivated.¹⁸ Thompson's conclusive point is that single-celled prokaryotic bacteria (and by extension, all higher-order multicellular organisms) are *living* rather than merely material because their self-assertion arises out of and is internally constituted by their social relations.¹⁹ And yet despite the comprehensiveness of Thompson's notion of sociality, there is a marked hesitation on Thompson's part to ascribe social life any further than the biological. Without a doubt, he draws the line firmly at linking sociality and the 'indifferent physicochemical' deterministic laws of material structures.

One of the ways to read Thompson's line in the sand is to say that he has already accepted a good deal of Whitehead's premises and conclusions. Both agree that irrespective of the extent of its rational qualities, a biological system (e.g. the heart) is predicated on its interdependent internal parts and the external forces which act upon the system as a whole. Furthermore, Thompson shares with Whitehead the central tenet that social life comes down to individual's enactive self-creativity in the teeth of its environment. On the basis of these points alone we can say that the differences between the cognitive scientist and the process-relational ontologist are not many and the similarities are overwhelming. Nevertheless, in this instance we will be better served by honing on the crucial difference between the two, as this will help illuminate the radical nature of Whitehead's position. When it comes to ascribing the quality of sociality, Whitehead does *not* differentiate between biological entities and physicochemical ones. This means that the mode of contact between beings, the concept which he is calling sociality, is permeated across existence: every entity has social encounters and

¹⁷ Evan Thompson, *Mind in Life: Biology, Phenomenology and the Sciences of Mind* (Cambridge, MA: Harvard University Press, 2010) p. 153.

¹⁸ Ibid., p. 76.

¹⁹ Ibid., p. 153.

experience; 'there is nothing which floats into the world from nowhere' (PR, 244). This also means that for him relational interplay (introduced by Whitehead through the notion of process of feeling) is a basic, primordial characteristic that underpins existence on the broadest scale imaginable. In his own words:

Every actual entity is in its nature essentially social; and this in two ways. First, the outlines of its own character are determined by the data which its environment provides for its process of feeling. Secondly, these data are not extrinsic to the entity; they constitute that display of the universe which is inherent in the entity (PR, 203, my emphasis).

This passage is representative of Whitehead's social theory. An individual organism comes to be in the context of an external network of forces acting upon it, such that the thing is shaped by its environment. Objects are thus certainly social constructs, but they are not only that. They are also social actors, actively exerting their influence in the universe. For Whitehead, if any entity participates in such a notion of sociality, that fact is enough to affirm the existence of that thing. This, then, is Whitehead's radical claim: sociality is an ontologically essential quality. The inverse of this constantly evolving process, pure individualism is *contra natura*. To say that nothing exists in a vacuum is not only to affirm the importance of sociality but to disavow its absence – if there is no relationality, no matter how basic, minimal or occasional, there is no existence. As Victor Lowe explains:

Independent existence is a myth, whether you ascribe it to God or to a particle of matter in Newtonian physics, to persons, to nations, to things or to meanings. To understand is to see things together, and to see them as, in Whitehead's favourite phrase, 'requiring each other'.²⁰

There is some measure of implicit co-affirmation involved when social entities like a human and a rock 'require each other'. The fact that an interdependent relation has taken place (rather than not taken place) positively recognises the existence of both entities in the universe, and what is more, the status of both entities as members of the same cosmological community.²¹ There is, then, an existential confirmation which

²⁰ Victor Lowe, *Understanding Whitehead* (Baltimore: The Johns Hopkins Press, 1962) p. 36.

²¹ We should not read any critical judgement in the word positive: existential confirmation by relation

happens even in the most modest social interaction. The simplest, and probably the first society to emerge is the hydrogen atom with a nucleus of one proton and its single orbiting electron. Imagine then, the complexity of the cosmos from a Whiteheadian perspective, where societies of anything from a hydrogen atom to a rock to a marine ecosystem to the human body to the conglomerate of human bodies that is the United Nations; all of these societies converge and overlap even if at several degrees of removal from each other. This is the vibrant onto-story of the unfolding cosmos.

Sociality is figured in its most romantic and enchanted sense here. Whitehead draws attention to a 'lowly form[s] of society' such as a piece of rock which are not typically regarded as societies and continues to make the point about the absolute pervasiveness of sociality. The implication of doing so is the dissolution of the bifurcation between 'raw' nature and culture. The idea is that the kind of sociality that is involved in human culture and society is not derived from some kind of 'natural' pre-sociality. Rather, in this more open-ended conception of society, the border between what exists 'prior to' sociality, i.e., the natural, and what is created out of the natural, i.e. the social cultural is blurred to the point of non-existence.²² This is an important point because it highlights that though there is a strong emphasis here on the socio-cultural world that is formed and constrained by a variety of conditions, it is not the case that 'this form of social construction provides a strong claim to authority and truth by referring to a world of natural laws that are seen as universal and immutable.²³ On the contrary, the status of natural law is far from static and immutable but relies on the constructivist principles of becoming and creative novelty (see for example, the geological study of the evolution of sandstone particles on this). Further, cultural social construction echoes natural conditions insofar as it is an automatic non-cognitive perpetuation of physical and mental interaction. But there is no claim to 'authority and truth' based on this; the claim is rather for an ontological revision of the nature-culture continuum to the extent that the theorisation of their feeding forwards and backwards into each other makes it no

should not inspire pessimism or optimism particularly, but recognition, at least of the fact that an interdependent relation has taken place rather than not, and at most sheer awe at persistent life-force of the ubiquitous social flow.

²² Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham and London: Duke University Press, 2002) pp. 9-11.

²³John Clarke and Allan Cochrane, 'The Social Construction of Social Problems' in *Embodying the Social: Constructions of Difference*, ed. Esther Saraga (London and New York: Routledge, 1998) pp. 3-42 (p. 21).

longer viable to divide them into the categories of 'pre-social' and 'social'. Instead, wherever an entity it appears, it does so under the webbed rubric of social relation, forming alliances and self-organising in context, preserving the past and breaking into novelty.

Nor is it the case that for Whitehead individual entities are entirely subsumed by their relations. If that were the case, we could not speak of any entity that enters the social relation to begin with. Whitehead recognises individual objects and their existence ensoi (privacy of entities). The emphasis here is that any entity is ontologically dualnatured: simultaneously having internality (for itself – *en soi*) and forged by its public relations with others. So, while all entities are individual, they are also simultaneously social entities, they are embedded in networks where they both realise and are realised by each other. This fundamental relatedness between a network of entities is the structural skeleton of sociality. The point is that things exist both as private, 'acknowledged in the *actus* of being what they are', *and* as social actors in a liquid cosmos in which different natural units of process melt together.²⁴ However, there is no such thing as an autonomous, isolated entity, which would be paradigmatic of nonexistence. For Whitehead, things are withdrawn to a degree – this is how they maintain their individuality as a defined society, e.g., Italy is withdrawn from Germany and this helps us individuate them - but not irretrievably so: Italy can never be vacuum-sealed from all relations with Germany.

As per our discussion above, we can say that societies are not simply a collection of individuals with similar characteristics which can be collated into representative groups (e.g. country of birth or workplace). Far more complex than that, a society incorporates individuals and their behaviours into an enduring – but not permanent – entity. Individuals who consider themselves part of a society will often act instinctively

²⁴ Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago: Open Court, 2002) p. 27. Merleau-Ponty's reading of Bergson, whose concept of duration is comparable, but not identical to Whitehead's process, is that Bergson views the flow of consciousness as a *liquid* in which 'instants and positions melt together'. Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London and New York: Routledge, 2003) p. 543. The plasticity of reality is also echoed in Deleuze's work, whose 'larval subject' gathers together passing instants of the material flux and is therefore a 'liquid principle'. Gilles Deleuze, *The Logic of Sense*, ed. Constantin V. Boundas, trans. Mark Lester (London: Continuum, 2003) p. 90, p. 216.

according to the force the society meets out. Thus, social patterns are clustered around blind habits and prejudices that have been accumulating and sedimenting unconsciously, often for generations on end. Indeed, as Whitehead notes, a community 'is kept together by the blind force of instinctive actions, and of instinctive emotions clustered around habits and prejudices' (S, 68).

Applying these societal insights to planetary concerns, the question becomes: how can a society of humans and the individuals in it reflect on what they do unthinkingly and expand the boundaries that circumscribe their ethical action towards others? Consider as an example the 1964 program called the 'Mississippi Summer Project' - a project devoted to registering black voters in the South which came to be known as "Freedom Summer." More than a thousand applicants were accepted into the program, but over 30% did not participate when it came time to go to Mississippi. The drop-out rate interested sociologist Doug McAdam, who theorized that those who ultimately declined did so because they had applied from self-interested motivation to begin with, writing statements to the effect of 'I want to be where the action is' on the application.²⁵ On studying the applications, however, McAdams found that this hypothesis did not bear out. The difference between applicants who went to Mississippi and those who ultimately stayed behind was not selflessness and selfishness, but the push and pull of social habits. It turned out that those who followed through were enmeshed in communities like church groups, friends and acquaintances with similar leanings towards civil rights or dormmates who had also applied. In other words, even if there were very reasonable second thoughts in the face of probable violence, those who did go were accountable to the particular configuration of the social patterns they were involved in. They were *expected* to be on the Mississippi-bound bus and would lose face if they withdrew. On the other hand, those who thought better of it were equally involved in social patterns governed by communities, but ones with different expectations such as newspaper and student government, academic groups and fraternities. When faced with the prospect of inconvenience, harm, arrest or worse, they did not have their community-ingrained social habits to fall back on, and they stayed home.

²⁵ Doug McAdam, 'Recruitment to High-Risk Activism: The Case of Freedom Summer', *American Journal of Sociology*, 92.1 (1986), 64-90.

What McAdam understood in his 1980s Freedom Summer study with regards to the goers and absentees is something that Hegel had elucidated in the *Philosophy of Right* long before. The set of ethical obligations which sustains and furthers a society is concretely borne out of that very same society. There is no *Sittlichkeit*, that is, no ethical life or concrete ethics, without its etymological origin Sitten - meaning customs, habit, culture. Hegel's insight was precisely this: there is no such thing as morality that is carved in stone. Neither the ethereal and complete world of the Platonic Forms, nor the abstract 'what should be' of the Kantian categorical imperative actually motivate action. Instead, it is the community itself that grounds ethical behaviour.²⁶ It is the obligations that one feels to the communities they are *already part of* which drive individuals to ethical (sittlich) action, even against risk to oneself, as we saw in Mississippi. And in the manner of an ongoing cycle, the individuals who fulfil their ethical obligations give the society an identifying energy to feed off of, a force which the enduring entity can then meet to individuals who do not know each other but instinctively and blindly follow suit in accordance to their social habits. In short, culture and ethics are inexorably intertwined. To talk of one is inevitably to talk of the other. To provoke large-scale social habits of the kind we need in this planetary era, we have to build on the connections and obligations we already have and feed the community with vectorforces that it can then magnify and proliferate amongst its members.

Nihilism

We know that when it comes to climate, there are several blocks to a cultural/ethical paradigm shift. For one, there are the infamous climate-deniers, those who deny that the issue is as severe as climate scientists would have us believe. Far more ubiquitous and nefarious (and possibly more relatable to us who are writing/reading this) is another type of denialism, one that William Connolly calls second-stage denialism in his

²⁶ Charles Taylor, *Hegel* (Cambridge: Cambridge University Press, 1999) p. 376. The same is true for Whitehead, who wants to avoid the problems associated in following Plato in separating off a static realm of perfect Reality from the variable and embodied realm of imperfection: 'Plato found his permanences in a static, spiritual heaven and his flux in the entanglement of his forms amid the fluid imperfections of the physical world.' (PR, 209). For Whitehead, reality *is* process and process is reality. That is all ye know on earth, and all ye need to know, as Keats put it.
book *Facing the Planetary,* whereby people are highly aware of the urgency of the climate issue but nevertheless slide away from participation in society and continue to act as if the climate crisis was not actually happening. The spell might otherwise be called cognitive dissonance, showcasing an inconsistency between intensity of thought and passivity of action. Following Connolly's Nietzschean reading, I will refer to this kind of climate passivity as eco-nihilism:

[Second-stage denialists] are weakened, anxious beings who doubt a providential God, or human exceptionalism, or sociocentrism, or climate gradualism. But they do not invest in alternative paths of meaning, responsibility, and activism partly because stubborn residues within and between them resist those investments and partly because they sense how disruptive political efforts would be to transform the institutions expressing them.²⁷

Connolly's insights on this second type of denialism touch a very real personal and cultural nerve. A hundred corporations make up 71% of the world's emissions, so what does it matter, that I – insignificant creature that I am – grow my own food in my allotment or use a bamboo toothbrush?²⁸ I realize that at least on some level my own being is tied up in flows of capital consumption, so is it even worth trying to extricate myself from this system and what good would it do the world if I did?²⁹ Though one has comprehended the urgency of the crisis and the current need for action, that rational understanding cannot save us from being discouraged. Even if I know that I ought to cut down on my plastic and eat less meat, that knowledge turns out to be insufficient motivation to lead me away from that low-simmering dejection and towards the necessary ethical response. Those of us caught up in the net of eco-nihilism are like those 1960s would-be activists who saw the need for ethical action and were

²⁷ William E. Connolly, *Facing the Planetary: Entangled Humanism and the Politics of Swarming* (Durham: Duke University Press, 2017) p. 166. This isn't to say that we're somehow personally responsible after all, but rather to acknowledge the fact that we're caught up in a more or less global system. Also see, Susan Clayton Whitmore-Williams, Christie Manning, Kirra Krygsman et al. 'Mental Health and Our Changing Climate' *American Psychological Association,* (2017)

https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf> [accessed 5 November 2019].

 ²⁸ Riley, Tess, 'Just 100 companies responsible for 71% of global emissions, study says,' *The Guardian*,10 Jul 2017, <https://www.theguardian.com/sustainable-business/2017/jul/10/100-fossil-fuel-companies-investors-responsible-71-global-emissions-cdp-study-climate-change [accessed 4 November 2019]
 ²⁹ An insight I owe to my supervisor, Dr Josh Robinson.

theoretically inclined towards it, but when it came down to it, the communal patterns around them were not strong enough to jolt them into active participation. And so, ultimately, we end up playing the role of second-stage denialists and, like the would-be activists, stay home.

There can be no question that fashioning salvation through hierarchical modernising is no solution at all. 'Between modernising and ecologizing we have to choose,' writes Latour.³⁰ Insofar as there is a choice to be made between modernizing and ecologizing, there cannot be any question as to which system has long-since squandered its good faith and which more cosmopolitical social habits we must try to adopt. But of course, it is never as simple as all that. Ultimately, the eco-nihilist is not what Connolly calls a first-stage denialist, that is, she does not deny that the modernizing societal pattern of dualism is incommensurate with this planetary era. Yet moving beyond the bifurcation which separates culture from nature will require re-evaluating metaphysical assumptions that have been unconsciously sedimenting into the fabric of the societal worldview for generations over hundreds of years. And in the face of all that, we may find ourselves lacking the vitality needed to reignite faith in a substitute meaninggenerating system. Yet that is precisely what Nietzsche suggests the nihilist ought to do.

Nihilism is ambiguous, Nietzsche explains, because it can signify either 'increased power of spirit: as *active* nihilism' or 'decline and recession of the power of the spirit: as *passive* nihilism.'³¹ Both forms of nihilism share the realisation that the centre cannot hold. But they differ with respect to the volitional response that is engendered by this insight. On one hand, active nihilists display strength of spirit by refusing to continue to be engaged by previous 'articles of faith' that evidently do not suit. The active nihilist is characterized by their persistent reassessment of practices which are either commonly valued positively (like commodification of labour for economic prosperity) or negatively (like political efficacy). The active nihilist asks the uncomfortable questions: to what extent are any of these established social forms conducive or detrimental to the preservation and enhancement of our immediate environment? Thus, to be an active

³⁰ Bruno Latour, *An Inquiry into Modes of Existence: An Anthropology of the Moderns*, trans. Catherine Porter (Cambridge, Mass.: Harvard University Press, 2013) p. 8.

³¹ Friedrich Nietzsche, *The Will to Power*, trans. Walter Kaufmann and R.J. Hollingdale (New York: Random House, 1966) p. 17.

nihilist means to determine a new system for oneself. In the case of climate, an active nihilist boldly sows the seed of their dissatisfaction with modernising and reaps from it a new mode of being-in-the-world that is more like ecologizing than dominating. An admirable re-orientation indeed, and one that will require all the more strength of spirit given that they will necessarily be at odds with the still prevailing techno-capitalist ideology of the age.³²

On the other hand, passive nihilists are hindered by their weakness of spirit and find themselves unable to make such a transition. Their own dejection with whatever the dissatisfactory 'modern' state is cripples their sense of agency. In turn, this proves to them that 'there is no meaning at all' and thus they characteristically (and perhaps involuntarily) slide into weariness, pessimism and inaction.³³ This is the more relatable class of people that see that a hundred corporations produce 71% of the world's emissions and cannot see how any intention or action on their part could possibly lead to the changes require to avoid ecological catastrophe. Though they cannot in good conscience approve of unsustainable development, but nor can they fully believe in the redeeming promises of ecologizing. The eco-nihilist *desires* affirmative action, but she has given up on the possibility of the efficacy of any such action in the face of constant news items and alarming statistics such as the one quoted here. Thus, she generalizes the 'image of modernity as disenchanted, that is to say, as a place of dearth and alienation' to the world at large. Ultimately, the eco-nihilist walks away from ethical action, declaring meaninglessness in her wearied psychological state.³⁴ Nietzsche suggests that the passive nihilist's position that all must therefore be meaningless is erroneous.³⁵ It is the weary psychological state that makes things appear to be without value or meaning. But it is of the essence that those who are victims of this lassitude 'regain composure' and see that the loss of meaning in one value system means that the

³² Ibid.

³³ Ibid., 14. Also see Daniel Conway, 'Revisiting the Will to Power: Active Nihilism and the Project of Trans-human Philosophy' in *Nihilism Now! Monsters of Energy*, eds. Keith Ansell-Pearson and Diane Morgan (Basingstoke: Macmillan, 1999) pp. 117-141 (pp. 124-125).

³⁴ Jane Bennett, *The Enchantment of the Modern World: Attachments, Crossings and Ethics* (Princeton and Oxford: Princeton University Press, 2001) p. 3.

³⁵ Nietzsche famously diagnoses Buddhism with this erroneous conclusion. The Buddha has the correct insight that that there is no transcendental meaning but generalizes meaninglessness such he takes the stance that life is inherently without value or meaning. Robert G. Morrison, 'Nietzsche and Nirvana' in *Nietzsche and the Gods*, ed. Weaver Santaniello (Albany: State University of New York Press, 2001) pp. 87-114 (pp. 92-94).

locus of meaning and value is once again an open question or an 'open sea,' as Nietzsche rousingly calls it:

At long last the horizon appears free to us again, even if it should not be bright; at long last our ships may venture out again, venture to face any danger; all the daring of the lover of knowledge is permitted again; the sea, *our* sea, lies open again; perhaps there has never been yet such an 'open sea.'³⁶

Inspiring as that passage might be to those who already feel the will to power, how does one make this appeal convincing to a passive nihilist? It would be wrong to think that devoting energy to such an appeal is a lost cause, for though the eco-passive-nihilist's spirit is weak, her will is strong. The trouble is that she finds herself isolated, away from the communal patterns that would support the unthinking formation of affirmative and ethical habits.

Sources of Nihilism

Whence *ecological* nihilism, then? What all-consuming 'form of domination and administration' is it that destabilizes societal members' being-in-the-world and fails to inspire the average citizen's faith? What systematized organising totality has blown up in our faces so that promises of modernisation and economic prosperity have effectively meant that we now stand in the ruins of construction sites, forest fires and melting icecaps? And is it any wonder that whatever the source of this anthropogenic environmental regression, it stokes unconscious societal patterns of nihilistic disappointment and bitterness in any given populace?

There are many accounts for the persistence of dispassion and apathy. Max Weber compellingly volunteers the interpretation that we ought to look critically at the rationalising culture of modernity. The industrial revolution in the nineteenth century was closely followed by massive advances in atomic/ nuclear energy and the digital revolution is still sweeping through the twenty-first century. Amidst all this upset, the communal unconscious 'share[s] the general human weakness for explanations of what

³⁶ Friedrich Nietzsche, *The Gay Science, with a Prelude in Rhymes and an Appendix of Songs*, trans. Walter Kaufmann (New York: Vintage, 1974) p. 280.

is incomprehensible in terms for what is familiar and well understood'.³⁷ The rationale for stability is the same as the one we discussed in chapter 1 with reference to scientific epistemological drive – it is the anxious need for assurance that 'there are no mysterious incalculable forces that come into play, but rather one can, in principle, master all things by calculation'³⁸ In a post-industrial world that is hyper focused on instrumental and determinate practicalities, to call someone 'emotional' is to insinuate that they are unstable or given to the ambiguous. On Weber's account, our minds have acquired the habit of opting for the precise, regular, constant and reliable over the wild, spectacular, idiosyncratic and the surprising. One learns to relate to things by seizing upon their instrumental value rather than by discerning their value as part of their cosmopolitical spectrum.³⁹

There's more than a grain of truth in this. Case-in-point, this Malta Independent headline: 'The government has started a process of modernisation – Prime Minister'.⁴⁰ To say that the ex-PM's speech – delivered at a 'party event' for people with various business interests – have not aged well is to damn it with faint praise. With hindsight, we know that the head of state was preaching modernity with the blood of journalist Daphne Caruana Galizia on his hands. Muscat and his closest allies eventually found themselves on resignation's doorstep over obscene amounts of money laundering which said murdered journalist uncovered. Still, Muscat's 2018 speech points to some important and long-standing trends in the course of Maltese modernity and the political fatigue and disenchantment which follows in the wake of such blatant violence and corruption. Muscat is hardly the first politician to cry 'modernize'. Malta's size (the smallest of the 27 EU nation states) means that it needs allies. Yet it is also an island, thereby having a physical severance from the mainland ecological system. The Mediterranean has served as a natural shield for the island, and this is why it has served as a satellite colony of the Byzantines, the Roman Republic, the Kingdom of Sicily, the

³⁷ Thomas Nagel, 'What Is It Like to Be A Bat?' *The Philosophical Review*, 83 (1974), 435-450 (p. 445).

 ³⁸ Max Weber, 'Science as a Vocation', in *From Max Weber: Essays in Sociology*, eds. H.H. Gerth and C. Wright Mills (Oxon: Routledge, 1970) pp. 129-158 (p. 139).
 ³⁹ Ibid., pp. 139-141.

⁴⁰ The Malta Independent, 'The government has started a process of modernisation – Prime Minister' in The Malta Independent', *The Malta Independent*, 18 Nov 2018,

<https://www.independent.com.mt/articles/2018-11-18/local-news/The-government-has-started-a-process-of-modernisation-Prime-Minister-6736199532 > [accessed 12 October 2020]

Crown of Aragon, the Spanish Empire, Napoleon Bonaparte (briefly) and the British Empire. Following this long stretch of colonialization, Malta turned to its European neighbours and joined the European Economic Community in 1970. Then, Prime Minister George Borg Olivier, in a speech on the occasion of the signing of the agreement, described the objectives of the agreement thus: 'The agreement offers incentives and encouragement which should be of considerable assistance to us in our efforts to diversify our economy and to place it on surer foundations'.⁴¹ With business and economic progress being the *de facto* aims across the two major (opposed yet similarly centrist) political parties, 'modernisation' came to be touted as shorthand to Malta's prosperous ends. Yet the fact remains that the neoliberal model relied on policies which privatized public sectors. To this day, the economic wheel turns by having property developers and entrepreneur companies take on the public sector of infrastructure, attempting to build golf courses on farmland, for instance.

The practice of 'winner takes all' that has characterised successive changes of government in Malta means that key positions in government at various levels are awarded to Party supporters. Thus, at any one time a substantive segment of the country's limited and trained human resource is left under-utilised, or at worse isolated and ignored in public policymaking.⁴²

We have here what Bruno Latour calls 'the double task of domination and emancipation,' that is, the modern promise of deliverance from human-human exploitation by redirecting societal energies into the wholesale domination and commodification of natural resources.⁴³ No more the foreign colonial entity who imposes social contracts on rational and unwilling participants. Maltese people were at last emancipated, equal partners in the European Union. But as per the Cartesian-Newtonian view, marine populations, arable farming land and geomorphological features occupy an entirely distinct ontological zone. They are vacuous actualities devoid of subjective immediacy, that is, they are mechanistic, physical substances which

⁴¹ 'Proposed Association of Malta with the European Economic Community', Presented to the House of Representatives by the Minister of Commonwealth and Foreign Affairs, 19 Oct 1970. Quoted in Roderick Pace, 'Malta and EU Membership: Adaptation, Change and Modernization,' *Agora Without Frontiers*, 8.4 (2003), 366-383 (p. 360).

⁴² Pace, 'Malta and EU Membership', p. 372.

⁴³ Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1992) p. 10.

can be scientifically mastered, colonized by the erstwhile colonizer. Matter obeys predictable universal causal laws and as part of a deterministic nature, can be operated upon to our advantage.⁴⁴ At least in Malta, the quest for emancipation meant prioritising macro-economic issues like dismantling protectionist barriers to attract investors, whose money in turn, dominates development of hotels and golf courses, industrial manufacturing zones and unnecessary underwater tunnels. From the seventies onwards, manipulation of the environment came to reflect the free and agentic spirit of a nation gingerly approaching the determination of its own social destiny.

In the Western European fold, there were very good reasons place our fate and our faith in the dual tasks of domination and emancipation. For one thing, the human desire to understand the natural world is as seductive as it is expedient. Indeed, on the face of it, what Augustine termed the '*eros* of the mind' – the ecstatic attraction and delight of obtaining useful and applicable knowledge of the world around us – is the noble ambition of emancipation from ignorance.⁴⁵ Accordingly, any epistemological progress was mobilized in the service of the growth of allied technologies against various (non-Western) competitors. With economic prosperity kept firmly in mind, understanding something intimately is inherently tied to its potential for commodification and consequent profit. Liberal emancipation as Latour pointed out, was meant to come through a reductive analysis of nature's inert processes and their redirection towards humanity's own ends. Given the irresistible promise of strong and free enterprise in the context of two world wars and a troubled history of colonialization, it is little wonder

⁴⁴ Ibid., 10-11. Latour underscores the two distinct ontological zones as 'that of human beings on the one hand; that of nonhumans on the other.' He characterizes the bifurcation in its most typical form: anthropocentric. But it can sometimes take the form of biocentrism such that it restricts sociality and subjective immediacy to the biological sphere. Evan Thompson, for instance, supposes that by strictest definition life can be ascribed right down to microscopic prokaryotic bacterium (the simplest single-celled organism) but not further than that. For him, the bifurcating line is quite low down the totem pole, but it exists nonetheless, and it depends on whether an entity 'brings forth or enacts its own identity and makes sense of the world from the perspective of that identity.' Thompson, *Mind in* Life, p. 153.
⁴⁵ Gene Fendt, *Love Song for the Life of the Mind: An Essay on the Purpose of Comedy* (Washington, DC: Catholic University of America Press, 2007) p. 281. In their commentary on Wernicke's clinical psychiatry lectures Miller and Dennison make a connection between mania, the eros of the mind, and Whitehead's first stage of learning, which we will discuss in the next chapter. Robert Miller and John Dennison (eds.), *An Outline of Psychiatry in Clinical. Lectures: The Lectures of Carl Wernicke*, trans. John Dennison and Robert Miller (London: Springer International Publishing, 2015) p. 430.

that Western societies accumulated unconscious societal patterns clustered around modernity and the domination of what they perceived to be inert.

Yet as we all know, the emancipatory dream was outlasted by rampant capitalism, which has since doubled down on domination. As Latour says, 'By seeking to orient man's exploitation of man toward an exploitation of nature by man, capitalism has magnified both beyond measure'.⁴⁶ It turns out that just as nature can become the subject of conquest, so can human labour - an injustice that the perennially colonized know only too well. The goals and advantages of conquest remained the same: a fast rate of progress, emancipation though the increase of technical efficiency and the flourishing and growth of human civilisation supported by the free market. John Maynard Keynes, an economist writing in 1930, predicted that accelerated technical improvements in manufacture and transport and the increased accumulation of capital by 2% per annum would mean that the economic problem of 'struggle for subsistence' that has persistently plagued mankind would be solved by 2030.47 He speculated that as our economies grew exponentially, we were going to get to a point in time where there would be enough material prosperity such that it could be divided evenly and we would no longer need to sweat for our daily bread. 'It is a wonderful thing for our businessmen and our manufacturers and our unemployed to taste hope again,' he exclaimed on a news broadcast.⁴⁸ Daniel Susskind, a contemporary economist, reckons that Keynes was right in the sense that if the global economic pie today were to be divided in equal slices, everyone in the world would get \$11,000, an amount that would continue to grow as the economy grows, relieving most from the economic problem of 'the struggle of subsistence'. But Keynes' optimism was only partially justified. What Keynes missed in that essay is the distribution problem; the pie of prosperity does not miraculously slice itself up evenly.⁴⁹ The exploited, those without healthcare, access to education and clean water or those who work upwards of two jobs for less than a living wage, would

⁴⁶ Latour, *We Have Never Been Modern*, p. 8.

⁴⁷ John Maynard Keynes, 'Economic Possibilities for our Grandchildren' in *Essays in Persuasion* (London: Palgrave Macmillan, 2010) pp. 321-332 (p. 326).

⁴⁸ John Maynard Keynes, quoted in Roger E. Backhouse and Bradley W. Bateman, 'A Cunning Purchase: The Life and Work of Maynard Keynes' in *The Cambridge Companion to Keynes*, eds. R. E. Backhouse and B.W. Bateman (Cambridge: Cambridge University Press, 2006) pp. 1-18 (p. 11).

⁴⁹ Daniel Susskind, *A World Without Work: Technology, Automation and How We Should Respond* (London: Allen Lane, 2020) pp. 148-149

certainly attest to that. And though it may be true that economic growth is such that the overall size of the pie is bigger, 'a smaller cake more fairly distributed may be preferable to a larger one with present levels of inequality' because, in his view, uneven distribution is as much a problem as economic diminishment.⁵⁰ The point is that a smaller pie that is equally distributed may be preferable if the big pie in question is made by the exploitation of material and human resources and still, ultimately ends up exacerbating the problem of unfair distribution. As for the hope Maynard Keynes speaks of, there is indeed plenty of it amongst the businessmen and manufacturers who hold the reins of domination. Yet it wears thin amongst the passive nihilist for whom the trickle-down does not trickle far enough down at all. We the 'under-utilised', 'isolated' and 'ignored' are not the recipients of a financial bailout after (one too many) an economic crisis and are not better off as a result of the uneven distribution that favours the businessmen and manufacturers. And this goes for the so-called inert natural world as well, which, having absorbed the effects of total dominion for centuries, is finally showing real signs of depletion: '[...] the multitudes that were supposed to be saved from death fall back into poverty by the hundreds of millions; nature over which we were supposed to gain absolute mastery, dominates us in equally global fashion, and threatens us all.'51

If ever there was a nihilistic realisation to be had it is to this sorry state of affairs. We, communally, through the generations, have all participated in the modernising myth, for instance through mythical stories of people whose success depends entirely on their colonising endeavours. One must set out to achieve; to be a swashbuckling conqueror like the Greats - Don Quixote, Lord Byron, Christopher Columbus. A certain swathe of the population was subliminally sold on the modern governing logic of conquest precisely because it has permeated from bedtime stories to public policy. It's the way things are, it's the way things always have been, and the way things will always be. 'We've always been at war with Eastasia'. But that organising totality has not only failed in delivering on its promise of eliminating man's exploitation of man but has actually aggravated said exploitation. Man nods to God, for he is the creator, but being created in

⁵⁰ Anthony B. Atkinson, *Inequality: What Can Be Done?* (Cambridge, MA: Harvard University press, 2015) p. 243. Also see Michela Betta, *Ethicmentality: Ethics in Capitalist Economy, Business and Society*

⁽Dordrecht: Springer Science + Business Media B. V., 2016) pp. 51-3.

⁵¹ Latour, We Have Never Been Modern, p. 8.

his image, feels entitled to take on the mantle of being its arbitrar, only to now recognize that this way of thinking had been hopelessly out of touch with our planetary entanglements and has in fact resulted in such accelerated ecological decay that we may have lost 'any opportunity to recover and to regain composure'. It transpires that the tendency to dominate in the name of development has been 'a long *waste* of strength'. With that recognition come the bitterness and agony that we as a species may have shot ourselves in the foot.⁵² This is the realization that triggers the psychological state of nihilism.

Where once there was something to be achieved by process, for instance getting involved in the meaning-producing systems of religion or politics which decide how society is organized, now one realizes that the process aims at *nothing* and achieves nothing, our governments are ineffective, and the capitalist institutions which were meant to satisfy our economic needs have turned into destructive geological forces. Nihilism shares something with a crisis of faith, whereby agentic culture can no longer inspire hope. The problem that I am describing here is deeply emotional. The information age is such that each of us is supremely well-informed about climate facts and statistics. But what can any one individual do? We have the sinking feeling that 'keep-cup culture' is not the meaningful change we need but if no greater unifying force presents itself to break the cycle, then what? It is precisely this question that leads to climate-related dejection. The cultural zeitgeist is such that 'one has posited a totality, a schematisation, indeed any organisation in all events' that will serve as a 'sort of unity'.⁵³ As a child, this organisational unity can take the form of a parent; as a member of a congregation one looks to God and as a citizen one is dependent on the ruling classes. These are the superior, unifying and organising structures on which we are dependent for context, and as a result of this dependence, they are the measures according to which we attribute *value* to ourselves and to the world around us. Nietzsche describes the condition of nihilism as the psychological state that is reached when one has sought meaning in 'a totality, a systemization, indeed any organization,' only to find that meaning is not there.⁵⁴ The seeker thus becomes discouraged and

⁵² Nietzsche, *The Will to Power*, p. 12.

⁵³ Ibid.

⁵⁴ Ibid.

ashamed that they wasted so much strength and let themselves be deceived by that faux meaning; even bitter and lost amidst the insecurity they now find themselves in. It is likely that we have all experienced something of the sort. The realisation that one's parents are fallible might be one of the first nihilistic milestones, but plenty of others follow. A romantic or platonic relationship which one took to be 'the gradual approximation of a state of universal happiness' breaks down.⁵⁵ The God you had faith in, the political ideals that you thought would foster harmony – they are the organising totalities against which you had defined your potential, purpose and sense of self. 'What all these notions have in common is that something is to be *achieved* through the process – and now one realizes that becoming aims at *nothing* and achieves *nothing*,' Nietzsche writes, in what reads to me as a direct critical challenge to one's attitude to process, and to process philosophy.⁵⁶

Whitehead acknowledges the problem: 'whether the process of the temporal world passes into the formation of other actualities, bound together in an order in which novelty does not mean loss' (PR 340). One of the profound paradoxes of human experience is that, while we crave novelty, we are also haunted by terror at the loss of the past and anxiety about future loss. 'Part of the joy of the new years is the hope of the old rounds of seasons, with their stable facts' (PR, 340). But as it turns out, there is a guarantee that novelty will translate into loss and that process destabilises facts. For the new to flourish, the old must die. Perhaps, counters the nihilist out of a protective mania to save the past, and out of a terror of what new losses novelty might bring, better the devil you know, better the comforts of cognitive dissonance which have accompanied us so far. Better to do nothing and preserve the status quo then make things worse. Whitehead here sheds light on the psychological status of a nihilism as one of state of paralysis out of the fear of novelty. Where once there was something to be achieved by process, for instance getting involved in the meaning-producing systems of religion or politics which decide how society is organised, now one realizes that the process aims at *nothing* and achieves *nothing*, our governments are ineffective, and the capitalist institutions which were meant to satisfy our economic needs have turned into

⁵⁵ Ibid.

⁵⁶ Ibid. Original emphasis.

destructive geological forces. 'Haunted by terror at the loss', we have lost the transcendental mechanism by which one sees oneself as part of the process and come to the nihilist resignation that in the face of constant anticipation of loss, the strategy is inaction as coping mechanism.

The original insight of Heraclitus (that the only constant in the world is change) returns, but this time, it captures also the terror of a world without unity or truth - the very things that, even if morally defunct, used to confer value to our lives. For at this point, writes Nietzsche, we have already reached the standpoint that there is no established truth or unity in the world: 'one grants the reality of becoming as the *only* reality'. But if there has been a loss of faith in the societal orders that govern these processes, then that road leads to fears surrounding creative novelty and existential uncertainties around the reality of becoming. If the aim of becoming is a source of pointless fatigue when one realizes that the measures according to which they attributed value to themselves and to their world do not make sense in practice – the nihilistic slither in the Edenic garden of meaning starts to echo insistently.⁵⁷ And one way to cope is to give up on 'becoming' altogether. As we have already hinted at in the introduction with reference to John Keats' 'Ode on Indolence', this is an emotional state of paralysis.⁵⁸ Nihilism is not the inverse of ecstasy, nor a synonym for melancholy. It is precisely the absence of those two states and any other emotional intensity - an emotional state, where one feels nothing, feels like doing nothing and looks forward to nothing. And so, just as Nietzsche says, the result is 'decline and recession of the power of the spirit,' that is, one withdraws from what one perceives as a hopelessly valueless world and becomes passive.⁵⁹ Those of us who feel climate anxiety may perhaps be prone to passive nihilism in this sense: in the face of valuelessness, one adopts a detached

⁵⁸ John Keats, 'Ode on Indolence', *Poetry Foundation*

⁵⁷ One's teenage years tend to be the most nihilistic, because it is the time when childhood strongholds of meaning start to crumble in the face of experience in the world.

<https://www.poetryfoundation.org/poems/52995/ode-on-indolence> [accessed 11 October 2020].
⁵⁹ Nietzsche, *The Will to Power*, p. 17. Passive nihilism differentiates itself from its cousin aggressive nihilism, which responds to shocking evidence that the course we are on is self-defeating by radically upping the ante of deniability, by attacking the soundness of the evidence presented to us by climate scientists, and by doubling down on the exact activities that exacerbate the problem. "Drill, baby, drill," the lively, young vice-presidential candidate repeated at every election stop in 2008. And "Frack, frack, frack," is the new demand. The biggest danger of aggressive nihilism its appetite for destruction will carry the day until it is too late, delaying responses until irreversible changes take over. Connolly, *Facing the Planetary*, p. 165.

attitude, an orientation which negates value. This is not detachment as practiced by the Stoics, who practiced a selective apathy towards things that are not in their own power. Passive nihilism is rather a withdrawal from what we had previously thought were value-producing systems (e.g. God in whom we have long-since lost faith, or capitalism, which has now shown itself to be a destructive geological force). As in the Aesop fable where the fox ultimately rejects the grapes he sought because they are out of reach, though the nihilist *desires* a value-infused world she has given up on the possibility of finding value, makes the generalisation that the world is intrinsically valueless and slides into a lack of participation in the process.⁶⁰

Eliminative Nihilism

Ray Brassier presents a version of nihilism that gives a different picture. Instead of thinking of nihilism as a calamitous diminishment, he champions disenchantment of the world as an important and necessary consequence of the potency of reason: 'The disenchantment of the world deserves to be celebrated as an achievement of intellectual maturity, not bewailed as a debilitating impoverishment'.⁶¹ For him, rather than a weakened state of being, nihilism is a sign of rational vigour because it points to one's alertness to the fact that reality 'is indifferent to our existence and oblivious to the "values" and "meanings" which we would drape over it in order to make it more hospitable.'62 Brassier thinks that philosophers should instead follow the hyper-rational nihilistic liberation to its natural conclusions: the attribution (the draping) of value is a human fluke in an uncaring and fundamentally entropic universe. To do philosophy well, Brassier says, is to realise that the idea that the universe is imbued with value is merely an illusory, egoic creation. That is to say, nihilism helps us to recognise valuelessness, and therefore 'represent[s] a gain in intelligibility', a step up from the unintelligibility of the value-saturated framework which results in paralytic disenchantment. This is the rational nihilistic position, which defends the intellectual importance of purposelessness and valuelessness.

⁶⁰Nietzsche, *The Will to Power*, p. 14.

⁶¹ Ray Brassier, *Nihil Unbound: Enlightenment and Extinction* (Hampshire and New York: Palgrave Macmillan, 2006) p. xi.

⁶² Ibid.

The disenchantment of the world [...] is a necessary consequence of the coruscating potency of reason, and hence an invigorating vector of intellectual discovery, rather than a calamitous diminishment. [Disenchantment] deserves to be celebrated as an achievement of intellectual maturity, not bewailed as a debilitating impoverishment. [Reality] is indifferent to our existence and oblivious to the 'value' and 'meanings' which we would drape over it in order to make it more hospitable. Philosophy should be more than a sop to the pathetic twinge of human self-esteem.⁶³

Brassier echoes the Nietzschean conception of nihilism articulated above, that is, the realisation that value-producing systems are defunct and generalisation to a valueless world. But then he rejects the diminishment that that realisation brings. The nihilistic problem is the psychological standstill that comes from being 'haunted by terror at the loss of the past' and 'perpetually perishing' futures (PR, 340). There is the selfshattering that one feels when one realises that the traditional categories of meaning and value can no longer sooth our need for existential security. Brassier's antidote is the truth of this extinction, the realisation and rationalisation of the egoic death where the subject of philosophy must recognise that they are already dead. Thus, he echoes the aphorism that 'to study philosophy is nothing but to prepare one's self to die'.⁶⁴ On one hand, philosophies which cater to the 'pathetic twinge' of self-esteem (literally, the esteem of one's unshattered self that previously came from faith in value systems) are bound to result in passivity. On the other hand, Brassier figures nihilism as an aid to come to terms with the fact of one's illusory sense of self and an intrinsically valueless world. For him, the nihilistic outlook is thus a boon rather than a hindrance, which signifies that the previously narcissistic human has understood that the universe cares little about their existence. From this point onwards, nihilism ceases to be an existential quandary but is revised as a speculative opportunity. Thus, the image of the eliminative nihilist human is a freeing one, no longer that of a being shackled by the desire of participation in an intrinsically meaningful world but of an empowered, emancipated, enlightened, scientific being in an indifferent material universe.

⁶³ Brassier, p. xi.

⁶⁴ Cicero, *Tusculan Dispositions,* i. 31. Quoted in Michel de Montaigne, 'That to Study Philosophy is to Learn to Die' in *Essays,* trans. Charles Cotton, ed. William Carew Hazlitt (Waikeke, NZ: The Floating Press, 2009) pp.187-218 (p. 187).

This is what makes Brassier's eliminative nihilism radical as opposed to Nietzsche's, for whom 'nihilism represents a pathological transitional stage' where what is pathological is 'the tremendous generalization, the inference that there is no meaning at all'.⁶⁵ For Nietzsche, the sliding away from the relevance of value was an error leading to weariness, exhaustion and passivity. One is meant to transition out of that valueless nihilism by refusing to continue to be engaged by values that do not suit. But the leap that Nietzsche takes, and which Brassier doesn't, is the relevance of meaning and value at large even if the current 'default' value system does not suit. The active nihilist is differentiated from his cousin the passive nihilist on this score because they endeavour to construct their own value system to replace the defunct one, while recognizing that this too will be subjective and based on their own perspective. Most crucially, the reorientation and maintaining of the new value system will result in 'increased power of the spirit'. 'To live is to evaluate,' writes Nietzsche, 'to have no values is to be dead'. Where Brassier would emphasise brute matter of fact, the task that Nietzsche opens up is the 'revaluation of all values', where the 'sign of strength' of the nihilist is the finding of alternative systems and pressing them into service, even if they are 'at odds with the prevailing ideology of the time'. It is true that nihilism is a speculative opportunity - it is an opportunity to find alternative systems to the eliminative impulse that world is mute and valueless. I agree with Brassier that nihilism is a milestone of our species, but I part ways with him in eschewing value altogether. There is no doubt that the notion of value will require radical transformation. But rather than represent maturity in thinking, the intellectual discovery of valuelessness seems like a dead end for which we have already paid too high a price. As Latour narrates it,

'Let us wipe away our tears,' the modernists liked to declare, 'let us become adults at last; humanity is leaving behind its myth-imbued childhood and is stepping into the harsh reality of Science, Technology and the Market. It's a pity but that's the way it is: you can either choose to cling to your diverse cultures, and conflicts will not cease, or, alternatively, you can accept unity and the sharing of a common world, and then, naturally (in every sense of the word), this world will be devoid of meaning. Too bad, love it or leave it.⁶⁶

⁶⁵ Nietzsche, *The Will to Power*, p. 14.

⁶⁶ Bruno Latour, *War of the Worlds: What About Peace?* trans. Charlotte Bigg, ed. John Tresch (Chicago: Prickly Paradigm Press, 1993) pp. 11-12.

It feels as though we have seen that movie before, and what we have found is that it pushed humanity into a double bind, where on one hand modernity gave us a secular, disenchanted and scientific world that is uncaring and brutish and on the other hand, the slow simmering cosmological nihilism that ensues from this is akin to the dissatisfaction with the set of values based in rationalism that serves only the select few at the expense of too many human and non-human others.

Ultimately, Nietzsche's nihilism is not the belief that the notion of value is a defunct one, but a constructive task of re-evaluating the universe according to more adequate categories. If the passive nihilist finds themselves weary and exhausted of existing transcendental value systems which rely on an external and objective point to fix meaning (e.g., theism or scientism) then the thorny path ahead is to re-centre value in immanence. Upon the intellectual achievement of having awoken to the fact that valueproducing systems are defunct, the eliminative argument that Brassier puts forward makes the move that there is no value at all. But from a Whiteheadian perspective, the task is not to make one's peace with the dubious prospect of a value-free world, but rather to shift the perspective from which one identifies value as either God centred or human centred. The question that will occupy us for the rest of this chapter is this one: in the wake of current irredeemable value systems, how can we ignite and cultivate new pluralistic, immanent value systems and communal patterns which would drive and support the action the passive nihilist wishes she could believe in?⁶⁷ 'That is the contemporary dilemma,' writes Connolly. 'Few of us surmount it completely. But perhaps it is both necessary and possible to negotiate its balances better.'68 In the remaining pages of this thesis, I will argue that we need to invigorate in the eco-nihilist something like a Whiteheadian sensitivity to value which acknowledges and takes into account value that is not centred in reason but that intrinsically belongs to sentient nature. For that reason, in what follows, I will work through Alfred North Whitehead's notion of aesthetic feeling. I will show how he opens the way to an affect-based account of the world, that is, a world constructed by an emotional impulse of the kind that expresses embedded material feeling and leads to 'boundless abstract possibility' (PR, 220). My wager is that if we move towards becoming attuned to the liveliness,

⁶⁷ The world 'has no meaning behind it, but countless meanings.' Nietzsche, *The Will to Power*, p. 267.

⁶⁸ William E. Connolly, *Facing the Planetary*, p. 9.

resilience, unpredictability and recalcitrance of 'each pulsation of actuality,' those of us on the edge of eco-nihilism stand a better chance of finally finding a source of wonder in the world that might jolt us out of our passivity and disenchantment and ignite in us an optimistic, passionate and ethical stance towards that very same world (MT, 89).

Vector Feelings and Value

Between July 2019 and January 2020, the Tate Modern in London was exhibiting a survey of pieces by the artist Olafur Eliasson. The exhibition opened with a mossy wall of spectacular proportions and continues with a journey through the elements – literally. There's water, dried moss, fog, and mists. One particularly entrancing work on show was first displayed in 1993, in Los Angeles, and is tantalising named 'Beauty'. Laura Cumming, art critic for *The Guardian*, describes the piece as follows:

[...] a room of quiet rain, through which rainbows play in the misty spray. It is titled, with unarguable and irreducible truth, *'Beauty'*. The sublime effects of nature are fleeting yet an artist can hold them before you for as long as you wish, in this case with nothing more than a spotlight, a pump and some hoses.⁶⁹

Eliasson's work is well known for artworks which offer interactive experiences. "Beauty" is no exception. It encourages the viewer to consider her relationship with her surrounding context. It makes art out of the conjunction of spectator and world, but also out of the conjunctions of the world with itself – the light, the mist and the breeze are all *dramatis personae* in this drama. And as the etymology of the word *conjunction* suggests (*con-* "with, together" + *iugare* "join, yoke together"), the marriage of disparate things does not level the value of either relatum. The water, the light, the breeze and the spectator are concurrently independent and interdependent, enabling each other to coevolve and slide into novel experiences.

⁶⁹ Laura Cumming, 'Olafur Eliasson: In Real Life; Takis – review,' *The Guardian*, 14 Jul 2019, https://www.theguardian.com/artanddesign/2019/jul/14/olafur-eliasson-in-real-life-takis-review [accessed 15 January 2020]



What of the artist himself? It's not a stretch to assume that he was grasped by the commonplace urban phenomenon of rain under a streetlight (those fleeting, sublime effects of nature, in Cumming's words). It seems that he has attempted, in the form of the installation, to imitate, represent and creatively express anew the feeling by which he had been grasped. The piece crystallizes for its viewers the aesthetic intensity of something that most of us – in the UK at least – encounter and ignore almost every day: rain under fluorescent lights. How could something which we routinely discount as causal and lifeless be so enchanting? Eliasson's installation is designed to call attention to the modern trap: the ontological divide between free, social subjects on one hand, and inert, non-valuable objects on the other. It is time, then, to start sketching out an alternative value system.

This is precisely Whitehead's project in *Process and Reality*, where he lays out his thesis that 'the basis of experience is emotional' (PR, 176).⁷⁰ His philosophy of organism attributes *feeling* indiscriminately throughout the actual world. That means that for him all entities – organic *and* inorganic – have a mode of experience and perception. Of course, in Eliasson's 'Beauty' the experience of light and mist does not involve anything like conscious experience. But when we examine those entities...

[...] the influx of feeling with vague qualitative and 'vector' definition is what we find. The dominance of the scalar physical quantity, inertia, in the Newtonian

⁷⁰ His intention, he writes, is to construct a critique of pure feeling 'in the philosophical position in which Kant put his *Critique of Pure Reason*. This should also supersede the remaining Critiques required in the Kantian philosophy.' Also see PR, 113.

physics obscured recognition of the truth that all fundamental physical quantities are vector not scalar (PR, 177).

Whitehead uses a very informative mathematical analogy here. Scalar quantities are quantities that have magnitude and no other characteristics. He puts scalar quantities in contradistinction with vector quantities. Vectors, like their scalar cousins, have magnitude, but crucially, they also have *direction*. Displacement and momentum are vector quantities whereas length, area and volume are measured in scalar quantities. In geometry, vectors are represented graphically by an arrow, connected an initial point A with a terminal point B. By comparing feeling with vectors, Whitehead is telling us that he thinks of feeling as vital. Feeling is a vector insofar as it is a basic property governing the fundamental dynamics of the world which animates even the most dormant or passive of entities, even if they are not or cannot be conscious of it. The direction of a vector – its standout feature – is also instructive in what a feeling is. '[F]eeling [...] is determinate and pointing to a beyond which is to be determined' (PR 162). And elsewhere, 'Feelings are "vectors"; for they feel what is there and transform it into what is *here*' (PR, 87).⁷¹ Here we find the creative dimension to Whitehead's philosophy of organism. A feeling originates somewhere but has transformative capabilities - it is constructive. And to the extent that the basis of experience is emotional, Whitehead attributes productive and purposeful behaviour to all dramatis 'personae' (so to speak) - planets, lobsters, people in comas, bacteria, galaxies, even mist and light.⁷² All these, with their unconscious or pre-conscious felt drives, exist in tension with one another, producing embodied truths in an affect-imbued mode. No wonder then, that for Whitehead, 'we find ourselves in a buzzing world, amid a democracy of fellow creatures' (PR, 50).

⁷¹ An idea echoed in *An Introduction to Mathematics:* 'The idea of the "vector", that is, of a directed magnitude, is the root-idea of physical science. [...] Thus, when in analytical geometry the ideas of the 'origin', of 'coordinates', and of 'vectors' are introduced, we are studying the abstract conceptions which correspond to the fundamental facts of the physical world' (IM, 75).

⁷² This is an element of Whitehead's flat ontology which connects up more with a poetic idea of pantheism than deism, where God could be construed as the vector feeling flowing in the universe playing all the multiple roles (with varying intensities) at once. In my view, Whitehead's ontological system could just as easily be atheistic as pantheistic, with feeling immanent in every concrescence and pervading the whole of creation without the need for the character of God. Process theism is beyond the scope of this thesis, but further discussion on Whiteheadian theism can be found in Charles Hartshorne, *A Natural Theology for Our Time* (La Salle, Illinois: Open Court Publishing, 1989) and David Ray Griffin, *Radically Different Postmodern Philosophy: An Argument for Its Contemporary Relevance* (Albany, State University of New York Press, 2007) pp. 166-214.

So, how does a vector feeling feel what is there and transform it into what is there? Whitehead's most technical definition of feeling will be incredibly informative here: 'This word feeling is a mere technical term; but it has been chosen to suggest that functioning through which the concrescent actuality appropriates the datum so as to make it its own' (PR, 164). The 'concrescent actuality' is the subject, Eliasson's mist for example, the entity that encounters the world. It 'appropriates the datum,' which is an objective and external data point in the world, at least where the feeling-subject is concerned. Keep in mind that any entity can be datum or subject, as incoming data are not atomistic impressions but every 'datum includes its own interconnections' (PR, 113). The process of feeling starts with responsive conformity of feeling whereby the datum become the basis for a complex unity of realization with the subject.

In the case of 'Beauty', data acting on the mist include the light beams and the slight breeze. All the *dramatis personae* in the installation, and more broadly in the world at large, appropriate data in ways native to themselves. The specific way they do this is crucial because it is ultimately this process of absorption that (at least temporarily) contours the identity or the individuality of the entity. Every entity is a literal embodiment of its perspective on the universe, constructed by all that assaults its sensibilities.⁷³ '*How* an actual entity *becomes* constitutes *what* an actual entity *is* [...] Its "being" is constituted by its "becoming"' (PR, 23). In Whitehead's process ontology there is the formulation of capture and appropriation, absorption and reproduction, imitation and creative expression.

But if we are all feeling bodies, how come the passive eco-nihilist remains dispassionate to recognition of the habitual modes of feeling of others and even motivate in her the sensibility of presumptive generosity?⁷⁴ One explanation might be that she had been overlooking the emotional experiences of the feeling bodies around her, perhaps imagining that one must start from rational shrewdness in order bring about (ethical) progress. Indeed, it is true that rationalisation means streamlined progress, and feeling

⁷³ Steve Odin, 'Whitehead's perspectivism as a basis for environmental ethics and aesthetics: A process view on the Japanese concept of nature' in *Japanese Environmental Philosophy* eds. J. Baird Callicot and James McRae (Oxford: Oxford University Press, 2017) pp. 123-144 (p. 123).

⁷⁴ William E. Connolly, *A World of Becoming* (Durham and London: Duke University Press, 2011) p. 75.

means more perplexity, 'for example, about freedom, knowledge, and the meaning of life.'⁷⁵ And so, a speculative suggestion to account for ethical dispassion is that we have grown habituated to working out the mental muscle of reason prematurely, before cultivating perplexing emotional attunement to our surroundings. Feeling the feeling in another, or what I will henceforth call ecological empathy, is precisely the state of exercising these emotional capacities. It is characterized by high sensitivity and a 'stance of presumptive generosity' which renders 'oneself more open to the surprise of other selves and bodies and more willing and able to enter into productive assemblages with them.'⁷⁶

In chapter five of *Science and the Modern* World, titled the 'The Romantic Reaction,' Whitehead argues that romantic poets such as William Wordsworth provide us with a model of this ecological self *in situ*, in the continuum of nature. Whitehead quotes this passage from *The Prelude or, Growth of a Poet's Mind; An Autobiographical Poem*:

> Ye Presences of Nature in the sky And on the earth! Ye Visions of the hills! And Souls of lonely places! can I think A vulgar hope was yours when ye employed Such ministry, when ye through many a year Haunting me thus among my boyish sports, On caves and trees, upon the woods and hills, Impressed upon all forms the characters Of danger and desire; and thus did make The surface of the universal earth, With triumph and delight, with hope and fear, Work like a sea?⁷⁷

When Wordsworth's eye falls on static objects like cliffs, hills, caves and trees, it does not take reflective distance and glaze over as ours are habitually trained to do in front of the commonplace occurrence (like rain under a streetlight). The poetic persona of *The Prelude* does not presume that the importance of those objects is that they assimilate to

 ⁷⁵ Thomas Nagel, *The View from Nowhere* (New York: Oxford University Press, 1989) p. 4. See also FR, p. 8.
 ⁷⁶ Bennett, *The Enchantment of Modern Life*, p. 131.

⁷⁷ William Wordsworth, 'The Prelude: Book 1: Childhood and School-time', *Poetry Foundation* <https://www.poetryfoundation.org/poems/45542/the-prelude-book-1-childhood-and-school-time> [accessed 11 October 2020]

what he already considers important or that it is his observing eye that makes them important. What stands out in the poetic passage above is the sensitivity and respect with which Wordsworth approaches the scene. The hierarchical distinction between the human and his nonhuman fellow citizens 'in the sky / And on the earth' starts to weaken in ethically and ecologically beneficial ways when there is a sensitivity to the longstanding process of nature ('through many a year') and a recognition that those many producers and contributors of feeling have a rich experience of their own; they have value in and of themselves, beyond their utility to the human.⁷⁸ Wordsworth's deference is such that he sees the caves, trees, woods and hills as intensely animated with 'danger and desire,' 'triumph and delight' and 'hope and fear' as himself. These are not qualities one attributes to that which one considers to be inert objects ripe for the dominating. They are respectful markers of consideration towards what one acknowledges to be equal intensity of feeling and intrinsic value.

This passage from *The Prelude* is representative of Whitehead's interest in Wordsworth's work and in the literary romantic movement at large, in which he found resonant and vivid visions of 'the important facts of nature [which] elude the scientific method' (SMW, 84). The theme that piqued both Wordsworth and Whitehead was the mysterious 'Presences of Nature', that is, how objects of day-to-day life 'cannot be divorced from [their] aesthetic values', how they haunt and suffuse us and each other in the widest sense possible before they present themselves to analysis in the focused setting of chemical laboratories. The cumulative sense of nature (the unified whole created by the parts, and the presence of the whole exuded onto the transitory parts) in *The Prelude* in particular represents to Whitehead the fundamental cornerstone of his philosophy – the transition of things from one state to the other, and the non-linear evolution of all entities according to their encounters with each other and with the cosmos. The relationship of man with nature is thus encapsulated in a larger cosmological network, where the wide transitoriness of nature is recognised alongside the coherence of its intrinsic reality:

Remembering the poetic rendering of our concrete experience, we see at once that that element of value, of being valuable, of having value, of being an end in

⁷⁸ Adam Potkay, 'Wordsworth and the Ethics of Things', *PMLA*, 123.2 (2008), 390-404 (p. 391).

itself, of being something which is for its own sake, must not be omitted in any account of an event as the most concrete actual something. 'Value' is the word I use for the intrinsic reality of an event. Value is an element which permeates through and through the poetic view of nature [...] This is the secret of Wordsworth's worship of nature. Realisation therefore is in itself an attainment of value (SMW, 92).

Whitehead lauds Wordsworth's attitude to nature, his state of presumptive generosity towards his surroundings. And most insistently, he connects this aesthetic sensibility to the persona's appreciation of *value* of his concrete experience. If we are to sketch out something like a Whiteheadian environmental ethic, it is important to first extract a working understanding of how he mobilizes the very slippery concept of *value*, a 'loaded term, replete with connotations' which seems to come in as many versions and definitions as there are thinkers.⁷⁹ Broadly speaking, philosophical concern with value has focused on three concentrated issues: 1) On what grounds can we say that something is of value or has value? 2) Is value (particularly aesthetic value) objective or subjective, that is, does value reside intrinsically within an object or constructed out of what observers feel about it; and 3) How do we set value?⁸⁰ My interest here is to outline how Whitehead approaches these prototypical questions about the operation of value in concrete reality, always keeping in mind how a Whiteheadian approach to value can contribute to engagement with our planetary context.

Whitehead's approach to value is to see it as the natural result of *concrescence* and *feeling*. As discussed above, when an entity encounters the world and uniquely absorbs the varied data in its vicinity, we can say that this entity is 'feeling' the world. We should recall that for Whitehead, 'This word feeling is a mere technical term; but it has been chosen to suggest that functioning through which the concrescent actuality appropriates the datum so as to make it its own' (PR, 164). I *feel* when I have constituted the thing that I am feeling and therefore respond in some way that I would not have done otherwise. When the entity feels or interacts with its surroundings, it

⁷⁹ Halewood, *A.N. Whitehead and Social Theory*, p. 71. Further notable discussion of the wide-ranging philosophical concern with value can be found in J.N. Findlay, *Values and Intentions* (London: George Allen & Unwin, 1961) and E. Schaper (ed.), *Pleasure and Value: Studies in Philosophical Aesthetics* (Cambridge: Cambridge University Press, 1983).

⁸⁰ Tom Regan, *The Case for Animal Rights* (Berkeley, Los Angeles: University of California Press, 2004) p. 246.

allows those surroundings to affect or change it in some way. It's an intimate and even vulnerable process for the entity in question to have its experience swayed (whether minorly or majorly) by another. When an entity appropriates another datum, the concrete effect of the encounter reverberates like a ripple effect, setting off varied chains of aesthetic sensibilities.

This is the process by which nature communicates with itself. In the Prelude, for instance, it is apparent that the 'craggy ridge' is affected by the diverse elements around it, so much so that those elements constitute its specific character make it so that it resembles 'a living thing'. The cliff's encounter with the starlight and grey sky above it has a direct effect on its shadowy 'grim shape' and the way in which its total and irreducible existence asserts itself 'as if with voluntary power instinct,' 'with purpose of its own'. While the cliff is responding to its surroundings, it is becoming more and more itself by 'gathering together, that is, of making things hold together in a determinate way.'⁸¹ The cliff, as part of the larger cosmological society and as individual within it, re-enacts its past while moving forward in time with (minimal) creative novelty as it interacts with other entities. It endures, explains Stengers, because it succeeds in maintaining its individual way of being through an environment that never ceases to exert its changing influence on it. In the enduring cliff, we see a distillation of the 'voluntary power instinct' of the rock formation. Indeed, the 'craggy steep' enchants Wordsworth because he sees that its 'endurance is not only a fact: it is an accomplishment and an achievement.'82 It majestically asserts itself 'with purpose of its own' and the realisation of that purpose is its achievement (perhaps its sheer presence as one of the many 'enduring things' in nature is its purpose and achievement in this case). The cliff takes a unique perspective on the order of nature and it does so without any justification at all except for the fact that it exists, and it feels, responds and endures.⁸³ Thus, value is the experience of an individual being itself, 'being an end in itself, of being something which is for its own sake' given that it does not do so in a

⁸¹ Stengers, *Thinking with* Whitehead, p. 157. My emphasis.

⁸² Ibid.

⁸³ Judith Jones, *Intensity: An Essay in Whiteheadian Ontology* (Nashville: Vanderbilt University Press, 1998) p. 36. As a product of the world, any individual not only *has* a perspective of the world but *is* a perspective on the world.

vacuum but as a result of its appropriation of other data. In Nagelian terms, value is the contextual what-it-is-it-likeness of a thing.

Yet, to have value thus is not only to *have value for oneself*, but to *infect* and *be infected* by others, to 'shar[e] value intensity with the universe' (MT, 111). One's value is not to be kept for oneself but to be shared with others and for the whole. This dynamic plays out in Wordsworth's recognition that the sky, the earth and the hills are not inert passive matter, but they have a haunting capability, they non-consciously but agentically impress upon the character of the things around them, they have 'ministry'. The verb 'minister' is more familiar to twenty-first century ears as 'administer', meaning the active performance of a task or function unto one who receives said action.⁸⁴ The agentic sense of 'minister' is then coupled with 'haunt' (to make one's influence/ presence known) to emphasise that the earth, the hills and the 'Presences of Nature' are creators and shapers of the poet's 'boyish sports' and of each other. Here is a perfect picture of Whitehead's process ontology, painted by the feeling-poet he so admired.

So, while things in the world assert themselves for themselves, by doing so they cannot help asserting themselves for others, and then more generally for the wider context. As an eco-nihilist, I might keep this in mind next time I think that my action is valueless and will not change anything. The emotional disposition to cultivate in this respect would be sensitivity to the vectors of affect around me. One might bring one's attention to questions like why this person reacted the way they did or what historical and aspirational unconscious drives are at work in any given country. To appreciate the value of others is to empathize with them. One can be ecologically empathetic by slowing down to feel and consider these various vectors.

Ethics and Value

⁸⁴ This brings to mind Whitehead's influence on the social sciences, particularly in the philosophy of management administration and business ethics which is fueled by an investigation of entities as intrinsically valuable active experiencers rather than passive and mute objects onto which one applies methodological control. See Margaret Stout and Jeannine M. Love, *Integrative Process: Follettian Thinking from Ontology to Administration* (Anoka, MN: Process Century Press 2015).

The catch is that heightened empathy does not automatically translate into ethical behaviour. After all, it is entirely possible to sense what the intrinsic values of others are and still disregard the empathic feeling entirely. Clearly, though cultivating an appreciation for aesthetic value is a sound *basis* for ethical action, we are at least one step away yet. To clarify the point, I'd like to discuss the moral conundrum presented by the comedian Louis C.K.:

Transcript: I like the idea of being a good guy. Sometimes I have an opportunity to be a good guy but then I don't necessarily do it. I was on a plane once; I was flying first class [...] and a soldier gets on the plane. [...] I've never seen a soldier in first class in my life. It could be a full-bird colonel, he's between two fat guys in coach. I've never seen a soldier get on the plane and be like 'Yeah I'm in the army, fuck you.' No, it's like having an extra flight attendant, they help everybody put their shit up...Every time I see a soldier on a plane I always think, you know what, I should give him my seat. It would be the right thing to do, it would be easy to do, and it would mean a lot to him. [...] This guy is giving his life for the country (he thinks). Everything in his life system told him that that would be a great thing to do and it's scary but he's doing it and I should trade with him. I never have. I've never done it once. I've had so many opportunities. And here's the fucked-up part. I still just enjoy the fantasy. I was actually proud of myself for having thought of it! 'I am such a sweet man!' 'That is so nice of me' to think of doing that and then totally never do it.

This is a great example because it illustrates exactly the relationship between ecological empathy and ethical action. The foundation of doing the right thing is to empathize, to check one's privilege, to feel that the soldier deserves the first-class seat more than you. C.K. even details a step forward, he has an action plan based on his empathetic action. He resolves to give up his seat. But still, the conclusion of C.K.'s anecdote is that though he takes pride in his ethical-empathetic inclinations, he falls short of concrete ethical action and ends up chastising himself for it. As a comedian, C.K. plays it for laughs and perhaps this is one of times where it is funny because it's true. It resonates because it is a familiar moral condition – 'the spirit indeed is willing, but the flesh is weak'.

Ethics and intrinsic value have a long philosophical history of being coupled together. The general reasoning, going back to Aristotle's *Nichomachean Ethics*, is that if an individual has inherent value then that individual is worthy of ethical concern and respect. When we say that a group of people, e.g., the Maltese, or a set of abstract concepts, e.g., freedom and fairness have intrinsic value, what we are saying is that those people or those concepts cannot be overridden for the benefit of others, no matter how commendable those benefits might be. As the United Nations' Universal Declaration of Human Rights states: 'No one can take away your human rights,' and this specifically because they are *intrinsically* valuable and absolutely essential to the individual's flourishing as a human. Article 27 of said declaration reads: 'Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.' All human individuals have the right to benefit from cultural advancement, although whether they are subsequently denied this right by other humans is a different matter. When we talk about what is yours by 'right', what we mean is that which is yours already (intrinsically), even these rights have been suppressed, be it the right to education (Article 25).⁸⁵

Political discussion on value abounds here, particularly around the issue of how policymaking institutions like the United Nations decide which entities have intrinsic value, and what criteria they use to determine this. As we examine the relationship between value and ethical culture in this section (*Sittlichkeit*), it might be good to keep in mind that there are evolutionary bases for people to empathize with other individuals whom they view as similar to themselves.⁸⁶ Compelling studies suggest when oxytocin, informally known as the 'love hormone,' is released into the brain there is an increase in generosity toward others, feelings of trust, prosocial behaviour and empathetic concern. But these studies also reveal that oxytocin enhances the distinction between in-group and out-group, making people more cooperative and caring towards those they perceive more likely to be allies and conversely, ambivalent or even defensive towards

⁸⁵ United Nations, 'Universal. Declaration of Human Rights', United Nations

<https://www.un.org/en/universal-declaration-human-rights/> [accessed 22 January 2020] and Youth For Human Rights, 'United Nations Universal Declaration of Human Rights', *Youth for Human Rights* <https://www.youthforhumanrights.org/what-are-human-rights/universal-declaration-of-humanrights/articles-16-30.html> [accessed 21 January 2020].

⁸⁶ Martin L. Hoffman, *Empathy and Moral Development: Implications for Caring and Justice* (Cambridge: Cambridge University Press, 2000) pp. 19-21. See also D. J. Kruger, 'Evolution and Altruism: Combining Psychological Mediators with Naturally Selected Tendencies.' *Evolution and Human Behavior*, 24 (2003), 118-25.

those perceived to be substantially different from oneself. From an evolutionary perspective the inclusionary/exclusionary effects of oxytocin confer an advantage, namely, caregiving towards those in one's tribe and reluctance to bond with those who are unfamiliar and who might consequently be a threat. Neuroscientists Jennifer S. Mascaro and Thaddeus Pace and psychiatrist Charles L. Raison suggest that it might be pertinent to re-brand oxytocin as the 'tribal hormone' because of the strong unconscious bias it produces.⁸⁷ The question is if it is possible to surmount the 'not-like-us-ness' of others whom we perceive to be in our out-groups. The goal would be to foster empathetic recognition of intrinsic value where we are typically used to overlooking it. And in order to do that, we need to unpick this 'not-like-us' bias a little bit further.

I would like to clarify that I do not think it is not correct to say that a culture that is hyper focused on productivity is entirely desensitized to matters of value. On the contrary, if one's desirable end is the increased accumulation of capital, then sensitivity towards the instrumental value of any given object is key. In that context, the value of a thing can be dependent on whether the thing produces desired consequences or results towards some other good.⁸⁸ If a thing has pragmatic value, then, its worth is assessed relative to end-goal. This is a very useful concept to because it gives us the framework to talk about the grounds on which certain individuals are recognized as having some intrinsic value (which ought to be morally prioritized). On the flipside, we might well analyse what are the criteria on which one justifies judging others as having primarily instrumental value and/or disregarding harm done to them as "necessary" and "for the greater good".

In 2005, the celebrated animal rights philosopher Richard Ryder admirably argued that our almost total negation of the rights (read: intrinsic value) of other species *who can*

⁸⁷ Jennifer S. Mascaro, Thaddeus W. W. Pace and Charles L. Raison, 'Mind Your Hormones! The Endocrinology of Compassion' in *Compassion: Bridging Practice and Science: A Multimedia Book*, eds. Tania Singer and Matthias Bolz (Munich: Max Planck Institute for Human Cognitive and Brain Sciences, 2013 <http://www.compassion-training.org/en/online/files/assets/basic-html/page230.html> [accessed 30 September 2017]

⁸⁸ The distinction comes from the Aristotelian idea that what is Good can be distinguished on the basis of whether it has value 'when considered in isolation' or whether it is 'merely useful' for its consequences. Aristotle, *The Nichomachean Ethics*, trans. J. A. K. Thomson (London: Penguin Books, 1976) 1096b6-26.

feel pain cannot possibly be justified. For Ryder, if one attributes distress to an entity, then one implies that there is 'someone there' who is subjectively feeling pain and who accords value to the quality of their own life. Thus, suffering is the criteria upon which we should accord inherent value and ethical concern to other entities.

Many other qualities, such as 'inherent value', have been suggested [as a basis for attributing rights to others]. But value cannot exist in the absence of consciousness or potential consciousness. Thus, rocks and rivers and houses have no interests and no rights of their own. This does not mean, of course, that they are not of value to u*s*, and to many other painients, including those who need them as habitats and who would suffer without them.⁸⁹

Ryder's point is that painients (beings that feel pain, animals included) are welcome in the moral circle because the experience of a particular animal is valuable to the animal's own constitution as an individual. Thus, Ryder might consider the endeavours of the fashion or meat industry as overlooking ethical regard to the animal precisely because of their disregard of the animal's intrinsic value and their exclusive focus on the instrumental value of one component of animal (its skin or its flesh). It is also plausible that Ryder might argue in the same way vis-à-vis the destruction of the rocks and rivers that make up an animal's habitat, that is, that the habitat is not intrinsically valuable in its own right (and therefore its destruction is not of direct ethical concern) but because its destruction denies the intrinsic value of the painients which depend on it. Thus, the constitutive parts of the painients, including the various parts of their bodies or their habitat, are not here considered inherently valuable but valuable only by second remove, insofar as they contribute to the quality of the experience of the animal in question. Whitehead's words echo: '[...] of having value, of being an end in itself, of being something which is for its own sake' (SMW, 92). Morally speaking, our oppression of other species cannot be justified because those species' pain and distress exists in its own right, beyond its usefulness to others. This is the inherent value on the basis of which animals ought to be respected, protected and made the subjects of our moral frameworks. However, it is apparent Ryder's position is that rocks, rivers and houses do

⁸⁹ Richard Ryder, 'All beings that feel pain deserve human rights' *The Guardian*, 6 Aug 2005 <https://www.theguardian.com/uk/2005/aug/06/animalwelfare> [accessed 20 January 2020]. See also Richard Ryder, 'Painism: Some moral rules for the civilized experimenter', *Cambridge Quarterly of Healthcare Ethics*, 8.1 (1999) 34–42.

not have the inherent value that humans and animals share, precisely because they do not feel pain. The experience of rocks and rivers is not for their own sake but exists exclusively insofar as they contain instrumental resources for humans and other animals. 'Thus, rocks and rivers and houses have no interests and no rights of their own' and no ethical concern need be extended to them. This is a view which he calls 'painism'. All things are valuable, then, as the Orwellian phrase goes, but some are instrumentally so.

Ryder is far from the only moral philosopher who endorses the idea that inherent value exists in contradistinction to instrumental value. Tom Regan, for instance, defends the position that to say that humans and animals have inherent value 'is to say that we are something more than, something different from, *mere receptacles*.'⁹⁰ Like Ryder, Regan mobilizes inherent value to widen the circle of ethical concern from only humans to also include animals, particularly those that are eaten or trapped:

[...] we are each of us [humans and animals] the experiencing subject of a life, a conscious creature having an individual welfare that has importance to us whatever our usefulness to others [...] they [animals] too must be viewed as the experiencing subjects of a life with inherent value of their own.⁹¹

It is not morally appropriate, Ryder and Regan agree, for humans to exploit animals for their own ends since animals have inherent value which confers them with rights that *cannot* be overridden. The argument is compelling enough and gradually we started to see governmental Animal Welfare Committees updating outdated policies which only reflected the instrumental value of animals. When Richard Ryder makes his case for the expansion of value to animals, he makes it on the basis of consciousness or potential consciousness of pain. For his part, Tom Regan attributes value based on the broader criterion 'subject-of-a-life', meaning the unique consciousness and personal experiences of that specific subject. According to both of them, inherent value is tantamount to a point of view. Perhaps we have finally zeroed in on why 'what is it like to be a bat' is considered a coherent question, whereas 'what is it like to be a rock' is more for the

⁹⁰ Tom Regan, 'The Case for Animal Rights for Animal Rights' in *Advances in Animal Welfare Science*, eds. M.W. Fox & L.D. Mickley (Washington, DC: The Humane Society of the United States, 1986) pp. 179-189 (p. 185). My emphasis.

domain of fantasy or sci-fi. My best conclusion is that those who have that position have a conception of inherent value that relies on the cognitive status found in the animal kingdom as compared to its distinctive lack in the ecological setting of rocks and rivers. Ryder certainly seems to think so given his comment that since rocks and rivers do not have conscious experience of pain, they do not have rights: 'value cannot exist in the absence of consciousness or potential consciousness.'⁹²

Regan remains more open to the idea that there can be such a thing as non-cognitive entities with inherent value and consequently, worthy of ethical regard. Indeed, as he reviews the reasons why his 'subject-of-a-life' criterion is intelligible and nonarbitrary, he specifically makes comments on the task of further extending the value and moral system to non-cognitive entities. On that logic, he prudently advises those of us who would like to take up the task of attributing value to non-cognitive, non-biological entities to proceed, but to do so with caution:

Whether it [inherent value] belongs to other forms of life, including plants, or even to rocks and rivers, ecosystems, and the biosphere, are questions the rights view leaves open for others to explore, noting only that the onus of proof will be on those who wish to attribute inherent value beyond subjects-of-a-life to offer a principled, nonarbitrary, nonprejudicial and rational defence of doing so.⁹³

And elsewhere, in a foreboding tone that can hardly escape the notice of a graduate student writing on this very topic: 'While no one is denied the possibility of working out such an ethic, however, those who do it certainly have their work cut out for them.'⁹⁴ If you are reading this thesis it is for you to judge if this was a fool's errand or not. As it is, I take the Whiteheadian view that everything, even rocks and rovers, ecosystems, and the biosphere, has some value for itself, for others, and for the whole. With Regan's words of caution duly heeded, I submit that an environmental ethic based on process ontology responds to Regan's invitation to extend an account of inherent value to even to 'the most trivial puff of existence' (PR, 18).

⁹² Richard Ryder, 'Speciesism' in *Ethics, Humans and Other Animals: An introduction with readings*, ed. Rosalind Hursthouse (Oxon: Routledge, 2000) pp. 237-240(p. 237).

⁹³ Tom Regan and Carl Cohen, *The Animal Rights Debate* (Lanham: Rowman & Littlefield Publishers, Inc., 2001) p. 217.

⁹⁴ Nicholas Dent, 'Value' in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995) p. 895.

Chapter 5 – Aesthetic Education

Everywhere philosophies of instinct were dominant and, along with them, the spurious romanticism that prefers feeling to understanding as if the two could possibly be separate.

• Albert Camus, Resistance, Rebellion, and Death¹

Whitehead's vision of a value-intense world from the last chapter can now be worked into an ecological ethic that is invested in reconsidering certain 'instinctive emotions clustered around habits and prejudices' which exclude certain entities from valuesystems. (S, 68). Indeed, it is societal habit that we saw Ryder and Regan appeal to when they make their case that the inherent value and ethical regard of animals ought to be reassessed. And now, the boundaries of our collective value systems and moral regard are teetering on the edge of another reconsideration – this time with respect to developing an ethic of the environment, rather than an ethic for its use. Aldo Leopold's essay 'The Land Ethic' opens with a Homeric episode that is particularly pertinent to a discussion on an ethic of the environment. When Odysseus returns home from the Trojan War, he finds that a number of suitors had been courting his wife Penelope. Furthermore, he finds out that a number of his female slaves had been unfaithful towards him, their owner, by sleeping with these would-be suitors. So, Odysseus does much the same thing anyone would do when one's property is not serving them; he gets rid of his property, in his case by a prompt and unceremonious mass hanging. In the 12th century BCE, the intrinsic value that confers protection by the ethical structure had not yet been expanded to humans considered as property. As Leopold points out, Odysseus is not in the wrong particularly; he is acting according to the blind force that keeps his societal system together.² And those particular societal habits and prejudices dictated then that wives had intrinsic value whereas slaves are merely expedient. Yet as times changed, so did the boundary drawn around those entities deemed worthy of moral consideration, to the extent that we now look back at grievous exclusions in past societies' moral concern as "obviously wrong" or "oversights which we have now

¹ Albert Camus, *Resistance, Rebellion, and Death* (New York: The Modern Library, 1960) p. 48.

² Aldo Leopold, *A Sand County Almanac and Sketches Here and There* (New York: Oxford University Press, 1949) p. 190.

corrected". Given this historical pattern, it is entirely plausible (though not easy, by any stretch) for societal patterns and habits of valuation to change in the direction of extending intrinsic value and ethical concern towards entities which previously had not been included in that category. It is in that vein that I argue that a Whiteheadian ethic would have us recognize that so-called vacuous actualities like rocks have intrinsic, instrumental and cosmological value far beyond their instrumental use to us as humans.

We have also seen how Wordsworth's romantic poetry illustrates that craggy ridges and the 'inert' environment at large have their own 'subjective immediacy,' irrespective of the interests of others (PR, 29). The cliff from *The Prelude* has a voluntary power instinct of its own; it holds itself together in a determinate way. And it also asserts its influence onto other entities in its vicinity, including the persona, and is malleable to the influence of the lake and the light. And so, the ecosystem goes. The ecological empathy that I have been promoting in this thesis depends on something similar to Wordsworth's poetic perception. It involves a kind of sensitivity to value, that is, a sensitivity to: 1) how the thing asserts its own *intrinsic* value; 2) what affects the thing produces so that it is of *instrumental* value to its neighbours (in the cliff's case these could be: winds, currents, seas, crabs as much as humans); and 3) the cliff's role in the cosmological vastness it belongs to. 'What is wanted is an appreciation of the infinite variety of vivid values achieved by an organism in its proper environment [...] what we want to train is the habit of apprehending such an organism in its completeness' (SMW, 248-9). The purpose of this chapter is thus to set forth the main Whiteheadian insights on perception of value and connect them to an active ethical perspective for our contemporary times.

On the subject of perception as a key concept in Whitehead's philosophy, Steven Shaviro explains: 'On my reading of Whitehead, perception is a subset of causal processes more generally, while at the same time causal processes are themselves "felt," even unconsciously, as they are fed back into direct perceptual experience.'³ I have cited this passage often in the last few years that I have been studying and writing about Whitehead. In particular, it has been useful to note that in process ontology, causal

³ Steven Shaviro, 'Whitehead on Causality and Perception', <http://www.shaviro.com/Blog/?p=1274?> [accessed 11 August 2020]

process is an umbrella term which encapsulates perception. This means that *before* larger unities of power and influence (of techno-capitalism or of cultural zeitgeist, for instance) have the chance to take hold, the world is made up of sense data arranged in such and such sequence and pattern. These causal data points represent the most elemental of all impressions, the primary stuff of experience. Yet though they are rudimentary, these data points are most efficacious because they interlock with other interdependent data points. In Whitehead's own words,

The former mode [the mode of causal efficacy] produces percepta which are vague, not to be controlled, heavy with emotion: it produces the sense of derivation from an immediate past, and of passage to an immediate future; a sense of emotional feeling, belonging to oneself in the past, passing into oneself in the present, and passing from oneself in the present towards oneself in the future; a sense of influx of influence from other vaguer presences in the past, localized and yet evading local definition, such influence modifying, enhancing, inhibiting, diverting, the stream of feeling which we are receiving, unifying, enjoying, and transmitting. This is our general sense of existence, as one item among others, in an efficacious actual world (PR, 178).

Causal data points constitute each other and cause each other's creative evolution. By way of example, consider the way that great heat melts rocks until they boil, or great cold freezes rocks until they crack. Meteorological forces (or vectors, as Whitehead likes to say) enter the experiential field of the rocks –they scrape, mix, shatter and crush, quite literally causally effecting the landscape to evolve.⁴ When we speak of causal efficacy, we refer to the way that any given entity has emerged out of forces which may be long dissipated except for their efficacious legacies. Before the iconic Eiffel Tower became the symbolic reference point for an entire nation's identity, there were sedimentary rocks which underwent intense exposition to the combined action of meteorological elements like rain and heat, thereby metamorphosing into the iron ore that was to become the symbol of France.⁵ The point is that the lively and unconscious forces that act on any subject gather and focus unto the concrescent entity's being,

⁴ Melissa Hogenboom, 'Rocks get super-heated to 1000C under new mountains', *BBCEarth*, 20 November 2014, <http://www.bbc.com/earth/story/20141120-the-hottest-part-of-earths-crust> [accessed 14th July 2016]

⁵ N. A., 'Iron Ore – Hematite, Magnetite & Taconite,' Mineral Information Institute,

<https://web.archive.org/web/20060417160321/http://www.mii.org/Minerals/photoiron.html> [accessed 9 August 2020]

guiding its process of evolution. Shaviro goes on to cite Whitehead's 'mere technical' definition of feeling in order to highlight that the fact that evolutionary process (for instance, of sedimentary rock to iron ore) is causal. That is, external sense data (rain, heat and bacteria) are unconsciously 'felt' by the evolving rock.

Then, the rock's formal constitution (what it is in itself, for itself) and its enduring intrinsic value are transmitted body-to-body; to human bodies as well, 'for we feel with the body [...] the "withness" of the body is an ever-present, though elusive, element in our perceptions of presentational immediacy' (PR, 311-2). When we speak of causal efficacy what we refer to is the openness of one body to act in tandem with other bodies. And we know that consciousness is not necessary for this 'ever-present' yet 'elusive' element to take effect. There is a wealth of resources with respect to the horticultural world that can be mobilised to show how this basic mode of connectedness functions. For instance, a forest is made up of underground biological pathways that connect the different species in it and make it behave as though it were a single organism.⁶ Similarly, Michael Marder's book *Plant Thinking* is a fascinating metaphysical insight into a thought-free way of being, where causally efficacious sense data underpins the character and the evolution of the receptive body (e.g., the plant), even if this body is none the wiser about the process it is undergoing.⁷ In other words, the firs and cedars of a forest feel the flows of causal efficacy as 'dim and undetermin'd sense/Of unknown modes of being'. That is to say, they feel the effects of causality without having a clear and demarcated sense of them. Likewise, with humans. For instance, the poetic persona in Wordsworth's poem registers the mysterious affective tone of the brooding cliff that made his young hands tremble while rowing back to shore. He registers it... but only just.

That spectacle, for many days, my brain Work'd with a dim and undetermin'd sense Of unknown modes of being⁸

⁶ Peter Wohlleben, *The Hidden Life of Trees: What They Feel, How They Communicate*, trans. Jane Billinghurst (Vancouver & Berkeley: Greystone Books, 2016). See also, Suzanne Simard, 'How trees talk to each other', *TEDSummit*

<https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other/up-next?language=mg#t-38346> [accessed 12th May 2019]

⁷ Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University, 2013).

⁸ William Wordsworth, 'The Prelude: Book 1: Childhood and School-time', *Poetry Foundation*

The pulses of emotion are coming from every direction, enveloping the concrescent persona. Yet they are vague and elusive rather than clear and distinct. Engaged as it is in a promiscuous and efficacious interchange with the rest of nature, the cliff is the primary character, the star datum, of this particular drama. And though Wordsworth's persona is emotionally attuned to its haunting capabilities, he nevertheless remains only dimly aware. In the shortest terms possible, he – like any of us – feels more than he knows.⁹ Even in the case of an entity that has the capacity for consciousness, the perceptual mechanism being levelled here starts from the vague influx of things as its foundation. And it is not the case that this vague experiential influx is always imported into the ways we think and judge the data before us (S, 39). Whitehead is very clear as he unreservedly makes the case that it is all very well to appeal to clarity and distinctness as the structure with reference to which we know about the world. But first, sensuous richness is 'a variable factor only present in the more elaborate examples of occasions of experience' (AI, 176), such as the human species. Second, even in the case of elaborate occasions of experience, clarity and distinctness can only follow from vagueness. The 'basis of experience is emotional' even then (AI, 176).

Sociological, psychological and psychoanalytic studies abound attesting to the ubiquitousness of feeling compared to the slither of awareness. We feel attracted, embarrassed or afraid before we can label the emotion as such. Our bodies remember violence that our minds do not. We find ourselves tapping to a rhythm of a song or find something creepy without knowing exactly why. We even unconsciously inherit cultural normativities and ethical attitudes from generations past. 'Consciousness is the crown of experience,' writes Whitehead, 'only occasionally attained, not its necessary base' (PR, 267). So, it appears that we blindly receive aesthetic data from the environment around us. And blind we may be, but we still have the capacity to be receptive to sensa.

<https://www.poetryfoundation.org/poems/45542/the-prelude-book-1-childhood-and-school-time> [accessed 11 October 2020]

⁹ The studio album *Random Access Memories* by Daft Punk points to this insight in the lyrics 'Sweat, sweat, sweat; lose yourself to dance', where the combination of music and bodily fluid erupt in a bodily movement that certainly feels more than it knows. There are echoes between the phrase 'lose yourself' and the Kierkegaardian discussion about self-annihilation in Chapter 1. Also, on feeling in music, see Suzanne K. Langer, 'On Significance in Music' in A *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art* (Cambridge, Mass; Harvard University Press, 1942) pp. 204-245.
Or sensa, being the powerful conjunction of data that they are, press themselves upon, or seep through our perceptive faculties in the mode of causal efficacy. The influx may be vague, but it is not entirely opaque because their 'voluntary power instinct,' continues to press against (and sometimes even seeps through) our more vivid perception, as Wordsworth knew very well.

My reading of process philosophy is that it aims to promote the fundamental role of causal efficacy as a mode of perception. The benefit of proposing this lowest common perceptual denominator is that in showing that our bodies are part of the wider realm of nature to which we belong, the ties between our species and the rest of the environment are strengthened. As we talk about the basic perceptual modes of causal efficacy, there is an emphasis on the efficacious actual world before thought has entered the arena. But crucially, this does not translate to a fantasy of the 'world without us.'10 Quite the opposite, there is an inclusive spin here, as Whitehead's ontology explores the structure of the causal nexus and the place of consciousness in it. In this respect process ontology sticks out as distinct to other prevalent (epistemological) positions which conversely explore the structure of consciousness as the foundational perceptive mode, and only from then on, the place of the world in it. Descartes' legacy as the first modern philosopher, for instance, may be down to the fact that he had 'a general human weakness for explanations of what is incomprehensible in terms of what is familiar and well understood'.¹¹ He asks, how do we know what we know? His representative theory of perception involves clarity and distinctness as the primary and most basic form of perception. Entities with the capacity of judgement apprehend particular entities by relying on impressions which are characterisations of universals and make inferences accordingly. Without the inference, Descartes argues, all we have are vague impressions which are merely a disconnected series of different qualitative states, each awaiting consolidation in the human mind:

[...] I remember that, when looking from a window and saying I see men who pass in the street, I really do not see them, but infer that what I see are men, just as I say that I see wax. And yet, what do I see from the window but hats and coats which

¹⁰ Peter Gratton, *Speculative Realism: Problems and Prospects* (London and New York: Bloomsbury, 2014) p. 52.

¹¹ Thomas Nagel, 'What Is It Like to Be A Bat?', The Philosophical Review, 83 (1974), 435-450 (p. 445).

may cover automatic machines? Yet I judge these to be men. And similarly, solely by the faculty of judgement [*judicandi*] which rests in my mind, I comprehend that which I believed I saw with my eyes^{.12}

When I look at a man in the street, I believe that he is really there. I believe that he is neither a trick of an evil demon nor an inert automaton. And the reason that I can have such assurance in my belief is the intellectual operation of my cogito. The *judicium*, the faculty of analysis, inference or judgment is that which confers the status of 'reality' unto what could otherwise be a trick or mere 'appearance'. Reality is thus always once removed, mediated and conferred by judgement. Cartesian dualism prioritises the operation of thought as that which constitutes the world and its entities: 'I am, I exist is necessarily true each time I pronounce it or that I mentally conceive it'.¹³ The place of clear and distinct perceptions in presentational immediacy in Descartes' approach is fundamental, since the operations are directed from the thinker to the things that he constitutes by virtue of his having perceived them in the vivid perceptive ways available to him.

Whitehead agrees that perception in the mode of presentational immediacy displays reality in ways amenable to representational analysis, showing only the more or less clear and distinct surfaces of the world as they are presented to a reflective subject here and now. Perception in the mode of presentational immediacy affords superior clarity and definiteness. It is concerned only with a narrow segment from the swarm of sense-data, which in their deepest and vaguest character had been knocking on the door of our attention. It provides us with clearly demarcated representations, 'vivid, precise, and barren' (S, 23). This is the effective relation between causal efficacy and perceptual experience - presentational immediacy is an outgrowth from the complex datum implanted by causal efficacy. What was vague, ill-defined and hardly relevant is selected from and made distinct and well defined. The 'more aboriginal mode' of causal feeling is transmutated (but not eliminated) into an inrush of explicit qualities so that the throbbing of the causal world now appears as 'our immediate perception of the

¹² René Descartes, *Key Philosophical Writings*, trans. Elizabeth S. Haldane and G. R. T Ross (Hertforshire: Wordsworth Editions Limited, 1997) p. 146.

¹³ Daniel Kolak and Garrett Thomson, *The Longman Standard History of Modern Philosophy* (Upper Saddle River: Pearson Longman, 2006) p. 46.

contemporary external word' (PR, 178; S, 21). The difference between the organic and the inorganic environment then, is that organic entities have recourse to various perceptual modes.¹⁴ The basic experience of causal efficacy may be (but are not necessarily) coordinated into distinct, definite and controllable experiences by the peculiar vividness of presentational immediacy which thereby renders those experience apt for immediate enjoyment. Without the selective function of presentational immediacy, causal efficacy would swallow up our experience into the 'dim consciousness of half-sleep' or 'dim and undetermin'd sense/Of unknown modes of being'. In its sharpness, presentational immediacy acts like a focused lens and affords us important sensuous richness, but we must remember that these clearly demarcated representations are by definition, limited in what they reveal to us about the world.

Whitehead talks at length on the problems on resting exclusively on perception in the mode of presentational immediacy. Hume, and subsequently Kant, had conceived the causal nexus as derived from the presupposed sequence of immediate presentations, that is to say, they deemed presentational immediacy to be the primary fact of perception. Whitehead, however, maintains that the opposite is the case, and that causal efficacy is the 'more aboriginal form' (PR, 178). Without the foundational role of causal efficacy, he explains, presentational immediacy becomes oddly detached, cut off from the world that presented itself to the perceiver as a field of force exerting a unique influence on the sensibilities. Whitehead stands in opposition to the oversight of causal efficacy in favour of emphasis on presentational immediacy the history of philosophy of sense-perception:

Unfortunately, the learned tradition of philosophy has missed their [sensa's] main characteristic, which is their enormous emotional significance. The vicious notion has been introduced of mere receptive entertainment, which for no obvious reason by reflection acquires an affective tone. The very opposite is the true explanation. The true doctrine of sense-perception is that the qualitative

¹⁴ Animals and other species of the organic environment have recourse to presentational immediacy as well as causal efficacy since they appear able to objectify their environment into specific component elements in an individual experience. See Sydney E. Hooper, 'Whitehead's Philosophy: Theory of Perception', *Philosophy*, Vol. 19, No. 73 (1944), pp. 136-158 (p. 136.)

characters of affective tones inherent in the bodily functioning are transmuted into the characters of [external] regions (AI, 215).

A tree in the forest may not have the benefit of clear and distinct perceptions with which to discriminate or be selective, yet it has an affective tone which it transmutes to bodies external to itself. For instance, as ecologist Simard explains, trees which find themselves shaded can request carbon from other trees (even across species) so that there is interdependent communication and transference from one to the other across the entire forest. There is an influx of influence from other vaguer presences – localized yet evading definition – each influence modifying, enhancing or inhibiting the concrescent subject (AI, 226). The stream of feeling is thus received, creatively modified and unified with the actual. This is the given, uncontrolled basis upon which any entity's character – the birch, the fir and the cedar, as well as our own characters – weans itself. Even in our own experience,

[...] there is always the dim background from which we derive and to which we return. We are not enjoying a limited dolls' house of clear and distinct things, secluded from all ambiguity. In the darkness beyond there ever looms the vague mass which is the universe begetting us (ESP, 95-96).

Yet for Descartes, it would seem that in the absence of sophisticated perceptive judgement, there is only irreducible brute matter. Contrary to the trees described here, whose primitive data of experience are complex, of dim and vague, the classical view of sense-perception sees matter as self-sustaining and self-sufficient, awaiting the interpretative character of *judicio* to validate its place in reality: 'And when we conceive of substance, we merely conceive an existent thing which requires nothing but itself in order to exist' (PR, 49f.). The problematic consequence of overlooking causal efficacy, especially when viewed from the lens of impending planetary collapse, is that if matter may be relegated to the category of the senseless, valueless and purposeless, then the world can be seen exclusively from the instrumental (and potentially exploitative) point of view imposed upon it by judgement. Furthermore, the doors are then wide open to the eco-nihilistic approach to the world described in the last chapter, which erroneously holds nature as a meaningless complex of facts which is apart from us and, indeed, which does not involve us at all.

Cosmological Empathy

In the context of our environmental predicament the eco-nihilist has already understood that the value system of human exceptionalism must be erroneous. The pressing reality of tremendous destruction has already been made amply evident. And yet, despite – or perhaps because of – the intense threat of anthropogenic planetary collapse brought about specifically by that value system, the eco-nihilist is loath to invest in any new value system. The passive slog that the eco-nihilist wades through is not made up of scepticism surrounding the facts, but rather of emotional weariness from already having invested in a failed value system. This is not a refusal to adopt an ecological ethical stance, but rather a wariness of adopting any stance at all. A passive nihilist longs for meaning but does not dare to *hope* for it.

The question of hope thus becomes central. The future looks uncertain, like a long impossibly foggy corridor in which one can only feel one's way around, unknowing of what could possibly be lying in wait.¹⁵ A terrifying corridor indeed, and one that the self-preserving eco-nihilist is understandably motivated to walk around. On one hand, there is the narrative detour that Gaia will look after herself, that the big rock in space will persevere according to its own laws which are oblivious to the earth's inhabitants. On the other hand, there are those who, in full view that all will most certainly *not* be fine, take the route of indulging the capitalist chaos that has led us here to begin with. 'Consume like crazy, only drink from styrofoam, and throw handfuls of dead batteries into our oceans so the impending apocalypse can hurry up and get over with.'¹⁶ Both of these stances are faulty because they point to a reluctance to enter that dense, foggy tunnel of planetary uncertainty. One says to oneself "there is nothing of value", or rather than making an emotionally risky 'flight into the thin air of imaginative generalisation' in search for new values (PR, 5). But ungrounded thin air and uncertainty are, in fact, the very locus of hope, as Rebecca Solnit shrewdly points out:

¹⁵ This turn of phrase is inspired by Olafor Eliasson's 'Your Blind Passenger', an installation comprising of a 90 meter-long, densely fogged tunnel which provides visibility only up to 1.5 metres ahead.

¹⁶ Charlie Amber (interview with Steven Shaviro), 'Is Consuming Like Crazy the Best Way to end Capitalism,' *Vice*, 19 Mar 2015, < https://www.vice.com/en_au/article/gq87mw/is-consuming-like-crazy-the-best-way-to-end-capitalism-050> [accessed 22 January 2020].

When you recognise uncertainty, you recognise that you may be able to influence outcomes – you alone or you in concert with a few dozen or several million others. Hope is an embrace of the unknown and unknowable, an alternative to the certainty of both optimists and pessimists. Optimists think it will all be fine without our involvement; pessimists take the opposite position; both excuse themselves form acting.¹⁷

Solnit's approach to the unknowable is that it invites action. She describes it as the 'spaciousness of uncertainty,' evoking the second phase of Whitehead's well-known suggestion that the philosophic method is analogous to the flight of an aeroplane. And in that vast scope of thin air and spaciousness, anything is possible, including an imaginatively heightened sensitivity to the aesthetic value 'of each pulsation of actuality' (MT, 89). What is needed now is a method whereby we can cultivate in us the feeling of the feeling of another. We are so used to not being cognizant of the primitive character of emotion in others that we have difficulty attuning or feeling conformally with another. The broadening of boundaries that is required can happen if we *feel differently*, that is find avenues to heighten our sensitivities to the vibrancy of our fellow creatures in the buzzing world, since they are, after all, already clamouring at the door of our attention. This is the required shift between passive and active nihilism. Though one can no longer have faith in the value system which promotes the human as the centre of value, this does not mean that therefore there is no value at all. We might, however, shift slightly from Nietzsche's suggestion that the "free spirit" ought to invent their own values. Whitehead's procedure does not involve creating new value but attuning to the value already intrinsic in nature. Still, the same Nietzschean caution applies – any re-valuation will come at odds with the ideology of the prevailing age and will always be undertaken in a landscape already shaped and fraught by socioeconomic interests. And the same vitality which will stoke productive action in place of passivity also applies. To live is to evaluate, to have no values is to be dead.

Aesthetic Education

¹⁷ Rebecca Solnit, *Hope in the Dark: Untold Histories, Wild Possibilities* (Chicago, Illinois: Haymarket Books, 2016) p. xii.

But paradigm shifts don't come easy. They must be cultivated, as Whitehead suggests, through aesthetic education. He gives an informative definition of what he means by the term:

What I mean is art and aesthetic education. It is, however, art in such a general sense of the term that I hardly like to call it by that name. Art is a special example. What we want is to draw out *habits of aesthetic apprehension* [...] Thus "art" in the general sense which I require is any selection by which the concrete facts are so arranged as to elicit attention to particular values which are realisable by them. [...] *The habit of art is the habit of enjoying vivid values* (SMW, 199-200).

At the centre of Whitehead's guide to heightened empathetic sensitivity is the imperative to constantly stimulate one's aesthetic disposition. Art is described generically as a *felt* act, as one way whereby the environment is reorganized into a new pattern so as to elicit attention to aesthetic values. He is suggesting that art is a kind of activity where one selects and attends in order to feel the feeling of others, to feel with others, to empathize. Art is a special example which encourages us to looks at things with special focus and reactivity. In the nineteenth century boys from well to do cultivated homes would travel in Italy in France and Greece and their homes were set amid beauty. Now that this is no longer the case, Whitehead suggests infusing art in everyday life using schools to produce a love of music, enjoyment of drama and some joy in beauty and colour. An Olafur Eliasson installation piece moves you around it, drives you to relate to it from various angles. You are activated by it. Mirror neurons fire away in what the neuroscientist Vittorio Gallese calls embodied simulation: 'Even the observation of the static image of someone else's action can serve to activate beholders' internal motor representations of the same actions.'18 The movement of the other is reenacted internally. As the body encounters the subjects in a painting or in a sculpture, it becomes invisibly tied to them. Embodied simulation thus allows a direct apprehension of the relational quality linking space, objects and the actions of others to our body.¹⁹

 ¹⁸ Vittorio Gallese, 'Bodily Framing' in *Experience: Culture, Cognition and the Common Sense*, eds. Caroline Jones, Rebecca Uchill, David Mather (Boston, MA, MIT Press: 2016) pp. 327-248 (p. 336).
 ¹⁹ Ibid.

But art is a special example. We don't need to spend all our time in art galleries to experience embodied simulation. In fact, the ecological imperative is that we engage in generalised aesthetic practice outside of the art gallery, that we meet the aesthetic value of the world by being sensitive to our surroundings and making the invisible emotional ties visible for ourselves. This is what sensitivity is – the acute feeling the feeling of another, catching a glimpse of the energetic vitality of things that we generally conceive as inert. Take, for instance, commonplace occurrences such as the rocky coastline on a small Mediterranean island, or the gentle and constant rain in an urban Welsh city. These two are everyday features of one's life in either of the two settings, so every day in fact, that they are easily overlooked amidst the cacophony of other things competing for their place in the foreground of our awareness. To take up the task of aesthetic education is to consider the dramatic sweep, the complex unity or the delicate subtlety of the rocks as if one were considering a vivid piece of art. We can ask "to which forces are [the rock's] sensitivities tuned: rain, salts, acids, winds, tides, heat? How does the becoming form of the rock instigate new force – shape the wind, give direction to new currents, absorb or dissolve salt solutions?"²⁰ In other words, the primary learning aim of a successful programme of aesthetic education is for its lifelong pupils to cultivate their sensitivity to the interactive connections of the ecological network.

Putting one's finger on the pulse of the planet's élan vital does not put humans at the centre of the world again, but it does serve to reinsert him in the tapestry of vitality. Whitehead is a crucial part of this equation – he like Bergson, like Deleuze, like Barad and Bennett, anticipates the 'positive ontology of vibrant matter' and how strangely vital things rise up to meet us, how the human and the rock overlap, and how they slipslide into each other. One moral of the story is that we are also nonhuman and the things too, are vital players. The hope is that the story will enhance receptivity to the things that surround us and infuse us and will generate a more subtle awareness of the complicated web of dissonant connections between bodies and will enable wiser interventions in that ecology and finding ways of *becoming* 'that respect the multiperspectival reality of the becoming planetary community.'²¹ Sensitive and passionate

²⁰ Andrew Goodman, *Gathering Ecologies: Thinking Beyond Interactivity* (London: Open Humanities Press, 2018) p. 84.

²¹ Whitney A. Bauman, *Religion and Ecology: Developing a Planetary Ethic* (New York: Columbia University Press, 2014) p. 61.

explorative involvement in planetary matters may be heightened through aesthetic education. A person immersed in the 'habits of aesthetic apprehension' will strive to be alert to the feedback loops that shape the things around her. She will seek to be aware of the many mutually self-modifying sequences that form a particular phenomenon from a myriad of possibilities.²² From that sensitive and emotionally explorative vantage point, she can see the rock-world relation anew and reflectively reappraise herself as a creative product of the fluxes of vector-feeling emanating from the coastal rocks. What was once only dimly felt is now intimately received: she is inexorably intertwined with her ever-evolving surroundings.

The Aims of Aesthetic Education

When we speak of aesthetic feeling what we refer to is the openness of one body to conform with the formal constitution (what the actual entity is in itself, for itself) of the other body. Throughout this thesis, I have been discussing how low-grade physical entities such as rocks have been erroneously treated as vacuous, as if they were 'devoid of subjective immediacy' (PR, 29). This thesis, by contrast, has followed the Whiteheadian impulse to repudiate any such notion. Not only are the rocks not vacuous, but they are also products and creators of physical feeling. Their experience evokes a felt response by all their conformal neighbours, be those winds, currents, seas, crabs or humans who pass by them on their commute each day. As a thing to be felt by others, a rock presents itself as an object of feeling. It attracts emotional attention. The rock's subjective form, consisting most fundamentally of emotional feeling, is transmitted body-to-body, 'for we feel with the body [...] the 'withness' of the body is an ever-present, though elusive, element in our perceptions of presentational immediacy.' (PR 311-12). Correspondingly, in aesthetic education the first aim is to foster the sensitivity of the body as it follows the trace of feeling already emanated by another body. 'Withness' is a state of emotional togetherness, a moment of visceral resonance and intimate, peculiar association. It is no accident that Whitehead's neologism 'withness' resembles the word 'witness' – for in emotional togetherness one finds the most penetrating expression of being a witness, that is, of testifying or giving testimony

²² Alan Peacock, 'Toward an Aesthetic of the Interactive', *Digital Creativity*, 12.4 (2010), 237-246.

to the experience of the other by virtue of having felt it with them. Far from being vacuous, all actualities feel/respond to each other as a matter of ontological necessity. 'Apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness' (PR, 167). The vector transmission of feeling is the most fundamental, primitive dimension of physical experience, as 'elusive' as it is 'ever-present'. If one were looking for an ontological lowest common denominator, or a tool to combat econihilist isolation by connecting the human to 'the most trivial puff of existence,' this would be it:

The primitive form of physical experience is emotional – blind emotion – received as felt elsewhere in another occasion and conformally appropriated as a subjective passion. In the language appropriate to the higher stages of experience, the primitive element is *sympathy*, that is, feeling the feeling *in* another and feeling conformally *with* another (PR, 162).

That's the trick: we must attune to the ever-present, blind and primitive emotional bonds that ground our subjective passions. This is the second aim of an aesthetic education: the cultivation of the awareness that we are always already 'feeling the feeling in another', thereby ourselves becoming live testimony to the notion that what had previously been regarded as vacuous is actually alive in its own subjectivity, vector transmission of experience and creative agency (PR, 222).²³ Aesthetic education means seeing the flux of events, the connectedness of things, the relationship of values in one's life and in the world. In view of the rocks, it means the capacity to intuit that the rocks' feelings affect our becoming character, and consequently, the character of the feelings that we emanate outwards for other feeling-subjects. Earlier in the thesis, we discussed Mascaro, Pace and Raison's paper which shows that when there are feelings of openness toward others, the body releases oxytocin which serves as a positive reinforcement to prosocial behaviour and empathetic concern. They preceded with the caveat that oxytocin hits are more hit-and-miss around entities less familiar to us because a bond is not yet established.²⁴ What we can now add is that in-groups can be expanded – the idea

²³ See also: 'The feelings are inseparable from the end at which they aim; and this end is the feeler. The feelings aim at the feeler, as their final cause. The feelings are what they are in order that their subject may be what it is. Then transcendently, since the subject is what it is in virtue of its feelings, it is only by means of its feelings that the subject objectively conditions the creativity transcendent beyond itself' (PR, 222).

²⁴ As a reminder, the out-group presents a potential threat, or at least it is perplexing enough that

is that aesthetic education, or the awareness that 'the basis of experience is emotional' can generalise what practitioners see as belonging to their (cosmological) in-group, and thereby heighten or generalise our spirit of generosity towards that larger group. Aesthetic education is notable for this kind of expanding and mobilising force, for making the intrinsic value of objects typically perceived as far, evidently felt. It turns out that what was considered as out-group was merely the result of value being absconded by dimness, or by the abstraction through which we come to our narrower perceptions.²⁵ Attunement to art, or more broadly, having the habit of aesthetic apprehension, means expanding the in-group in the sense that it heightens sensitivity to others' value that was already there, but which had previously been overlooked. Transitions from the hunting-gathering life to the agrarian society to the urban society brought new modulations of behaviours and a broadening to the group to which inherent value and empathetic regard was habitually ascribed. So too, aesthetic education promises a revision and revitalised extension of valuation and ethical concern.

We may find ourselves frustrated at the subtlety of Nature, or aesthetic feeling is ubiquitous but awareness of it is few and far between. Like the Earth's slowly rising temperature, the affective capacity of certain objects is real enough to be felt but not dramatic enough to capture and rouse empathetic and ethical attention. On this score, Rob Nixon makes a sound link between one's passivity toward out-groups and the *anonymous* nature of certain ecological disasters: "How can we turn the long emergencies of slow violence into stories dramatic enough to rouse public sentiment and warrant political interventions, these emergencies whose repercussions have given rise to some of the most critical challenges of our time?"²⁶ Nixon's difficulty is rooted in a similar discussion to the one above: there is a restriction on what aesthetic value rises

to attention perhaps because certain effective tones are merely vague, and not dramatic

compassion there does not yield the same type of chemical gratification, whereas the in-group already constitutes occasions from our past experience, that is to say we are already familiar with the feelings those who most directly share our own formal constitution.

²⁵ I take the point that there may still be resistance to feeling value. Here the attunement to the feeling of others may take the form of accepting the challenge constituted by the other; or having the ethos to not see divergent identities as threats. See M. Kanat et al., 'Oxytocin Attenuates Neural Reactivity to Masked Threat Cues', *Neuropsychopharmacology*, 40.2(2015), 287–295.

²⁶ Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, Mass and London, England: Harvard University Press, 2011) p. 3.

to be salient enough to provoke emotional response. In this case also, what is necessary is a distinctive and habitual effort to broaden one's frame of reference, to find a narrative drama in that which appears ordinary and mundane and to consider things that one normally does not think about as belonging to the in-group as worthy of concern. That narrative can broaden a person's sense of shared feeling beyond the predictable limitations of in-group/out-group. That is to say, when one asks questions like 'to what sensitivities is the rock attuned?' or even the Nagel-inspired 'What is it like to be a rock?' one is extending the range of individuals to which one's emotional attention is attuned to. It can contribute to changing one's compassionate dispositions, motivations and attitudes towards the previously excluded from empathetic care. And when we deliberately attempt to find narrative drama that can provoke co-feeling, we see more and more individuals as belonging to the in-group, when there are studies that show that such enhanced co-feeling can even provoke that same in-group oxytocin release in the brain. We can add then, at least one requirement to the programme of aesthetic of education: it must follow the aeroplane trajectory we referred to in the opening pages of this thesis: leaving from the empirical ground of observed rock, flying into the air of asking what 'is it like to be a rock' and landing so that things are felt again as dramatic and as part of the ingroup.²⁷ Furthermore, a programme of aesthetic education will be continual - there will be millions of these flights made so that they become habit, so that empathy with the world will become habit. It is crucial that aesthetic apprehension is habitual. And the insistence on habit-forming is important too. Aesthetic education, and consequently, aesthetic-based ethics is a distinctly disciplined form of affect, a deliberate training out of 'the habit of ignoring the intrinsic worth of the environment' and into 'the habit of apprehending organisms in their completeness' (SMW, 196, 200). It involves a dedicated and continual fostering.²⁸ Whitehead's maximized empathy procedure should be approached while keeping this possibility of transformation of habits of valuation in mind. A Whiteheadian ethic aims

²⁷ See Michael Halewood, 'Situated speculation as a constraint on thought' in *Speculative Research: The Lure of Possible Futures*, eds. Alex Wilkie, Martin Savransky and Marsha Rosengarten (London and New York: Routledge, 2017) pp. 52-64.

²⁸ Michel Foucault, *Technologies of the Self: A Seminar with Michel Foucault*, eds. L. H. Martin, H. Gutman and P.H. Hutton (London: Tavistock Publications, 1988) p. 18 and William E. Connolly, *Neuropolitics: Thinking, Culture, Speed* (Minneapolis: University of Minnesota Press, 2002) p. 169. Examples might be mediation, dream work, psychotherapy, arts-based like music dance, film or psychedelic work.

at heightened sensitivity to value, *and* of making a habit of both feeling and maximising the value of experience.

Aesthetics and Ethics

We have already said that Whitehead finds the metaphysical foundation of the world in aesthetic experience, in the vividness of felt quality rather than in cognitive experience. 'All order is therefore aesthetic order, and the moral order is merely certain aspects of aesthetic order' (RM, 104). So, according to Whitehead, the broadest descriptions of the world can be subsumed under aesthetics, with morality being narrower, more specific and subsumed under its broader cousin. Accordingly, the task is to determine which aspects of the aesthetic order define the moral order – that is to say, how are aesthetics and ethics governed by the same fundamental principles and what is it, apart from their respective broadness and narrowness, that defines each of them as distinct. To begin with, we might point to the words of semiotician Charles Pierce, who also identifies echoing principles at work in aesthetics and ethics: 'Esthetics is the science of ideals, of what is objectively admirable without ulterior reason [...] Ethics, or the science of right and wrong, must appeal to Esthetics for aid in determining the *summum bonum*. It is the theory of self-controlled, or deliberate conduct.'²⁹ For Pierce, as for Whitehead, aesthetics is notable for its display of value for its own sake. Where ethics is 'selfcontrolled', aesthetics needs 'no ulterior reason', and is characterised by the organic interaction of various elements. Ethics is a measured and deliberate expression with respect to value, but the judicious deliberateness harkens to aesthetics, which is in free play, and 'exists for its own sake, as the intrinsic reaping of value.' (MT, 184).

But what kind of conceptual bridge is required so that the broadness of aesthetics can translate into the specificity of ethics? Brian Henning's *The Ethics of Creativity* is important in that it emphasises the translatability of aesthetics to ethics. Echoing Whitehead's triadic view of value (for oneself, for others and for the whole), Henning shows that the aesthetic value achieved in the creative process is never merely confined to the entity as subject but is always extended to the entity as superject, so that value

²⁹ Charles S. Pierce, *Collected Papers*, eds. Charles Hartshorne and Paul Weiss, vol. 1 (Cambridge Mass.: Harvard University Press, 1934) p. 191.

permeates through and through, to other future occasions and to the entire whole.³⁰ And yet notwithstanding such widespread dispersion, even in the aesthetic context there is a sense of unity of the many elements which come to concrescence in one actual entity. The data (and the mental feelings they give rise to) are subsumed under one (one individual) yet retain their differences. It is this unity that allows for the integration of the physical and the mental feeling and therefore accounts for the entity's advances into creative novelty.

Aesthetic experience, then, operates universally under the principle of identity that emerges from contrast with other individuals. That is to say, entities are a unity in diverse multiplicity, according to the principle of the One and the Many. Whitehead's ethic of feeling is constituted by the same principles. To have an aesthetic experience is precisely to be sensitive to the value of another occasion in the aesthetic continuum. The ethical task is likewise, to make the value of the other occasion vivid to oneself, or to refine one's sensitivity to value so that one is concerned with values that go beyond oneself. Although one is always concerned with one's own self-realisation as the feelingtone of self-valuation, one is also always concerned with the value of others in the sense that this contributes to one's own self-valuation. However, the ethical component is in the habitual deliberateness of sensitivity to the value of others, which then brings an individual in touch with others and with the entire universe of things. Aesthetic-based ethics is thus rooted in attentiveness to social intercourse. On this score, Henning suggests that Whitehead's moral philosophy has some convergences with Aristotelean virtue ethics, in particular in the emphasis of cultivation of positive habits of appreciating value as it already exists in nature.³¹ An ethic of feeling depends, first and foremost, on one's sensitivity, appreciation and respect to the intrinsic value of others, and this, according to Whitehead, can be helped by a formative aesthetic education.

Furthermore, the aim of this sharpening of one's appreciation to the intensity of experience of others is to safeguard and maximise the value that is possible in each

³⁰ Brian G. Henning, *The Ethics of Creativity: Beauty, Morality and Nature in a Processive Cosmos* (Pittsburgh, PA: University of Pittsburgh Press, 2014) p. 134-5. See also 'An actual entity is at once the subject experiencing and the superject of its experiences. It is subject-superject and neither half of this description can for a moment be lost sight of' (PR, 29).

instance – *summum bonum*, as Pierce puts it. The ethics in this respect lies in accepting social responsibility, in understanding that one has the capacity not merely to identify value but to *enhance* the quality of experience of others. 'The greater part of morality hinges on the determination of relevance in the future' (PR, 44). The sensitivity that needs to be amplified then, is not merely where value exists in others and may have been overlooked but also to relevance, to the potential effect of the present maximisation of value on the future. Here, the moral agent is spotlighted as the superject; what bubbles to the surface is their potential for affect. Within the Whiteheadian scheme, an ethical decision is thus also a creative decision which emerges in contrast to what already is and towards the actualisation of the wider intensity of experience of actualities.³² In summary, an action is morally appropriate if it achieves the most value in the situation taken as a whole (cosmologically). This is what is meant by expanding the boundaries of our ethical systems. What is entailed is a redefinition of the whole by the inclusion of non-cognitive individuals in the whole. Our primary obligation is to affirm the value of the whole cosmos, including its human and its nonhuman and non-animal systems. This is what Catherine Keller calls 'ethical universalism' - the ethical significance of human conduct is cosmological (not metaphysical like Plato or Kant). The moral worth of our action is the measure of our connection to reality which *is* the natural world.

The Call of Romance

The title of this section borrows a phrase from Whitehead's *The Aims of Education*, in which one aim is to 'make vivid the call of romance' (AE, 41). The core of that book is Whitehead's rejection of the prevailing model of education based on 'text-book knowledge of subjects' (AE, 29), which as far as he's concerned, can only engender the dry and passive reception of 'inert ideas' (AE, 1). He argues, instead, for a *rhythmic* model of learning, involving three cycles: romance, precision and generalisation. Romance is the stage where the student is stirred with desire to 'sail with Odysseus' across the seas of new subject-matter (AE, 16).³³ In romance, the topic 'has the

 ³² Daniel D. Williams, 'Moral Obligation in Process Philosophy' in *Alfred North Whitehead: Essays On His Philosophy*, ed. George L. Kline (Lanham, MD: University Press of America, 1989) pp. 189-195 (p. 190).
 ³³ The sailing across the seas of Romance, with the help of the spoken word of a mother or of some wandering bard comes first, before the reading of Homer (AE, 16).

vividness of novelty, [which] holds within itself unexplored connexions with

possibilities half-disclosed by glimpses and halfconcealed by the wealth of material' (AE, 17).³⁴ Precision is where one's relationship with the subjectmatter ferments by exactness and technique; and generalisation is the synthesis of the previous cycles, where one approaches abstract problems by throwing what has already been learnt into fresh combinations. The aim of education is to stimulate the energetic current of these three cycles, away from passive stagnation and towards emotional invigoration. We



can imagine education *qua* romance, precision and generalisation tirelessly 'turning and turning in the widening gyre,' coming finally to the apex, which for Whitehead is the 'comprehension of the art of life'. By the 'art of life', Whitehead means *activity* that expresses the full extent of the individual's *potentialities* in the face of her actual environment (AE, 39). The rhythmic nature of education, then, initially provoked by romance, is poised to maximise potentialities and produce activity. It's a mobilising and energising antidote for the passivity engendered by the linear accumulation of knowledge. And just when we think the job is done, the apex of one vortex leads straight into the middle of the other's base, and the habitual rhythms of education start again.

What lessons can green education and awareness campaigns learn from Whitehead's model of education? Perhaps that stoking action and change in behaviour is not so much a matter of 'transmitting the facts' but of helping the rhythmic flow of progress along. It's not to say that scientific research and its key findings do not have their place, just that there is another element – *the element of romance* – that is often missed by these campaigns, because their method of education relies too heavily on the 'premature stage of precision' (AE, 39). If the purpose of green educational campaigns is to talk econihilists out of their complacency, it is not enough to reveal scientific truths and expect that the rational force of bare facts will be so compelling as to inspire ethical action. Instead, what is needed, at least initially, is a spark of 'motive power' which can bring

³⁴ Notice the uncertain, half-disclosed and half-concealed nature of hope. Hope is like an axe breaking down doors without fully knowing what is possibly on the other side. Solnit, *Hope in the Dark*, p. 5.

the value which is already in the world to our emotional attention (AE, 40). If the econihilist's disenchantment is a symptom of her frustrated desire to feel herself as part of a world saturated with value, then what better tonic can there be than the romantic approach - the salient features of which are its capacity to provoke alertness to value and feed one's 'tumultuous desire for merging personality in something beyond itself'? (AE, 40). In the immediate grips of romance, one feels the call of the world more intensely, that is to say, one becomes more sensitive or sympathetic to the world's aesthetic intensities. In its capacity to launch the ship of Odysseus, romance elicits one's awareness of their embeddedness, of their 'feeling the feeling in another and feeling conformally with another' (PR, 162). This is what Whitehead calls sympathy but could just as easily have called empathy: the primitive form of physical experience, received as felt elsewhere on another occasion and conformally appropriated as a subjective passion (PR, 162). Empathy has been defined as an ability to feel and acknowledge the feelings of another, leading to an attuned response from the observer. In general researchers identify two types of empathy: cognitive empathy (detached acknowledgement and understanding of a distressing situation based on a sense of duty) and affective empathy, which, while containing each of the elements of cognitive empathy, extends to an acknowledgement and understanding of a person's situation by 'feeling with' the person. Affective empathy has action embedded within it. One does not merely acknowledge the value of another but feels its vividness and is compelled to respond in compassion, with feeling. (etymologically – con (with) passion (feeling)).

Whether we focus on *affectivity* and call it empathy, or on the *withness* and call it sympathy, the reaction we are looking for is the rendering of an emotional exchange that has already happened in high definition. The role of the stage of romance is not to stoke aesthetic sensitivity or ontological empathy (that is happening, whether one likes it or not) but to foster attention to it, or enchantment by it – to cultivate sympathy. This is how I understand Whitehead's appeal to 'make vivid the call of romance' – as a wholesale indulgence of the eco-nihilist's already existing 'tumultuous desire for merging personality in something beyond itself' and a timely reminder that one's self is a diffused, distributed, and composite thing, ecological from the get-go, always part and parcel of a larger, fractious process of *natura naturans* (AE, 40). Thus, the paradigm shift of empathy is a crucial step on the way to seeing oneself both as embedded within

a climate-dependent ecological network *and* as complex creatures with significant planetary presence and a responsibility of care. Whether we are talking about formal education or general life-experience, art and aesthetic sensitivity provides us with vivid apprehensions of value and the life of the spirit (this latter not understood strictly in a religious sense but in the sense of the quality of life as a whole).

When your population widely appreciates what art can give – its joys and terrors – do you not think that your prophets and your clergy and your statesmen will be in a stronger position to when they speak to the population of the love of God, of the inexorableness of duty, and of patriotism? (AE, 41).

Unless we make vivid the call of aesthetic romance, Whitehead seems sure that the life of the spirit will decline as will political and ethical activity. The life-force of the whole system is weakened. Perhaps this accounts for the widespread dispiritedness that people feel with regards to their elected leaders. In 1929, Whitehead predicted that in the future, historians will write that Russia's fall 'issued from the spiritual blindness of her governing classes, from their dull materialism, and from their Pharisaic attitude to petty formulae of statesmanship' (AE 41). These words are uncomfortably close to home as we see that political leadership often skips out on forms of wonder and curiosity with regards to the world they are entrusted to protect and serve.

And yet, moral behaviour, Whitehead tells us, comes from the subjective element; from within, not from without. That is to say, perhaps one ought not rely on the external factors – on politicians honouring the call of aesthetic romance, for instance – in order to overcome the emotional and ethical despondence that is so troubling to us in our individual lives. Sensitivity must be felt by the student herself; discipline is *self*-discipline and fruition is the outcome of the student's own initiative (AE,39). In *Aims of Education*, as in *Process and Reality*, Whitehead privileges the becoming of an occasion (the student) for its own sake, for its intrinsic value. It is the student themselves (and in this context, I would venture to say that we are all students) who must accept the *response-ability* that feeling the inherent value of another confers upon them. A teacher's role is akin to that of the midwife – to elicit and support that which was always-already awaiting release but remaining respectful of the fact that action is ultimately 'the voluntary issue of free choice' (AE, 30). Likewise, a green campaign

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informed by Whiteheadian principles of rhythmic education, starts with the special dimension of romance, excitement, wonder and curiosity. It is necessary that an aesthetic education's first move is to awaken the student to the aesthetically immediate vivid apprehensions of value of the 'the most trivial puff of existence', specifically on the basis of 'the common fact of value-experience, as constituting the essential nature of each pulsation of actuality' (MT 111).

The Next Stage

At that stage, aesthetic education can proceed only if the students accept the responsibility that comes with romance. Such responsibility may come in the form of the injunction 'do no harm', as Whitehead seems to be hinting at here: 'By reason of this character, constituting reality, the conception of morals arises. We have no right to deface the value-experience which is the very essence of the universe' (MT, 111). And elsewhere, 'The second stage is governed by the private ideal, gradually shaped in the process itself; whereby the many feelings, derivatively felt as alien, are transformed into a unity of aesthetic appreciation immediately felt as private. This is the incoming of 'appetition', which in its higher exemplifications we term vision' (PR, 212). What we are dealing with here is the ageless philosophical dilemma of the one and the many. Once we broaden the world of moral concern to all the entities that reside within it, the political practice we live by must hold together the reality of individual autonomy (be it our own, or others') and the communal interdependence of those individuals. In other words, we must make sure that our actions both uphold the fledgling social habit of respecting individual value experience and reflect the broader system of valuation which is the essence of the world. What is at stake is a *new covenant* that each of us makes with each other and with the cosmos based on an ecocentric ethic in favour of a flourishing Earth.

As with the Faustian myth, the covenant that resulted in the modern globalised economy discounted the future and instead placed great value in maximising short-term personal preference and is ultimately a suicidal commitment. There is a commitment to 'limitless growth, limitless wants, limitless wealth, limitless natural resource, limitless energy and limitless debt'.³⁵ Similarly, the modern commitment to mastery of nature has us viewing earth as a source of raw materials for production and manufactured capital and a dump for waste. And crucially, it is now incumbent on us to break this societal contract and replace it with something else. A contemporary covenant cries out for a change of heart. Here, Michel Serres speaks fervently for a new social contract in place of an old one which fails to acknowledge and protect the existing bonds between us and the world:

Through exclusively social contracts, we have abandoned the bond that connects us to the world, the one that binds the time passing and flowing to the world outside, [...] the bond that allows our language to communicate with mute, passive, obscure things – things that, because of our excesses are recovering voice, presence, activity, light. We can no longer ignore this bond.³⁶

On the governmental scale, there have been many attempts at such a covenant. For instance, the IUCN Draft International Covenant on Environment and Development is a joint initiative between the International Council of Environmental Law and IUCN Commission on Environmental Law. This is an illustration of an integrative effort combining international organisations and the business community's bonds with the totality of the environment. There is a sense of duty, in the sense that it is legal framework which turns on obligation, yet references are also made to the ethical imperative of preserving and protecting the 'intrinsic values of biological diversity'.³⁷ This document may be considered a response to the call for a new ecocentric approach that seriously codifies the flourishing of the 'mute, passive, obscure' ecological backdrop and the interdependence of the entities.

But on the personal scale, the word covenant judiciously sediments the realisation of value of others beyond efficient, mutual self-interest. In that sense, the covenant at issue here is not as broad as the legal framework that the Earth jurisprudence indicates. But it is perhaps deeper insofar as it is enacted on individual scales of deliberate

³⁵ Wendell Berry, 'Faustian Economic: Hell Hath No Limits' in *Harpers Magazine*, May 2008, pp. 35-42. ³⁶ Michel Serres, *The Natural Contract*, trans. E. MacArthur and W. Paulson (Ann Arbor: Michigan UP, 1995) p. 39.

³⁷ Klaus Bosselman, 'Human Rights and the Environment: Redefining Fundamental Principles?' in *Governance for the Environment: Global Problems, Ethics and Democracy*, eds. B. Gleeson and N. Low (New York: Palgrave, 2001) pp. 118-134.

transformation, self-conscious choice and commitment. It is a code, as Emile Durkheim argued, a deep 'non-contractual element' bond that reflects moral relationships, which exceeds mutual self-interest and yet is accepted as binding and has its basis in fellow feeling.³⁸ It is empathy that sparks covenants, not mere contractual obligation which one follows out of some sterile form of Kantian duty, or mutual self-interest which protects only the instrumental value of each entity. This is important for the eco-nihilist, for whom no passing into law, no IUCN legal framework will be effective in the same way that civil rights or the equal marriage act are written into law does not mean that racism or homophobia are wiped out. Similarly, when it comes to nurturing our relations with the world for positive impact, the felt ethical obligation must come from an acceptance of the bond from within and not from without. Put differently, if I do not feel the intrinsic value of the rock, then ethical norms will be alien to my experience and will gain no foothold. I would then be such a person who may follow the categorical rule out of pure duty but without a basis in fellow-feeling. The point at issue here is not the passing of multinational laws then, but the importance of methods like aesthetic education for nurturing sensitivity of feeling and for heightening the social bonds of empathy, respect, sympathies between diverse groups, clarifying basic priorities and noting commonalities in fundamental preferences. This is what is meant by the individual covenants that we make with each other and with the Earth – it involves a complex array of profound emotional experience and a commitment to the maximisation of the intrinsic, relational and cosmological value found therein. In other words, it involves the Whiteheadian journey from aesthetics to ethics.³⁹

Finally, this is what Whitehead means by the word 'democracy' in *Process and Reality*: 'we find ourselves in a buzzing world, amid a democracy of fellow creatures' (PR, 50). *Demos*, as in the Greek term used to designate the assembled public, the *public* now being an expanded dēmos, including all feeling and self-valuing organisms and their distinct possibilities of co-evolution with others, guided by their own intrinsic aesthetic agency. *Unconscious* aesthetic agency, but agency nonetheless – sensuous, not

³⁸ Emile Durkheim, *The Division of Labour in Society*, ed. Steven Lukes, trans. W.D. Halls (London: Palgrave Macmillan, 1984) pp. 162, 324-5.

³⁹ J. Ronald Engel, 'Property: Faustian Pact or New Covenant with Earth?' in *Property Rights and Sustainability: The Evolution of Property Rights to Meet Ecological* Challenges, eds. David Grinlinton and Prue Taylor (Leiden/Boston: Martinus Nijhoff Publishers, 2011) pp. 63-86 (p. 66).

contemplative but still very much purposeful, driven and creative. Vacuous actualities were erroneously dubbed so because they appeared, to Newton for instance, to be wholly inert and, in his words, 'massy, hard and impenetrable'.⁴⁰ Yet as we have seen, individual entities are organism-like in their creativity. The rock receives external data points and creates itself. And insofar as it is shows up as a data point for other entities it is also creative of others. A representative democracy provides citizens with the freedom necessary for this kind of self-creation and creation of others. It is open to the creative influence of the cosmos by representing the freedoms of those entities, rather than tyrannically monopolise the freedom of others for the benefit of a non-representative few.

But is it not the case that our admiration of democracy and our dislike of tyranny and despotism presuppose the limitations of human knowledge and goodness? Because power tends to corrupt and because no one person is sufficiently wise to govern alone we share the responsibility and privilege of governing.⁴¹

Westphal's argument for democracy is that no one citizen of the world possesses sufficient wisdom and goodness to govern well by themselves. Tyranny attests well to the corruption that ensues when one individual monopolises power and determines which intrinsic values are to be left out (at best) or weakened and minimised (at worst). Having admitted that humans are prone to using power to benefit themselves at the exclusion of others leads Westphal quite naturally to the conclusion that power must therefore be divided up to protect and maximise the interests of the many. It is on this reasoning that we have a preference for democracy (power of the many) over oligarchy (power of the few) or autocracy (power of the one). The ideal Whiteheadian cosmopolitical blueprint retains this democratic impulse towards shared rule for the benefit of the many. In a democracy no one individual and no one group gets the dubious tyrannical privilege to determine and monopolise power. Every member of the community has creative freedom of themselves and, with others, meaningfully participates in the larger cosmic whole. In order to be ecocentrically moral then, an ecodemocratic paradigm must first, acknowledge that the world is a pluralistic continuum of multiple, overlapping value-laden individuals; a continuum 'like a sea' as

 ⁴⁰ Isaac Newton, quoted in John Faram, *Essay on Man's Ideas of Power* (New York: HardPress, 2018) p. 64.
 ⁴¹ Merold Westphal, 'Temporality and Finitism in Hartshorne's Theism,' *The Review of Metaphysics*, 19.3 (1966) 560-61.

Wordsworth puts it. Second, such a political system has a crucial aim: maximising value, understood in each of the triadic senses entity's self-importance, its extension to others and its role in the cosmological whole.

For civic republicans, in cases of conflict, public values always take precedence over private, and the common good is the ultimate value. From this point of view, our liberal democracies, dominated by massive concentrations of democratically unaccountable economic power and with political participation largely reduced to voting for parties (frequently indistinguishable) every few years, are farcical.⁴²

Our ethical consideration must take cosmological value into account, that is, our obligation is to consider what would achieve the most inclusive, complex and unified whole for all the individuals involved. Etymologically, democracy indicates the rule of the people for the people. Yet the major civilizational advance and the novel modes of reorganisation are now pointing us to a way of rule which prioritises the cosmos and which presses our attention to the whole ecological civilisation. A cosmocracy is concerned with the overlapping entanglements of the cosmos.⁴³ It is concerned with how we co-inhabit the earth when 'we find ourselves in a buzzing world, amid a democracy of creatures' (PR, 50). As citizens of a cosmopolitical democracy with the benefit of reflection on our participation in the expanded demos, the ethical task is not to attempt to rationally bridge the unbridgeable chasm with the Other or to smooth over diverse parts of experience so that there is no discord.⁴⁴ The aim is rather to coexist with all earth's creatures, to proffer respect and allegiance to other entities such that there is 'a harmony of the diverse parts of the world to achieve a complex and unified whole that is both beyond its parts and yet not destructive of them; moreover, by participating in such a unity, the value experience of each part becomes more intense.'45

⁴² Patrick Curry, *Ecological Ethics: An Introduction* (Cambridge: Polity Press, 2011) p. 180.

⁴³ Henryk D. Skolimowski, 'Cosmocracy As the Next Stage in The Development of Democracy', *World Affairs: The Journal of International Issues*, 7.2 (2003), 133-151.

⁴⁴ From a Jamesian perspective achieving cosmological unity is actually undesirable as it would dampen the creativity of our human co-existence.

⁴⁵ Henning, pp. 147-148.

Conclusion

Throughout this project, I have reflected on the hypothesis that the individual who understands themselves as fundamentally distinct from the ecological network is one who is not inclined to participate in it. In the last chapter, I outlined an emphasis on aesthetic education as a counter to such feelings of alienation. The aim of this kind of education is to guide the self-development of its students by making evident a sense of value that already exists in actual entities. It works by taking the forms of romantic wonder and tumultuous desire and making apparent that the experiential streams of human individual and the value-laden objects which lie beyond them (the human individuals) are in fact merged (AE, 62-63). Thus, a basic and creative attachment is formed where one did not exist before. There is plenty of pathos in this fusion, as indeed there must be, if it is to serve as the launching foundation of the project of attunement to the environment. The Whiteheadian metaphysical structure that we have explored here has similar pathetic force, and with its emphasis on enquiry on the most basic cases of experience provides a launching pad for a richer and more inclusive way of regarding the world with aesthetic appeal. Both aesthetic education and process metaphysics as whole, get their power from each entity's fundamental cosmological orientation towards 'relationships, interactions, and processes within the totality of being'.1 The rhythmic, process-type cycles of education (as well of reality and the investigation of it) all get their spurs onwards with lures and curiosity for novel syntheses of feeling.

Having made the case for nonhuman subjectivities in the first half of the thesis, the second half was dedicated to blockages and aesthetic education as a broad facilitating model for new modes of responsiveness. I have discussed metaphor as one such 'technique of the self', where the aim is a representative and connective link (in the medium of linguistic image) either between self and other, or observed links between others. But there are varied other in 'techniques of the self' which use the visceral register and, in so doing, work on establishing one's collective self by reaching into embedded dispositions and remain below the level of conscious scrutiny. One example

¹ Thomas E. Hosinski, *Stubborn Fact and Creative Advance: An Introduction to the Metaphysics of Alfred North Whitehead* (Lanham, Maryland: Rowman and Littlefield Publishers, Inc., 1993) p. 3.

is the late nineteenth century practice of hypnotherapy. Jean-Martin Charcot was fascinated with the unconscious parts of the nervous system and developed a technique to study it that remains poorly understood to this day. Charcot's work in physiological psychiatry was negatively evaluated because unconscious mental processes were seen as vague, evading respectable definition. Hypnotherapy joins poetry, meditation, sports and other states of flow as 'techniques of the self' which work at the subliminal level and 'through which existing identities can be stabilised, new identities permitted, or new formations enabled'.² Going forward, this project opens a window to several fascinating ways of studying the endeavour of going beyond oneself by increasing sensitivity to the affective tone of experience. Art, drama 'and joy in beauty of form and colour' convey something of the significance of microprocesses that occur without our attention being necessarily devoted to them. So too, do other non-ordinary states of consciousness like meditative trances and psychedelic therapies open up new realms of reverberation of the unconscious multiplicities and point to the variety of intersecting subjectivities in the world.³ Similarly, within the frame of behavioural and organisational science, Mihalj Csikszentmihalyi describes the state that performers and athletes reach when they are attuned with their instruments in creative workflow as directly opposed to anxiety and worry.⁴ In those cases, psychological links are drawn between sensitivity to atmospheric infusions and as such optimal reception to their environment and openness to experiential involvement.⁵

These cases can offer specific case studies into the way that the individuals' sensesaturation is expressed or 'translated' back into social intelligibility is also important, as it offers as direct as possible a way to trace how enhanced responsiveness makes the felt connection with the world evident and communicable. The aesthetic experience involved in mass, crowd activity is a particularly fertile field. As a large receiver of

² David Campbell, 'Identity, Difference, and the Global: William Connolly's International Theory' in *The New Pluralism: William Connolly and the Contemporary Global Condition*, eds. David Campbell and Morton Schoolman (Durham and London: Duke University Press, 2008) pp. 289-304 (p.296).

³ Leonard Gibson, 'The LSD Experience: A Whiteheadian Interpretation', *Process Studies*, 7.2(1977) 97-107.

⁴ Mihaly Csikszentmihalyi and Susan A. Jackson, *Flow in Sports* (Champaign, Illinois, Human Kinetics, 1999); Mihaly Csikszentmihalyi, *Beyond Boredom and Anxiety: The Experience of Play in Work and Games* (San Francisco: Jossey-Bass, 1975).

⁵ Mihaly Csikszentmihalyi, *Flow and the Foundations of Positive Psychology: The Collected Works of Mihaly Csikszentmihalyi* (New York and London: Springer, 2014) pp. 15-16.

experience which is not aware of itself as such, 'the crowd takes in qualities of startlingly powerful nature, through its animacy, impersonality and size.'⁶ From collective rhythm keeping to protest-music, to marches and crowds of seemingly unconnected individuals shouting in unison, the supposition is that through engaging in these practices one discovers that their private self is in fact a deeply connected self. Furthermore, these activities plausibly open individuals up to contestability – we may expect resistance and conflict, but also surprises, new connections and shifts in emotional tone. One finds that the privacy of an object arises out of the coming together of many strands of influences to create one singular enduring object (PR, 35). The aesthetic educational experience is one that makes the 'concrescence' (literally the growing together) of objects evident, so that there is a lived understanding that the defining characteristics of any individual are shown to be 'gradually shaped in the process itself' (PR, 301).

For the person doing metaphysics, there is a constant concern with the question of 'the one and the many' because the universe of experience includes beings that are not so different from each other, yet unique in the sense of 'what-they-are'.⁷ In response, process metaphysics shows every entity to be distinct yet very much relational and depending on its sociality for its continued 'gradually shaped' individuality. There is always a push back and a push forward, and always questions to be asked about the one, the many, and their relationship. The dialectic of 'the one and the many' or the individual and the whole introduces a socio-political outlook which understands 'the individual *one* as always situated in the context of the *many* and as both constituted by and constitutive of this many'.⁸ In our global times, it is crucial that a system of thought invites attention to the way that objects are organised into groups, and the ways that ties of the collective that can maintain or dismantle unities.

Furthermore, we require a firm metaphysical foundation that accounts for, or at least is concerned with, the communal element amongst diverse objects. The concern with non-

⁶ Mary Esteve, *The Aesthetics and Politics of the Crowd in American Literature* (Cambridge: Cambridge University Press, 2003) pp. 16-17.

⁷ Gareth B. Matthews and Marc S. Cohen, 'The One and the Many,' *Review of Metaphysics*, 21(1968) 630-655.

⁸ Robert Grossmark and Fred Wight (eds.), *The One and the Many: Relational Approaches to. Group Psychotherapy* (New York and London: Routledge, 2015) p. 3.

isolated members with positive regard towards the community can serve as timely guidance as several branches of philosophy deal with the interfaces of human/ nonhuman relationships. Such a system of thought is compatible with the aims of environmental philosophy, which links nature to the human and groups them together in a coherent system of thought: 'A philosophy is a general theory which explains or justifies actions, policies or positions [...] an environmental philosophy can be defined as a general theory linking humans, nature and values.^{'9} For environmental philosophy, the groundwork laid down by metaphysical reviews of our most basic assumptions about what kind of process nature is and our relation to it, serves as a base for questions about our ethical responsibility beyond ourselves as individuals and towards the social contexts of our habitats. Such an ethical response would have a direct relationship to the distinct value carried by the non-human world. What's more, it would need to balance the moral significance of the (non-human) community with those of (non-human) individuals. There is also the not-so-small matter that conceptions of human-nature relationships have been shifting considerably since the seventies, when there was a rumbling of a consensus amongst scientific circles that rising global surface temperatures are a massive destabilising force for nature. 'Sometime around 1975, the equilibrium, or balance-of-nature worldview in ecology gave way to one in which nature is constantly changing, often chaotically and in which violent disturbance is normal and healthy, not an abnormal and pathological, occurrence.'10 With respect to the climate crisis ahead, twenty-first century ethical theories have the added difficulty of humans' troubled relations with their non-human environments. In light of this, it is even more important to lay down foundational theories concerning comprehensive ecological relationships. Arne Næss represents an approach to eco-philosophical outlooks which has been attentive to the 'relational totalfield'.¹¹ Like Whitehead's system of thought, Næss' deep ecological philosophy affirms the value already implicit in the world but pivots away from value as merely an instrumental concern and focuses his emphasis on aesthetic encounters with nature on its own terms, that is to say, its intrinsic value. On the other hand, the metaphysical

⁹ Andrew Brennan 'Introduction' in *The Ethics of the Environment*, ed. Andrew Brennan (Aldershot, Dartmouth,1995) p. xv.

¹⁰ J. Baird Callicott, *Beyond the Land Ethic: More Essays in Environmental Philosophy* (Albany, New York: State University of New York Press, 1999) p. 9.

¹¹ Arne Næss, 'The Shallow and the Deep, Long-Rage Ecology Movement: A Summary,' *Inquiry*, 16(1973) 95-100 (p. 95).

system advanced here can be put to fruitful comparison with social ecological philosophy, which 'see nature as essentially creative, directive, mutualistic, fecund, and marked by complementarity, not "mute," "blind," "cruel," "stingy," or "oppressive."¹² It would be interesting to see how such philosophies balance their concepts of the 'inwardness of life' – particularly when talking about entities like rocks or seas that are not living and breathing – and the common ecological community. Finally, it would be interesting to see how these eco-philosophies, which 'see ecocommunities as participatory communities', approach problems like human passivity and abstentions from such participation which Murray Bookchin warns, runs the antithetical risk of the devolution of the individual as 'a homogenized thing, passive, obedient, and privatized, which makes for a submissive personality and a manipulable constituent.'¹³

At the foundation of the affinities between process and environmental philosophies, there is a constantly pruning and picking at this paradoxical and often difficult relationship between discrete units and their affective force in the societies they form a part of. This is all very well and good for the metaphysician and the environmental philosopher, but what do these theories have to do with the individual who feels small and alienated from any sense of efficacy in their community? This thesis has pointed to the need for a metaphysical foundation in communal participation, and the importance in investing in the stimulation of ecological selves by fostering sensitivity to and allegiances with larger circles of (non-human) individuals.¹⁴ In this vein, architectural critic Michael Sorkin published a book called '20 Minutes in Manhattan', which traces the commute from his home to his studio in New York. With the aims of overcoming the disenchantment of the social world brought about by progressive rationalisation, Sorkin wrote about paying special attention to the historical and communal details of his neighbourhood:

In terms of local politics and the psychology of participation, this essentially elective investment has a positive result, increasing our stake in both the building and the neighborhood. Such long-duration presence also has the effect

¹² Murray Bookchin, *The Modern Crisis* (Philadelphia: New Society, 1986) p. 57.

¹³ Ibid., pp. 35-36.

¹⁴ Regarding low participation in communal activity and potential incentives for collective action, see Grant Jordan and William A. Maloney, *Democracy and Interest Groups: enhancing Participation?* (New York: Palgrave Macmillan. 2007) pp. 66-69.

of making us all more knowledgeable from both an historical perspective and from that of detail about the place we live. Our stability thus leads to a heightened and strengthened sense of participation, to an increase in loyalty, to a cementing of community.¹⁵

Sorkin's emphasis on the emotional orientations that encounters with small, easily overlooked details reminds us of the aesthetisation of everyday life as a way to conceive of and explore the commingling of social identities. It was in this corresponding *flaneur*like spirit which privileges the aesthetic experience in one's surroundings that, in an effort to make the research that led to this thesis land in a pragmatic sense, I organised a series of slow, silent walks where the pace was set by the group of individuals and their various sensuous perceptions of the non-human (natural and urban) individuals along the way. In short, the walks were intended to highlight the same generalising function from individual to other to cosmos which we find in Whitehead's work, in order to loosen the bifurcations and 'the tensions between self and other, the individual and the crowd, past and present, near and far, movement and statis, desire and control'.¹⁶ Away from the academic setting, such an endeavour retains this project's emphasis on an ontology that recognises that the primitive base of experience – even the experience of the shared environment (the city) – is a matter of blind feeling before it is ever a matter of cognition. Going forward, there are opportunities to promote the merging of blind emotion with directed mindfulness of the affective and efficacious responses elicited by our surroundings. What I have in mind is involvement in artistic and grassroots political projects which motivate 'the primitive element [of] sympathy, that is, feeling the feeling in another and feeling conformally with another' (PR, 162). Such a motivation fits with a secular process ethos which does not see divine gods or sovereign kings and queens holding and disseminating decontextualised value. Instead, such prescriptions of value are always already immanent within primitive and concrete, physical experiences. A future project influenced by the process view advanced here might thus work with the express aim of renewing the intensity of the individual's *feeling-with* the value-saturated microcosms they are embedded in.

¹⁵ Michael Sorkin, *Twenty Minutes in Manhattan* (London: Reaktion Books, 2009) p. 46.

¹⁶ Max Silverman, *Facing Postmodernity: Contemporary French Thought on Culture and Society* (London and New York: Routledge, 2002) p. 68.

Bibliography

- Alfsvåg, Knut, 'The commandment of love in Kierkegaard and Caputo', *Neue Zeitschrift für* Systematische Theologie und Religionsphilosophie, 56.4 (2014), 473-488
- Ahmed, Sarah, *Queer Phenomenology: Orientations, Objects, Others* (Durham: Duke University Press)
- Amber, Charlie, 'Is Consuming Like Crazy the Best Way to end Capitalism,' *Vice*, 19 Mar 2015, < https://www.vice.com/en_au/article/gq87mw/is-consuming-like-crazy-the-best-way-toend-capitalism-050> [accessed 22 January 2020]
- Ambrose, Susan A., Bridges, Michael W., DiPietro, Michele, et. al., *How Learning Works: Seven Research-Based Principles for Smart Teaching* (San Francisco: John Wiley & Sons, Inc: 2010) pp. 126-127
- Amin, Ash and Thrift, Nigel, *Arts of the Political: New Openings for the Left* (Durham and London: Duke University Press, 2013)
- 'Alan Watts On Prickles and Goo', *YouTube*, 15 Dec 2012, ">https://www.youtube.com/watch?v=D4vHnM8WPvU> [accessed 16 September 2019]
- Arendt, Hannah, The Human Condition (Chicago and London: University of Chicago Press, 1998)

Aristotle, *Metaphysics*, trans. Hugh Lawson-Tancred (London: Penguin, 1998)

—— *The Nichomachean Ethics*, trans. J. A. K. Thomson (London: Penguin Books, 1976)

- Atkinson, Anthony B., *Inequality: What Can Be Done?* (Cambridge, MA: Harvard University press, 2015)
- Backhouse, Roger E. and Bateman Bradley W., 'A Cunning Purchase: The Life and Work of Maynard Keynes' in *The Cambridge Companion to Keynes*, eds. R. E. Backhouse and B.W.
 Bateman (Cambridge: Cambridge University Press, 2006) pp. 1-18
- Baker, Alan, 'Are There Genuine Mathematical Explanations of Physical Phenomena?', *Mind*, 114 (2005), 223-238 http://dx.doi.org/10.1093/mind/fzi223
- Barresi, John and Martin, Raymond, 'History of Prologue: Western Theories of the Self in *The Oxford Handbook of the Self*, ed. Shaun Gallagher (Oxford: Oxford University Press, 2011) pp. 33-58
- Bauman, Whitney A., *Religion and Ecology: Developing a Planetary Ethic* (New York: Columbia University Press, 2014)

- BBC Radio 4, 'Ian McEwan on "The Cockroach", *Today*, 24 Sep 2019 <https://www.bbc.co.uk/programmes/p07p51ys> [accessed 24 September 2019]
- Bennett, Jane, *The Enchantment of the Modern World: Attachments, Crossings and Ethics* (Princeton and Oxford: Princeton University Press, 2001)
- —— *Vibrant Matter: A Political Ecology of Things* (Durham and London: Duke University Press, 2010)
- Bergson, Henri, *Creative Evolution*, trans. Arthur Mitchell, (New York: Henry Holt and Company, 1911)
- —— *The Creative Mind: An Introduction to Metaphysics*, trans. Mabelle L. Andison (Minneola, New York: Dover Publications Inc, 2007)
- Berry, Wendell, 'Faustian Economic: Hell Hath No Limits' in *Harper's Magazine*, May 2008, pp. 35-42
- Betta, Michela, *Ethicmentality: Ethics in Capitalist Economy, Business and Society* (Dordrecht: Springer Science + Business Media B. V., 2016)
- Bookchin, Murray, The Modern Crisis (Philadelphia: New Society, 1986)
- Bosselman, Klaus, 'Human Rights and the Environment: Redefining Fundamental Principles?' in *Governance for the Environment: Global Problems, Ethics and Democracy*, eds. B. Gleeson and N. Low (New York: Palgrave, 2001)
- Braidotti, Rosi, 'Body-images and the Pornography of Representation' in *Knowing the Difference: Feminist Perspectives in Epistemology*, eds. Kathleen Lennon, Margaret Whitford (London and New York: Routledge, 1994) pp. 17-30
- Brassier, Ray, *Nihil Unbound: Enlightenment and Extinction* (Hampshire and New York: Palgrave Macmillan, 2006)
- Brennan, Andrew, 'Introduction' in *The Ethics of the Environment*, ed. Andrew Brennan (Aldershot, Dartmouth, 1995)
- Brentano, Franz, *The Four Phases of Philosophy and Its Current State*, eds. Barry Smith and Balázs Mezei (Amsterdam and Atlanta, GA: Rodopi B. V., 1998)
- Butler, Judith, 'A "Bad Writer" Bites Back', *The New York Times*, 20 Mar 1999 <https://archive.nytimes.com/query.nytimes.com/gst/fullpage-950CE5D61531F933A15750C0A96F958260.html> [accessed 25 November 2020]
- Cabot, Zayin, *Ecologies of Participation: Agents, Shamans, Mystics and Diviners* (Lanham, Maryland: Lexington Books, 2018)

- Callicott, J. Baird, *Beyond the Land Ethic: More Essays in Environmental Philosophy* (Albany, New York: State University of New York Press, 1999)
- Campbell, David, 'Identity, Difference, and the Global: William Connolly's International Theory' in *The New Pluralism: William Connolly and the Contemporary Global Condition*, eds. David Campbell and Morton Schoolman (Durham and London: Duke University Press, 2008) pp. 289-304

Camus, Albert, Resistance, Rebellion, and Death (New York: The Modern Library, 1960)

Clarke, John and Cochrane, Allan, 'The Social Construction of Social Problems' in *Embodying the Social: Constructions of Difference*, ed. Esther Saraga (London and New York: Routledge, 1998) pp. 3-42

Connolly, William E., A World of Becoming (Durham and London: Duke University Press, 2011)

—— *Climate Machines: Fascist Drives and Truth* (Durham and London: Duke University Press, 2019)

—— *Facing the Planetary: Entangled Humanism and the Politics of Swarming* (Durham and London: Duke University Press, 2017)

- —— Neuropolitics: Thinking, Culture, Speed (Minneapolis: University of Minnesota Press, 2002)
- —— *Political Theory and Modernity* (Ithaca and London: Cornell University Press, 1993)
- Conway, Daniel, 'Revisiting the Will to Power: Active Nihilism and the Project of Trans-human Philosophy' in *Nihilism Now! Monsters of Energy*, eds. Keith Ansell-Pearson and Diane Morgan (Basingstoke: Macmillan, 1999) pp. 117-141
- Coster, Geraldine, Psychoanalysis for Normal People (Oxford: Oxford University Press, 1926)

Cox, Gary, The Sartre Dictionary (New York and London: Continuum, 2008)

- Critchley, Simon, *A Companion to Continental Philosophy*, eds. Simon Critchley and William R. Schroeder (Hoboken, New Jersey: Blackwell Publishing Ltd., 1999)
- Csikszentmihalyi, Mihaly, and Jackson, Susan A., *Flow in Sports* (Champaign, Illinois, Human Kinetics, 1999)
- Csikszentmihalyi, Mihaly, *Beyond Boredom and Anxiety: The Experience of Play in Work and Games* (San Francisco: Jossey-Bass, 1975)
- —— Flow and the Foundations of Positive Psychology: The Collected Works of Mihaly Csikszentmihalyi (New York and London: Springer, 2014)
- —— *Flow: The Psychology of Optimal Experience* (New York: Harper Collins, 1990)

Cumming, Laura, 'Olafur Eliasson: In Real Life; Takis – review,' *The Guardian*, 14 Jul 2019, https://www.theguardian.com/artanddesign/2019/jul/14/olafur-eliasson-in-real-life-takis-review> [accessed 15 January 2020]

Curry, Patrick, *Ecological Ethics: An Introduction* (Cambridge: Polity Press, 2011)

de Beauvoir, Simone, The Second Sex, trans. and ed. H. M. Parshley (London: Vintage, 1997)

- —— The Second Sex, trans. C. Borde and S. Malovany Chevallier (London: Jonathan Cape, 2009)
- de Montaigne, Michel, 'That to Study Philosophy is to Learn to Die' in *Essays*, trans. Charles Cotton, ed. William Carew Hazlitt (Waikeke, NZ: The Floating Press, 2009) pp.187-218
- Deleuze, Gilles and Guattari, Félix, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (London & New York: Continuum, 1987)
- —— *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem and Helen R. Lane (London & New York: Continuum, 2004)
- Deleuze, Gilles, *The Logic of Sense*, ed. Constantin V. Boundas, trans. Mark Lester (London: Continuum, 2003)
- Dennett, Daniel C., *The Intentional Stance* (Cambridge, MA and London, England: MIT Press, 1989)
- Dent, Nicholas, 'Value' in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995) p. 895
- Descartes, René, *Key Philosophical Writings*, trans. Elizabeth S. Haldane and G. R. T Ross (Hertforshire: Wordsworth Editions Limited, 1997)
- —— *Meditations on First Philosophy. With Selections from the Objections and Replies*, trans and ed. John Cottingham (Cambridge: Cambridge University Press, 1996)
- Dick, Philip K., Do Androids Dream of Electric Sheep? (Los Angeles, CA: Boom! Studios, 2010)
- Dickinson, Emily, 'The Brain, within its Groove' <http://www.writing.upenn.edu/~afilreis/88v/ed556.html> [accessed 6 February 2020]
- Diogenes Laertius, *Lives of the Eminent Philosophers*, trans. R.D. Hick (Harvard: Harvard University Press, 1925)
- Dolezal, Luna, 'Shame, Vulnerability and Belonging: Reconsidering Sartre's Account of Shame', Human Studies, 40(2017) 421-438
- 'Donald's Decision (1941)', YouTube, 26 Mar 2014

<https://www.youtube.com/watch?v=9gwaON1hJd4> [accessed 14 October 2020]

- Durkheim, Emile, *The Division of Labour in Society*, ed. Steven Lukes, trans. W.D. Halls (London: Palgrave Macmillan, 1984)
- Ehrenburg, John, *Weariness of the Self: Diagnosing the History of Depression in the Contemporary Age* (Montreal: McGill-Queen's University Press, 2010)
- Eliot, T. S., 'Yeats' in On Poetry and Poets (New York: The Noonday Press, 1957) pp. 295-208
- Engel, J. Ronald, 'Property: Faustian Pact or New Covenant with Earth?' in *Property Rights and Sustainability: The Evolution of Property Rights to Meet Ecological* Challenges, eds. David Grinlinton and Prue Taylor (Leiden/Boston: Martinus Nijhoff Publishers, 2011) pp. 63-86
- Esteve, Mary, *The Aesthetics and Politics of the Crowd in American Literature* (Cambridge: Cambridge University Press, 2003)
- Faram, John, Essay on Man's Ideas of Power (New York: HardPress, 2018)
- Fendt, Gene, *Love Song for the Life of the Mind: An Essay on the Purpose of Comedy* (Washington, DC: Catholic University of America Press, 2007)

Findlay, J.N., Values and Intentions (London: George Allen & Unwin, 1961)

- Foley, Leo A., A Critique of the Philosophy of Being of Alfred North Whitehead in the Light of Thomistic Philosophy: A Dissertation (Washington, D.C.: Catholic University of America Press, 1946)
- Foucault, Michel, *Technologies of the Self: A Seminar with Michel Foucault*, eds. L. H. Martin, H. Gutman and P.H. Hutton (London: Tavistock Publications, 1988)
- Frost, Robert, 'The Road Not Taken', *Poetry Foundation* <https://www.poetryfoundation.org/poems/44272/the-road-not-taken >[accessed 14 October 2020]
- Gallese, Vittorio, 'Bodily Framing' in *Experience: Culture, Cognition and the Common Sense*, eds. Caroline Jones, Rebecca Uchill, David Mather (Boston, MA, MIT Press: 2016) pp. 327-248
- Garland, William J., 'What is Whitehead's Highest Good?' (Third International Whitehead Conference Claremont University, Claremont, CA., 1998) <http://www.ppquimby.com/alan/hgstgood.htm> [accessed 14 October 2020]
- Gatti, Hillary, *Giordano Bruno and Renaissance Science: Broken Lives and Organizational Power* (Ithaca and London: Cornell University Press, 1999)
- Gerhart, Mary and Russell, Allan, *Metaphoric Process: The Creation of Scientific and Religious Understanding* (Fort Worth: Texas Christian Univ., 1984)

- Gibson, Leonard, 'The LSD Experience: A Whiteheadian Interpretation', *Process Studies*, 7.2(1977) 97-107
- Goodman, Andrew, *Gathering Ecologies: Thinking Beyond Interactivity* (London: Open Humanities Press, 2018)
- Gratton, Peter, *Speculative Realism: Problems and Prospects* (London and New York: Bloomsbury, 2014)
- —— 'Quick Thoughts on Derrida Today Conference 2014,' *Philosophy in a Time of Error*, 3 Jul 2014 https://philosophyinatimeoferror.com/2014/06/03/quick-thoughts-on-derrida-today-conference/ [accessed 14 March 2019]
- Griffin, David Ray, *Radically Different Postmodern Philosophy: An Argument for Its Contemporary Relevance* (Albany, State University of New York Press, 2007)
- Grossmark, Robert, and Wight, Fred (eds.), *The One and the Many: Relational Approaches to. Group Psychotherapy* (New York and London: Routledge, 2015)
- Grosz, Elizabeth, *Becoming Undone: Darwinian Reflections on Life, Politics, and Art* (Durham and London: Duke University Press, 2011)
- Guenther, Lisa, 'Shame and the Temporality of Social Life', *Continental Philosophy Review*, 44.1(2011) 23–39
- Halewood, Michael, *A.N. Whitehead and Social Theory: Tracing a Culture of Thought* (London & New York: Anthem Press, 2011)
- —— 'Situated Speculation as a Constraint on Thought' in Speculative Research: The Lure of Possible Futures, eds. Alex Wilkie, Martin Savransky and Marsha Rosengarten (London and New York: Routledge, 2017) pp. 52-64
- Hanief, Mahammad, *The Theory and Practice of Criticism in T.S. Eliot* (Calcutta: Writers Workshop Publication, 1988)
- Haraway, Donna, *Staying with the Trouble: Making Kin in the Cthulucene* (Durham and London: Duke University Press, 2016)

—— When Species Meet (Minneapolis: University of Minnesota Press, 2008)

Harman, Graham and Gabriel, Markus, 'Graham Harman interviews Markus Gabriel', *Edinburgh University Press Blog*, 23 Sep 2016 <https://euppublishingblog.com/2016/09/23/graham-harman-interviews-markusgabriel/> [accessed 14 May 2018]

- Harman, Graham, 'On Vicarious Causation,' *Collapse II: Speculative Realism* (Falmouth: Urbanomic, 2012) pp. 171-205
- —— Prince of Networks: Bruno Latour and Metaphysics (Melbourne, re.press, 2009)
- —— *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago: Open Court, 2002)
- Hartshorne, Charles, *A Natural Theology for Our Time* (La Salle, Illinois: Open Court Publishing, 1989)
- Hegel, Georg Wilhelm Friedrich, *The Science of Logic*, trans. and ed. George Do Giovanni (New York: Cambridge University Press, 2010)
- Heisenberg, Werner, *The Physicist's Conception of Nature* (London: Hutchinson Scientific and Technical, 1958)
- Henning, Brian G., *The Ethics of Creativity: Beauty, Morality and Nature in a Processive Cosmos* (Pittsburgh, PA: University of Pittsburgh Press, 2014)
- Hoffman, Martin L., *Empathy and Moral Development: Implications for Caring and Justice* (Cambridge: Cambridge University Press, 2000)
- Hogenboom, Melissa, 'Rocks get super-heated to 1000C under new mountains,' *BBCEarth*, 20 Nov 2014, <http://www.bbc.com/earth/story/20141120-the-hottest-part-of-earthscrust> [accessed 14 July 2016]
- Hooper, Sydney E., 'Whitehead's Philosophy: Theory of Perception', *Philosophy*, 19.73(1944), 136-158
- Houlgate, Stephen, *The Opening of Hegel's Logic: From Being to Infinity* (West Lafayette, Indiana: Purdie University Press, 2006)
- Hosinski, Thomas E., *Stubborn Fact and Creative Advance: An Introduction to the Metaphysics of Alfred North Whitehead* (Lanham, Maryland: Rowman and Littlefield Publishers, Inc., 1993)
- Hursthouse, Rosalind, 'The Central Doctrine of the Mean' in *The Blackwell Guide to Aristotle's Nicomachean. Ethics*, ed. Richard Kraut (Malden, Mass: Blackwell Publishing, 2006) pp. 96-115

Jackson, Frank, 'What Mary Didn't Know', Journal of Philosophy, 83.5 (1982) 127-136

James, William, Essays in Radical Empiricism (Mineola, New York: Dover Publications, 2003)

—— Habit (New York: Henry Hold and Company, 1890)

- —— Pragmatism (Indianapolis: Hackett Publishing, 1981)
- —— The Varieties of Religious Experience: A Study in Human Nature (New York: Longmans, Green and Co, 1917)
- —— Writings, 1902-1910 (New York, Library of America, 1987)
- Johnson, Dominic, *God Is Watching You: How the Fear of God Makes Us Human* (Oxford: Oxford University Press, 2016)
- Jones, Judith, *Intensity: An Essay in Whiteheadian Ontology* (Nashville: Vanderbilt University Press, 1998)
- Jonze, Spike (dir.), Her (Sony Pictures Releasing, 2013)
- Jordan, Grant, and Maloney, William A., *Democracy and Interest Groups: enhancing Participation?* (New York: Palgrave Macmillan. 2007)
- Kafka, Franz, 'The Metamorphosis' in *The Metamorphosis and Other Stories* (Mineola, New York: Dover Publications, Inc., 1996)
- Kanat M., et al., 'Oxytocin Attenuates Neural Reactivity to Masked Threat Cues', *Neuropsychopharmacology*, 40.2(2015), 287–295
- Kant, Immanuel, *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Palgrave Macmillan, 2007)
- —— Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as a Science, trans. James W. Ellington, 2nd edn (Indianapolis: Hackett Publishing Company, Inc: 2001)
- Keats, John, 'Ode on Indolence', *Poetry Foundation* <https://www.poetryfoundation.org/poems/52995/ode-on-indolence> [accessed 11 October 2020]
- —— Selected Letters of John Keats, ed. Grant F. Scott (Cambridge, Mass.: Harvard University Press, 2002)
- Keller, Catherine, 'Of Symbolism: Climate Concreteness, Causal Efficacy and the Whiteheadian Cosmopolis' in *Rethinking Whitehead's Symbolism: Thought, Language and Culture*, eds. Roland Faber, Jeffrey A. Bell and Joseph Patek (Edinburgh: Edinburgh University Press, 2017) pp. 208-226
- Keynes, John Maynard, 'Economic Possibilities for our Grandchildren' in *Essays in Persuasion* (London: Palgrave Macmillan, 2010) pp. 321-332
- Kidd, Celeste and Hayden, Benjamin Y., 'The Psychology and Neuroscience of Curiosity', *Neuron*, 88 (2015) 449-460

- Kierkegaard, Søren, *Concluding Unscientific Postscript*, ed. and trans. Alastair Hannay (Cambridge: Cambridge University Press, 2009)
- —— *The Present Age*, trans. Alexander Dru (New York: Harper Torchbooks, 1962)
- Kolak, Daniel and Thomson, Garrett, *The Longman Standard History of Modern Philosophy* (Upper Saddle River: Pearson Longman, 2006)
- Kruger, D. J., 'Evolution and Altruism: Combining Psychological Mediators with Naturally Selected Tendencies.' *Evolution and Human Behavior*, 24 (2003), 118-25
- Langer, Suzanne K., 'On Significance in Music' in A *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art* (Cambridge, Mass; Harvard University Press, 1942) pp. 204-245

Laplanche, Jean, Essays on Otherness, ed. John Fletcher (London and New York: Routledge, 1999)

- Latour, Bruno, *An Inquiry into Modes of Existence: An Anthropology of the Moderns*, trans. Catherine Porter (Cambridge, Mass.: Harvard University Press, 2013)
- —— War *of the Worlds: What About Peace?* trans. Charlotte Bigg, ed. John Tresch (Chicago: Prickly Paradigm Press, 1993)
- —— *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1992)
- Lawtoo, Nidesh, *Conrad's Shadow: Catastrophe, Mimesis, Theory* (East Lansing, MI: Michigan State University Press, 2016)
- Leonard, Anne, The Story of Stuff (London: Constable & Robinson Ltd, 2010)
- Leopold, Aldo, *A Sand County Almanac and Sketches Here and There* (New York: Oxford University Press, 1949)
- Lowe, Victor, Understanding Whitehead (Baltimore: The Johns Hopkins Press, 1962)
- Manning, Erin, *The Minor Gesture* (Durham; Duke University Press, 2016)
- Marder, Michael, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University, 2013)
- Marion, Jean-Luc, *The Erotic Phenomenon*, trans. Stephen E. Lewis (Chicago: University of Chicago Press, 2006)
- Marx, Karl, 'Postface to the Second Edition,' in *Capital*, vol. 1, trans. Ben Fowkes (New York: Random House/ Vintage Books, 1977)

- —— 'The Leading Article in No. 179 of the *Kolnische Zeitung*' in Karl Marx and Frederick Engels, *Collected Works*, vol. 1 (London: Lawrence and Wishart, 1975) pp. 184-202
- Marshall, Tim, *Prisoners of Geography: Our World Explained in 12 Simple Maps* (London: Elliott & Thompson, 2019)
- Mascaro, Jennifer S., Pace, Thaddeus W. W. and Raison Charles L., 'Mind Your Hormones! The Endocrinology of Compassion' in *Compassion: Bridging Practice and Science: A Multimedia Book*, eds. Tania Singer and Matthias Bolz (Munich: Max Planck Institute for Human Cognitive and Brain Sciences, 2013 < http://www.compassiontraining.org/en/online/files/assets/basic-html/page230.html> [accessed 30 September 2017]
- Massumi, Brian, *Parables for the Virtual: Movement, Affect, Sensation* (Durham and London: Duke University Press, 2002)
- Matthews, Gareth B., and Cohen, Marc S., 'The One and the Many,' *Review of Metaphysics*, 21(1968) 630-655
- Max, Herner, *Hegel's Phenomenology of Spirit: A Commentary Based on the Preface and Introduction*, trans. Peter Heath (Chicago and London: University of Chicago Press, 1975)
- McAdam, Doug, 'Recruitment to High-Risk Activism: The Case of Freedom Summer', *American Journal of Sociology*, 92.1 (1986), 64-90
- McCarty, Jeff, 'The Fuck It Ideology' *Human Civilisation Reformation Coalition*, 4 Dec 2020 https://www.hcrcoalition.com/the-fuck-it-ideology>
- McEwan, Ian, The Cockroach (New York: Vintage Publishing, 2019)
- McGinn, Colin, 'Hard Questions' in *Consciousness and Its Place in Nature*, ed. A. Freeman (Exeter: Imprint Academic, 2006) pp. 90-9
- *The Character of Mind: An Introduction to the Philosophy of Mind* (Oxford: Oxford University Press)
- Meillassoux, Quentin, After Finitude, trans. Ray Brassier (London: Continuum, 2009)
- Merleau-Ponty, Maurice, *Phenomenology of Perception*, trans. Colin Smith (London and New York: Routledge, 2003)
- Miller, Robert, and Dennison, John (eds.), *An Outline of Psychiatry in Clinical. Lectures: The Lectures of Carl Wernicke*, trans. John Dennison and Robert Miller (London: Springer International Publishing, 2015)

- Mineral Information Institute, 'Iron Ore Hematite, Magnetite & Taconite,' *Mineral Information Institute,* 17 Apr 2006, https://web.archive.org/web/20060417160321/http://www.mii.org/Minerals/photoir on.html> [accessed 9 August 2020]
- Morris, Bertram, 'The Art-process and the Aesthetic Fact in Whitehead's Philosophy' in *The Philosophy of Alfred North Whitehead*, ed. Paul Arthur Schilpp (Evanston and Chicago: Northwestern University Press, 1941) pp. 461-486
- Morrison, Robert G., 'Nietzsche and Nirvana' in *Nietzsche and the Gods*, ed. Weaver Santaniello (Albany: State University of New York Press, 2001) pp. 87-114
- Muir, John, John of the Mountains: The Unpublished Journals of John Muir, ed. Linnie Marsh Wolfe (Wisconsin & London: The University of Wisconsin Press, 1979)
- Nachtomy, Ohad, 'On Living Mirrors and Mites: Leibniz's Encounter with Pascal on Infinity and Living Things Circa 1696' in *Oxford Studies in Early Modern Philosophy*, eds. Daniel Garber and Donald Rutherford (Oxford: Oxford University Press, 2018)
- Næss, Arne, 'The Shallow and the Deep, Long-Rage Ecology Movement: A Summary,' *Inquiry*, 16(1973) 95-100
- Nagel, Thomas, 'What Is It Like to Be A Bat?', The Philosophical Review, 83 (1974), 435-450

—— *The View from Nowhere* (New York: Oxford University Press, 1989)

- Nichols, Gary, Sedimentology and Stratigraphy, ed. 2 (West Sussex: Blackwell Publishing, 2007)
- Niemoczynski, Leon, 'Phenomenology and Onto-Empathy', *After Nature*, 29 Jun 2017, ">http://afterxnature.blogspot.com/2017/06/> [accessed 2 October 2019]
- —— 'Reality as Social Process and Onto-Empathy', After Nature, 16 Mar 2017, http://afterxnature.blogspot.com/2017/03/reality-as-social-process-and-onto.html [accessed 2 October 2019]
- Nietzsche, Friedrich, *The Gay Science, with a Prelude in Rhymes and an Appendix of Songs*, trans. Walter Kaufmann (New York: Vintage, 1974)
- —— *The Will to Power*, trans. Walter Kaufmann and R.J. Hollingdale (New York: Random House, 1966)
- Nixon, Rob, *Slow Violence and the Environmentalism of the Poor* (Cambridge, Mass and London, England: Harvard University Press, 2011)
- Nocek, A.J., 'On Symbols, Propositions and Idiocies: Towards a Slow Technoscience' in *Rethinking Whitehead's Symbolism: Thought, Language and Culture*, eds. Roland Faber, Jeffrey A. Bell and Joseph Petek (Edinburgh: Edinburgh University Press, 2017) pp. 186-

- Odin, Steve, 'Whitehead's perspectivism as a basis for environmental ethics and aesthetics: A process view on the Japanese concept of nature' in *Japanese Environmental Philosophy* eds. J. Baird Callicot and James McRae (Oxford: Oxford University Press, 2017) pp. 123-144
- Pace, Roderick, 'Malta and EU Membership: Adaptation, Change and Modernization,' *Agora Without Frontiers*, 8.4 (2003), 366-383
- Paz, Octavio, *The Siren and the Seashell: And Other Essays on Poets and Poetry*, trans. Lysander Kemp and Margaret Sayers Peden (Austin; University of Texas Press, 1976)
- Peacock, Alan, 'Toward an Aesthetic of the Interactive', Digital Creativity, 12.4 (2010), 237-246
- Pierce, Charles S., *Collected Papers*, eds. Charles Hartshorne and Paul Weiss, vol. 1 (Cambridge Mass.: Harvard University Press, 1934)
- Plato, The Republic, trans. Desmond Lee (London: Penguin, 2003)
- —— *Symposium*, trans. Alexander Nehamas and Paul Woodruff (Indianapolis: Hackett Publishing, 1989)

Pope, Alexander, An Essay on Man (New York: Samuel R. Wells, 1875)

- Potkay, Adam, 'Wordsworth and the Ethics of Things', PMLA, 123.2 (2008), 390-404
- Przybylski, Andrew K., Murayama, Kou, DeHann Cody R., et al., 'Motivational, emotional, and behavioural correlates of fear of missing out', *Computers in Human Behaviour*, 29(2013), 1841–1848
- Regan, Tom, *The Case for Animal Rights* (Berkeley, Los Angeles: University of California Press, 2004)
- —— 'The Case for Animal Rights for Animal Rights' in Advances in Animal Welfare Science, eds. M.W. Fox & L.D. Mickley (Washington, DC: The Humane Society of the United States, 1986) pp. 179-189
- Regan, Tom and Cohen, Carl, *The Animal Rights Debate* (Lanham: Rowman & Littlefield Publishers, Inc., 2001)
- Riley, Tess, 'Just 100 companies responsible for 71% of global emissions, study says' *The Guardian*, 10 Jul 2017, <https://www.theguardian.com/sustainablebusiness/2017/jul/10/100-fossil-fuel-companies-investors-responsible-71-globalemissions-cdp-study-climate-change> [accessed 4 November 2019]

Robbe-Grillet, Alain, For a New Novel: Essays on Fiction, trans. Richard Howard (New York;

Grove Press, Inc., 1965)

- Russell, Bertrand, *Portraits from Memory and Other Essays* (London: George Allen & Unwin, 1956)
- Ryder, Richard, 'All beings that feel pain deserve human rights' *The Guardian*, 6 Aug 2005 ">https://www.theguardian.com/uk/2005/aug/06/animalwelfare>
- —— 'Speciesism' in *Ethics, Humans and Other Animals: An introduction with readings*, ed. Rosalind Hursthouse (Oxon: Routledge, 2000) pp. 237-240
- —— 'Painism: Some moral rules for the civilized experimenter', *Cambridge Quarterly of Healthcare Ethics*, 8.1 (1999) 34–42
- Sartre, Jean-Paul, Being and Nothingness, trans. Hazel E. Barnes (London: Methuen Press, 1957)
- Schaper, E., (ed.), *Pleasure and Value: Studies in Philosophical Aesthetics* (Cambridge: Cambridge University Press, 1983
- Searle, John R., 'Indeterminacy, Empiricism, and the First Person', *The Journal of Philosophy*, 84(1987) 123-146
- Segall, Matthew D., 'Cosmos, Anthropos, and Theos in Harman, Teilhard, and Whitehead' *Footnotes2Plato*, 12 Jul 2011 < https://footnotes2plato.com/2011/07/12/cosmosanthropos-and-theos-in-harman-teilhard-and-whitehead/> [accessed 4 December 2020]
- —— 'Lecture and notes on Part I of Whitehead's Process and Reality' Footnotes2Plato, 22 Jul 2019 <https://footnotes2plato.com/2019/07/22/lecture-and-notes-on-part-i-ofwhiteheads-process-reality/> [accessed 14 October 2020]
- Serres, Michel, and Latour, Bruno, *Conversations on Science, Culture and Time* (Ann Arbor: University of Michigan Press, 1998)
- Serres, Michel, *The Natural Contract*, trans. E. MacArthur and W. Paulson (Ann Arbor: Michigan UP, 1995)
- Sexton, Anne, 'The Poet of Ignorance' in *The Complete Poems of Anne Sexton* (Boston, MA: Mariner Books, 1999)
- Shakespeare, William, *The Tempest* < https://www.sacred-texts.com/sks/ff/tem.htm> IV. 1.179-182 [accessed 16 September 2019]
- Shaviro, Steven, *Post Cinematic Affect* (Winchester and Washington: John Hunt Publishing Ltd, 2009)
- —— The Universe of Things: On Speculative Realism (Minneapolis and London: University of

Minnesota Press, 2014)

- —— 'Whitehead on Causality and Perception', *The Pinocchio Theory*, 06 Dec 2014, http://www.shaviro.com/Blog/?p=1274?
- —— 'Whitehead on Feelings,' *The Pinocchio Theory*, 08 Jun 2015, https://www.shaviro.com/Blog/?p=1309> [accessed 18 October 2019]
- Sheldrake, Rupert, *Morphic Resonance: The Nature of Formative Causation* (Rochester, Vt: Park Street Press, 2009)
- Sidgwick, Henry, The Methods of Ethics, (London: Palgrave Macmillan, 1962)
- Silverman, Max, Facing Postmodernity: Contemporary French Thought on Culture and Society (London and New York: Routledge, 2002)
- Simard, Suzanne, 'How trees talk to each other', *TEDSummit*, Jun 2016, <https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other/upnext?language=mg#t-38346> [accessed 12 May 2019]
- Skolimowski, Henryk D., 'Cosmocracy As the Next Stage in The Development of Democracy', World Affairs: The Journal of International Issues, 7.2 (2003), 133-151
- Solnit, Rebecca, *Hope in the Dark: Untold Histories, Wild Possibilities* (Chicago, Illinois: Haymarket Books, 2016)
- Sorkin, Michael, Twenty Minutes in Manhattan (London: Reaktion Books, 2009)
- Squires, Roger, 'Mentality,' in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995) pp. 552-3
- Solomon, Robert C., *The Passions: Emotions and the Meaning of Life* (Indianapolis, Indiana: Hackett Publishing Company Inc., 1993)
- Stengers, Isabelle and Debaise, Didier, 'The Insistence of Possibles: Towards a Speculative Pragmatism', *Parse Journal*, 7(2017), 12–19
- Stengers, Isabelle, 'The Cosmopolitical Proposal' in Making Things Public: Atmospheres of Democracy, eds. Bruno Latour and Peter Weibel (Cambridge: MIT Press, 2005) pp. 994-1003
- —— 'Thinking with Deleuze and Whitehead: A Double Test' in *Deleuze, Whitehead, Bergson: Rhizomatic Connections,* ed. Keith Robinson (New York: Palgrave Macmillan, 2009) pp. 28-44
- —— *Thinking with Whitehead: A Free and Wild Creation of Concepts*, trans. Michael Chase (Cambridge, MA: Harvard University Press, 2011)

- —— 'Whitehead and Science: From Philosophy of nature to speculative cosmology' (2005), http://www.mcgill.ca/files/hpsc/Whitmontreal.pdf. [accessed 13 November 2019]
- Stout, Margaret and Love, Jeannine M., *Integrative Process: Follettian Thinking from Ontology to Administration* (Anoka, MN: Process Century Press 2015)

Susskind, Daniel, A World Without Work: Technology, Automation and How We Should Respond (London: Allen Lane, 2020) pp. 148-149

- Taylor, Charles, Hegel (Cambridge: Cambridge University Press, 1999)
- Taylor, Robert C., *Journeys to Selfhood: Hegel & Kierkegaard* (London: University of California Press, 1980)
- *The Holy Bible Containing the Old and New Testaments*, New King James Version (Nashville, Tennessee: Thomas Nelson, Inc., 1982) John 12, 24-5.
- The Malta Independent, 'The government has started a process of modernisation Prime Minister' in The Malta Independent', *The Malta Independent*, 18 Nov 2018, <https://www.independent.com.mt/articles/2018-11-18/local-news/The-governmenthas-started-a-process-of-modernisation-Prime-Minister-6736199532 > [accessed 12 October 2020]
- Thompson, Evan, *Mind in Life: Biology, Phenomenology and the Sciences of Mind* (Cambridge, MA: Harvard University Press, 2010)
- Trigg, Dylan, The Thing: A Phenomenology of Horror (Winchester: Zero Books, 2014)
- United Nations, 'Universal. Declaration of Human Rights', *United Nations* <https://www.un.org/en/universal-declaration-human-rights/> [accessed 22 January 2020]
- Vogt, Katja Maria, *Law, Reason, and the Cosmic City: Political Philosophy in the Early Stoa* (Oxford: Oxford University Press, 2008)
- Weber, Max, *Political Writings*, ed. Peter Lassman, trans. Ronald Speirs (Cambridge: Cambridge University Press, 1994)
- —— 'Science as a Vocation', in From Max Weber: Essays in Sociology, eds. H.H. Gerth and C. Wright Mills (Oxon: Routledge, 1970) pp. 129-158
- Westphal, Merold, 'Temporality and Finitism in Hartshorne's Theism,' *The Review of Metaphysics*, 19.3 (1966) 560-61
- White, Stephen K., 'Uncertain Constellations: Dignity, Equality, Respect And...?' in *The New Pluralism: William Connolly and the Contemporary Global Conditions,* eds. David Campbell

and Morton Schoolman (Durham and London: Duke University Press, 2008) pp. 143-166

- Whitehead, Alfred North, *The Aims of Education and Other Essays* (New York: The Macmillan Company, 1929)
- —— Adventures of Ideas (New York: The Free Press, 1961)
- —— *The Concept of Nature* (Cambridge: Cambridge University Press, 1986)
- —— The Function of Reason (Boston: Beacon Press, 1958)
- —— An Introduction to Mathematics (New York: Dover Publications, Inc., 2017)
- —— *Modes of Thought* (New York: The Free Press, 1968)
- —— *Process and Reality: An Essay in Cosmology,* eds. David Ray Griffin and Donald W. Sherburne (New York: The Free Press, 1978)
- —— *Religion in the Making* (Cambridge: Cambridge University Press, 1926)
- —— Symbolism, Its Meaning and Effect (New York: Capricorn Books, 1958)
- Whitmore-Williams, Susan, Manning, Christie, Krygsman, Kirra et al. 'Mental Health and Our Changing Climate' American Psychological Association, (2017) https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf [accessed 5 November 2019]
- Whitney, Barry L., 'An Aesthetic Solution to the Problem of Evil,' *Philosophy of Religion* 35.1(1994) 21-37
- Wilde, Oscar, 'Lady Windermere's Fan' in *The Plays of Oscar Wilde* (Hertfordshire: Wordsworth Editions Limited, 2000) pp. 163-218
- Williams, Daniel D., 'Moral Obligation in Process Philosophy' in *Alfred North Whitehead: Essays* on *His Philosophy*, ed. George L. Kline (Lanham, MD: University Press of America, 1989) pp. 189-195
- Williamson, Colwyn, 'Proposition' in *The Oxford Dictionary of Philosophy*, ed. Ted Honderich (Oxford and New York: Oxford University Press, 1995)
- Wohlleben, Peter, *The Hidden Life of Trees: What They Feel, How They Communicate*, trans. Jane Billinghurst (Vancouver & Berkeley: Greystone Books, 2016)
- Woodard, Ben, 'The Twilight of Becoming (and Process)', *Naught Thought*, 17 Aug 2011, <https://naughtthought.wordpress.com/2011/08/17/the-twilight-of-becoming-andprocess/> [accessed 16 September 2019]

Wordsworth, William, 'The Prelude: Book 1: Childhood and School-time', Poetry Foundation

<https://www.poetryfoundation.org/poems/45542/the-prelude-book-1-childhood-and-school-time> [accessed 11 October 2020]

- Yeats, William Butler, 'The Second Coming', *Poetry Foundation*, <https://www.poetryfoundation.org/poems/43290/the-second-coming> [last accessed 6 December 2020]
- Youth For Human Rights, 'United Nations Universal Declaration of Human Rights', *Youth for Human Rights* https://www.youthforhumanrights.org/what-are-humanrights/universal-declaration-of-human-rights/articles-16-30.html [accessed 21 January 2020]
- Zahavi, Dan, *Self and Other: Exploring Subjectivity, Empathy and Shame* (Oxford: Oxford University Press, 2014)